

Criterion wise input Criterion I-VII

Project CRITERION I: CURRICULAR ASPECTS

1.1 Curriculum Design and Development

1.1.1 The institutional vision and mission as reflected in the academic programmes of the university

Vidyasagar University is committed to the ideal of seeking knowledge for enhancement of human freedom. Knowledge in itself is recognized as a legitimate goal because every higher step in the ascent of knowledge frees the individual from ignorance and irrational practices. As practitioners in the field of higher education we believe that critical thinking and revisions of thought continuously opens and re-opens the frontiers of knowledge. Our institutional mission is to make this process as dynamic as possible as possible.

The University was conceived as a non-traditional institution of higher education in the erstwhile undivided Medinipur district of the West Bengal state in India. The university was named after the nineteenth century social reformer and educationist, Pandit Iswar Chandra Vidyasagar, who was also dedicated to the cause of the upliftment of women.

Inspired by his ideals Vidyasagar University has committed itself to the goal of teaching and learning in higher education, ensuring quality education and providing opportunities for research and extracurricular activities in the best possible manner in order to spread the benefit of higher education in a location which is relatively backward but which has a glorious history.

- The University operates academic programmes at three levels – under-graduation, post-graduation, and the doctoral (PhD). At the under-graduation and the post-graduation level all traditional disciplines of physical and life sciences, humanities and social sciences, and, commerce are taught.
- Some faculties have disciplines that have specialized further at the under-graduate and post-graduate levels; e.g. microbiology, electronics, aquaculture management, nutrition etc. Such specializations have grown out of the major disciplines, through initiatives and enthusiasms of their traditional and existing faculty.
- These have gone a long way in catering to the needs of society and attending to local demands like opportunities for better and more diversified employment.
- A career in research is offered through the Ph.D. programme to all those who seek higher knowledge in different disciplines. All these courses have been instituted through the due process prescribed by the UGC and the act, statutes and rules of the University.
- The University also has special bachelor programme in Education.
- There are programmes leading to professional degree in law, programme leading to diploma in various specializations e.g. Dental Technician, Radiographic Technician, ECG Technician, etc.
- It also offers vocational degree courses; e.g. office management and secretarial practice, functional English, seed technology, advertising and sales promotion, automobile management, videography etc.
- Several departments have adopted an interdisciplinary approach towards the framing of syllabus, keeping in mind recent trends in curriculum designing.

1.1.2 Design and development of the curriculum

The institutional system that continuously oversees the process of design and development of curriculum is three-tiered, for the under-graduate as well as the post-graduate. The progress

of curriculum design and development, as well as its implementation, are monitored by internal and external experts and later reviewed by the entire University faculty.

- The statutory bodies that supervise the process at the Post-Graduate level are (a) the Departmental Committee that comprises the entire faculty of the Department; (b) the Board of Studies, which includes nominated members of the Department and external experts on the subject from other academic institutions nominated by the Executive Council of the University; (c) Faculty Council which comprises representatives of all Departments and all Professors of the University. It is mandatory, as per the rules of the University, to place all new syllabi before the respective Faculty Councils.

- The Departmental Committee is empowered to take decisions regarding revision of course curriculum and courses to be offered during the year.

- The Department Committee members, who are in continuous touch with the students, assess the need for revision of syllabus periodically. Syllabi revision is done at regular intervals. This exercise is carried out every three years.

- The need for revision arises due to the advancement in researches and studies in respective domains of knowledge, and also due to the perception that modification on syllabus might help impart the pedagogic lessons in a more fruitful ways.

- Assessment of teachers by students provides helpful inputs in this process. The student feedback exists only for academic evaluation of the course curriculum and teacher evaluation. The evaluation report is first analyzed at individual teacher level. The departmental committee then analyses all the evaluation report and takes corrective measures. If the department feels the necessity of administrative intervention then the department forwards its observations and recommends action to the competent authority.

- In the process of revision of syllabus the Board of Studies, which is also a statutory body, thoroughly examine the revision proposals and approve the revisions initiated by the Departmental Committee if they consider those as fit enough according to more general standards of pedagogy, accepted universally. Care is taken to ensure that thematic structures of the courses, or the problematic addressed therein are feasible as taught courses, set within the limit of time provided for each semester. An optimum balance is sought to be maintained between the objectives of the courses and its feasibility as a taught course. The evaluative process pursued is based on the credit system.

Societal needs play an important determining role in designing and developing the academic curriculum.

- For example proximity to coastal areas has led to studies on aquatic resources and culture, and, the Department of Aquaculture Management and Technology owes its origin to such studies and those have practical implications in terms of developing products.

- Similarly, demand for healthcare has also led to diversification of specialization in that domain and the Department of Bio-Medical Laboratory Science and Management fulfils some of the needs in terms of creating a trained pool of professionals, specialization in methods of clinical diagnosis and automation.

- As the process of establishing specialized departments often entail separation of assets and faculty from a pre-existing department, the deliberations of the Department Committee and Board of Studies are placed before a higher body – the Faculty Council. As already pointed out it is mandatory, as per the rules of the University, to place *all* new syllabi before the respective Faculty Councils. Formation of new departments assumes a greater significance because of social implications. So in matters of establishing new academic department it is the apex body of the University – the Executive Council – which has the final say.

For the Under-Graduate level the process of syllabi revision is initiated by the Under-Graduate Board of Studies for respective disciplines.

- The Board comprises teachers from Under-Graduate Colleges and Post-Graduate Departments, and external subject experts nominated by the Executive Council of the University.
 - As for the Post-Graduate Studies syllabi revision at Under-Graduation is treated as periodically necessary. This exercise is carried out every three years.
- The Boards, at both levels, play crucial roles in the academic development of the University, as these are the points of interaction with senior academic faculties from other state universities. Such interactions help the Departmental faculties to upgrade knowledge, learn about the practices of other universities and exchange academic inputs.

1.1.3 Curriculum design and development that ensures

- ❖ **Employability**
- ❖ **Innovation**
- ❖ **Research**

Curriculum design and indices of development:

Employability –

This is a major focus of all the programmes of the University except the Ph.D. where innovation and research rather than employability are kept in mind.

- In natural sciences approximately 50% to 80% students M. Sc degree holders are employed; the general trend on the higher side being 33% in school teaching, 15% in faculty positions of colleges, universities and institutes, 2% in administrative jobs, and the rest 30% being engaged in research.
- Humanities, Arts and Social Sciences departments fare well so far as employments in schools are concerned.
- About 1500 ex-students of the university have been employed in the past five years in different professions including school teaching.
- About 577 candidates have cleared the National Eligibility Test and State- Eligibility Test in the last five years.
- For some students, of course, research orientation is very important and they seek to enroll for Ph.D. even before obtaining employment.
- The University always takes the effort for introducing new courses or modifies the courses according to the changing job market and societal needs as well as to carry out research in emerging and new areas. Recently, the University has re structured some postgraduate programmes to make them more specialized, socially relevant and job oriented. Curriculum design ensures equal proportion of hands- on practical training for skill acquisition and sound theoretical knowledge base. To impart exposure to field oriented problem solving ability to students, certain practice oriented courses are included in the curriculum. The University encourages colleges to apply for UGC vocational programmes and also for autonomous status so that the respective colleges can design their own curriculum suited to the local needs and employability. During restructuring the curriculum suggestions are taken from the external experts of Board of Studies, who usually come from reputed universities or institutes. Feedback of the alumni and employers are also taken into consideration while designing the syllabus. Attention is given in designing the curriculum for better scope of employment. To impart exposure to field oriented problem solving ability to students, certain practice oriented courses are included in curriculum.
- Innovation is encouraged by the University through curriculum upgradation, introducing value added programmes and courses.

- The UGC model curriculum is taken as guideline for preparing many of the courses in arts and science. The curriculum also adheres to requirements of UGC-NET and SET examinations.
- In the PG programmes offered by most of the departments, component of research is included as a mandatory course. This part of the curriculum exposes them to several research agenda on the field concerned. For example, the curriculum in most of the departments includes a dissertation paper which is oriented towards research.

Innovation –

- Several innovative strategies have been incorporated in the designing of the curriculum. The general trends in the academia across the world are kept in mind. Certain departments in the Humanities stream, such as the Departments of English and Bengali, organize field trips as part of the curriculum. The pattern of examination questions and the syllabus are determined keeping in mind the pattern of questions in competitive examinations such as NET and SET.
- The Department of English has incorporated culture studies, Dalit literature and culture, and the study of new English literatures into its syllabus. The Department of History, similarly, has incorporated the study of regional and local history in its syllabus. The departments in the science stream have attempted, in recent times, to design their curriculum along the lines of social needs.

Research –

- The curriculum allows scope for research projects at the post-graduate level. Normally, a student devotes one semester in lieu of one course, to write a dissertation under the guidance of a teacher, on a particular topic or theme. The Departments of the Faculty of Science regularly conduct in-house dissertation projects for their post-graduate students. Some of the departments conduct research through collaboration.
- In the Faculty of Arts & Commerce, as enrollment of students in some Departments increased the preference shifted to evaluation by examination rather than through research projects. Sociology, a self-financing-subject, has lesser enrollment, and has retained the dissertation component in its evaluation. However, Political Science and Philosophy because of enhanced enrollment over the years has discontinued it.
- Students are encouraged to use computers at the post-graduate level. This enables them to make smooth progression towards research at the Ph.D. level. The departments of the Science faculty introduce the post-graduate students to statistical methods. The departments of the Arts & Commerce faculty introduce topics of contemporary relevance in their curriculum, which enables the students to carry out research later.
- Favorable student-teacher ratio which ranges from 1:4 to 1:8 helps in supervision of research and use of facilities provided by the institution. The number of registered Ph.D. students in Arts & Commerce faculty is 186 (2013), and in the Science faculty the number is 298 (2013). The total number of applications received in 2013 is 1155.

1.1.4 Guidelines of the regulatory bodies used for developing and/or restructuring the curricula

The academic departments of the University closely follow the guidelines of the UGC for the preparation of syllabi. The model syllabi of the UGC have been followed by faculty members in designing their courses.

Many innovative courses, like, Biomedical Laboratory science, Quality control assessment in Microbiology etc has been prepared for the benefit of the learners.

1.1.5 Interaction with industry, research bodies and the civil society in the curriculum revision process

The University interacts with the industry and civil society in many ways. The industry participates in the academic programmes of the departments through projects carried out by the students of the departments of Commerce, Library Science, Electronics, Physics and Remote Sensing & GIS. The curriculums of these departments are therefore oriented towards interaction with industry through feedbacks.

Departments like Microbiology, Geography, Zoology, and Bio-Medical Laboratory Science have interacted more directly with industry through development of a digital laboratory and consultancy for herbal drug industry. The syllabi of these departments are thus suitably attuned to the needs of industries.

1.1.6 Facilitation of the introduction of new programmes of studies in its affiliated colleges

- Colleges in general teach subjects at the under-graduate level.
- If any college desires to introduce post-graduate programme in any subject it applies to the University.

The colleges initiate the process by sending requests to the University for Introduction of new programmes of studies like Master of Arts/Master of Science/Master of Commerce in departments which they identify as having the capacity to sustain the operation of those programmes. Besides this, colleges also introduce diploma / certificate courses in areas having societal relevance or the potential for employment opportunities. In order to introduce those new programmes of studies in affiliated colleges the University takes the following steps

- A team of experts related to the disciplines for which the programmes are to be introduced, visit the colleges. The experts are drawn from the faculty of the University and also from external institutions.
- The report and the recommendation of the experts are placed before the Faculty Council for Postgraduate Studies / Undergraduate Studies and discussed there.
- If the recommendations of the experts find approval at the concerned Faculty Council, they are placed before the Executive Council.

1.1.7. University's encouragement to its colleges to provide additional skill oriented programmes relevant to regional needs?

The colleges of the University offer additional skill oriented programmes in the form of vocational courses; e.g. office management and secretarial practice, functional English, seed technology, advertising and sales promotion, automobile management etc. These are provided for additional skill orientation suited to the regional needs.

Apart from vocational courses programmes leading to diploma in various specializations e.g. BMLT, DOCA, etc. are also provided at the under-graduate level.

1.2 Academic Flexibility

1.2.1. Furnish the inventory for the following:

Programmes taught on campus

Overseas programmes offered on campus

Programmes available for colleges to choose from

Table 1.1: Summary of the courses taught in the University

Courses	Number
PG	29
Certificate Course	04
Diploma	01
PG Diploma	03
M. Phil.	01
Ph. D.	26

Table 1.2 (A) PG courses offered by the university

Faculty of Arts and Commerce		
Sl no	Name of the Department	Course Offered
1	Bengali	M.A (2 YRS)
2	Business Administration	M.B.A (2yrs)
3	English	M.A (2 YRS)
4	Santali	M.A (2 YRS)
5	Sociology	M.A (2 YRS)
6	Sanskrit	M.A (2 YRS)
7	Political Science & Rural Administration	M.A (2 YRS)
8	Philosophy & Life World	M.A (2 YRS)
9	Library & Information Science	M.A (2 YRS)
10	Hindi	M.A (2 YRS)
11	History	M.A (2 YRS)
12	Economics with Rural Development	M.A (2 YRS)
13	Commerce with Farm Management	M.com. (2trs)
Faculty of Science		
1	Applied Mathematics with Oceanology and computer Programming	M.sc (2 yrs)
2	Aquaculture Management & Technology	M.sc (2 yrs)
3	Anthropology	M.sc (2 yrs)
4	Botany & Forestry	M.sc (2 yrs)
5	Biomedical Laboratory Science & Management	I. M.sc BMLSM II. M.Sc. in clinical Nutrition & Dietetics (2 years)
6	Chemistry chemical Technology	M.sc (2 yrs)
7	Computer Science	I. M.sc (2 yrs) II. M.C.A (3 YRS)
8	Electronics	M.sc (2 yrs)
9	Geography & Environment Management	M.sc (2 yrs)
10	Human physiology with community Health	M.sc (2 yrs)
11	Microbiology	M.sc (2 yrs)
12	Physics & Technophysics	M.sc (2 yrs)
13	Remote sensing & GIS	M.sc (2 yrs)
14	Zoology	M.sc (2 yrs)

(B) PG Diploma

1	Mass Communication & Videography	P.G Diploma in Mass Communication & Videography (1 yrs)
2	Microbiology	P.G. Diploma in Quality Control & Assurance in Microbial Technology
3	Computer Center	P G Diploma in Applied Computer Science (PGDACS)

(C) Certificate Course:

No	Dept / Center	Course
1	Political Science & Rural Administration	Human Rights
2	English	Communicative English
3	Computer center	Office Automation and Internet Technologies
4	Computer center	Information Technology

(D) Diploma courses

1	Computer center	Advanced Office Automation and Internet Technologies
---	-----------------	--

- As yet, no overseas programme has been offered by the University.
- The colleges teach courses generally at the Under-Graduate level, and at the Post-Graduate level in special circumstances, when their specialization in the field and infra-structural capability are judged adequate by the experts (refer 1.1.6). If the expertise in those disciplines is available at the University the programmes are initiated through those experts. In other circumstances when such expertise is not available in the University, the experts are invited from other institutions, and programmes are initiated through them. The introduction of programmes like M.A/M.Sc/M.Com depends on factors like social need and social demand, and faculty strength in particular disciplines. A number of colleges have been allowed to conduct post-graduate programme with their own faculty and infra-structural support by the authorities of the University. The decisions to allow the colleges to administer post-graduate programmes are taken after thorough inspection of the college's assets and infra-structures by expert committees. (Refer 1.1.6.)

The following programmes are offered in affiliated colleges of this university:

B.A (Hons) B. A (Gen)
 B.Sc. (Hons) B. Sc. (Gen)
 B.Com. (Hons) B. Com (Gen)
 Vocational (major)

Table 1.3: Subjects offers for undergraduate courses

B.A (Hons) BA (Gen)	B.sc (Hons and Gen)	B.com (Hons and Gen)	Vocational (Major)
Bengali B.B.A English Economics Education Hindi History Music Philosophy Physical Education Political Science Sanskrit Sociology Santali	Anthropology Aquaculture Management Biotechnology BCA Botany Chemistry Computer Science Electronics Environmental Studies Geography Mathematics Microbiology Nutrition Nautical Science Physics Physiology Paramedical Courses Statistics Zoology	Commerce Marketing Management	Tourism& Travel Management Office Management &Secretarial Practice Agroservice Automobile Maintenance Industrial Fish & Fisheries.

The University offers the above-mentioned subjects from which the affiliated colleges can choose subjects for their institutions. The combination of subjects for an undergraduate programme is decided by the colleges depending on their infrastructure and other facilities.

1.2.2

Details on the following provisions with reference to academic flexibility

a. Core / Elective options

b. Enrichment courses

c. Courses offered in modular form

d. Credit accumulation and transfer facility

e. Lateral and vertical mobility within and across programmes, courses and disciplines

a) Every department allows its students to exercise their option of choosing elective courses. These elective courses are generally supposed to correspond to the specialization of the particular faculty member and thus designed and developed by them. The need for offering specialized courses are assessed by respective faculty members and discussed at the Department Committees. The contents of the units of study are defined at this level, and then placed before the Board of Studies for further consultation with external experts. The experts, especially the external ones, are consulted at the time of introduction of the courses at the Board of Studies. If there is a need for review, i.e. if the particular faculty member assesses that there is such a need, then the experts are consulted once again at the meeting of the Board of Studies. The outcome, or the learner's feedback, is generally assessed through the evaluation of the teacher by the students. These courses are offered every semester, and are

taught alongside a number of core courses. The core courses are considered as fundamental or basic to the discipline's curricular structure.

b) Enrichment courses are offered through the Merged Scheme (a UGC programme) lecture series, which is intended for SC/ST, and OBC students. These lectures are sometimes offered as remedial teaching. Those are also intended as special teaching to prepare the students for competitive examinations like NET, SET, School Service Commission Examination and Public Service Commission Examination.

The following table shows details of classes held under the Merged Scheme in the last four years:

Table 1.4: Number of lectures held in different departments under Merge Scheme

SL NO.	DEPARTMENTS	No. of classes
1	ANTHROPOLOGY	7
2	BENGALI	10
3	BIO-MEDICAL LABORATORY SCIENCE & MANANGEMENT	17
4	BOTANY	14
5	COMMERCE	1
6	CHEMISTRY	7
7	ECONOMICS	11
8	ELECTRONICS	9
9	ENGLISH	25
10	HINDI	3
11	HISTORY	27
12	HUMAN PHYSIOLOGY	8
13	SOCIOLOGY	7
14	LIBRARY & INFORMATION SCIENCE	3
15	MASS COMMUNICATION	8
16	MATHEMATICS	5
17	MASTER OF BUSINESS ADMINISTRATION	7
18	MICROBIOLOGY	5
19	PHILOSOPHY	8
20	REMOTE SENSING	6
21	SANSKRIT	7
22	SANTALI	2
23	SOCIOLOGY	1
24	ZOOLOGY	5
25	SPECIAL LECTURE	1

c) The University has adopted the semester system as the basis of curriculum implementation programme. Thus all courses taught within that system are organized in the form of modules, having equal weight of marks and course content.

d) The University is planning to introduce credit accumulation and transfer system but is yet to implement it.

e) The university has no facility for lateral and vertical mobility within and across programmes, courses and disciplines.

1.2.3. Policy and strategy for attracting international students

Although university has no explicit policy for attracting students from abroad the international students are encouraged to join any course offered by the university. They are given priority for accommodation in the campus, if required.

1.2.4. Courses developed to target international students

There are no courses targeting international students.

1.2.5. Dual degree and twinning programmes

The University does not have dual degree or twinning programme.

1.2.6. Self-financing programmes

The university has certain self-financing programmes. The following table details these programmes:

Table 1.5: Number of Seats for the students in departments with self financing courses

SL NO	Subject	Total Seats
1	Sociology	60
2	Sanskrit	95
3	Aquaculture Management technology	30
4	Bio-Medical Laboratory Science & Management	30
5	Computer science	
6	Electronics	25
7	Microbiology	30
8	Clinical Nutrition & Dietetics	30
, 9	Remote Sensing, GIS,	45
10	Quality Control And Assurance in Microbial Technology	15
11	MBA	60
12	MCA	50

Table 1.6: The fee structure of self-financing courses

Courses	Sem I	Sem II	Sem III	Sem IV	Sem V	Sem VI
MCA	13,430	12,750	13,135	12,750	14,135	14,000
Computer science	13,680	13000	14385	14000	--	--
Sociology , Sanskrit	2800	2000	2135	2000	--	--
MBA	17410	15000	15135	15000	--	--

Electronics & Microbiology	16180	15500	15885	15500	--	--
Aquaculture Management technology, Remote Sensing, GIS, Clinical Nutrition& Dietetics	11180	10500	10885	10500	--	--
Bio-Medical Laboratory Science & Management	13680	13000	13385	13000	--	--
Quality Control And Assurance in Microbial Technology	3180	2750	--	--	--	--
PG Diploma Course in Mass Communication & Videography	7130	6750	--	--	--	---

Teacher qualification and salary are at par with departments aided through govt. funding. The guidelines regarding admission of students to PG programmes are also the same.

1.2.7. The conventional face-to-face mode and the distance mode of education

There is no uniformity in the syllabi of the conventional mode and distance mode of education, as the structure of the PG programmes in these two modes of learning are different. The conventional mode follows the pattern of semester system while the distance mode operates on the format of annual teaching –evaluation system. Therefore, it has not been possible to introduce flexibility in combining courses.

1.2.8. Choice Based Credit System (CBCS)

The Credit System has not been implemented in the University curriculum as yet. But within the past 5 years the University has created the necessary framework for its implementation.

As and when the University introduces the system of awarding Grade Points to students on a 5 point scale for the number of Courses opted by the students, the Cumulative Grade Point Average (CGPA) will be attained, and, the above measures will be complemented.

In Ph. D. course work CBCS has been introduced and the system for awarding grade points has also been initiated.

1.2.9. Percentage of programmes offered by the university that follow

- ❖ Annual system
- ❖ Semester system
- ❖ Trimester system

- The under-graduate – B.A/B.Sc/B.Lib – programmes are based on the format of the annual system (in affiliated colleges only): (100%)
- The post-graduate – M.A/M.Sc/M.Lib – programmes are based on the format of the semester system: (100%)
- Trimester system is not yet introduced. (0%)

1.2.10 Inter-disciplinary programmes

The courses at the Remote Sensing and Geographic Information System are inter-disciplinary. Students from different disciplines like Physics, Chemistry, Geology, Zoology and Geography enroll for this programme and obtain M.Sc. degree.

Teachers from different disciplines like Geography, Geology, Chemistry and Statistics are engaged to teach the courses of this programme.

PG-Diploma course on 'Quality control and assurance in microbial technology' is an interdisciplinary course among different departments like Botany, Physiology, Nutrition, etc.

The UGC sponsored Gandhian Studies Centre offers inter-disciplinary programmes with Political Science, History and Philosophy Departments serving as nodal departments.

Over the years Certificate Courses have been taught to students from the above mentioned departments of the University. Senior academics from other institutions have been invited to deliver lectures on themes related to Mahatma's life, history and philosophy.

1.3 Curriculum Enrichment

1.3.1 Review and upgradation of the curriculum of the university

Curriculum is revised once in three years or as and when required. The process of revision of curriculum is ongoing, and is monitored by the course-in-charges and members of the Department Committees, Board of Studies and Faculty Councils – the 3 tiered system as indicated in item 1.1.2. The process takes into consideration all factors like, social relevance, job orientation and knowledge intensity.

However in response to the changing system of the University curriculum format, especially the change over to the semester system, the syllabi of the different academic departments of the University were revised in a major way, twice – in 2007-08 when all departments adopted the semester system and in 2011-12 when it was perceived that the institution should adopt the principle of syllabi revision every 3 years.

All curricula have been reviewed after ascertaining the demand from various stakeholders.

The strategies adopted for the revision of existing programmes include:

- a) Following the syllabus guidelines of UGC and AICTE
- b) Meeting of the BOS to review the need
- c) Evaluation and observation of changes, relevance and requirements
- d) Feedback from the students and alumni
- e) Consultation with employers in some cases

1.3.2. Introduction of new programmes at UG and PG levels during the last four years

At the post-graduate level, M.Sc. in Clinical Nutrition and PG-Diploma course on 'Quality control and assurance in microbial technology' are interdisciplinary courses which have been introduced in the past four years.

At the undergraduate level, Human Rights Education, as a general subject, was introduced in 2012-13, Biochemistry and Electronics have also been introduced as general subjects.

1.3.3. Strategies adopted for the revision of the existing programmes

Rigorous review of existing programmes and brain storming with the help of external experts are the primary means. The feedback is also obtained from students, alumni, employer, community, industry etc. and are given due consideration in framing the curriculum. The feedback given by students and stake holders is the basic matrix for identifying shortfalls in curricular content and reinforcements needed therein.

Percentage of courses that underwent syllabus revision in the last four years:

Courses in the Science stream- 98%

Courses in the Arts & Commerce stream - 95%

1.3.4. Value-added courses offered by the university

The university always seeks to introduce value-added courses. The University has introduced a UGC-sponsored certificate course in 'Human Rights'.

1.3.5. Higher order skill development programmes in consonance with the national requirements as outlined by the National Skills Development Corporation and other agencies

Students are allowed to participate in higher order skill development programmes, wherever necessary. For example students are encouraged to participate in short courses like, e-journal training, bioinformatics, and language proficiency courses offered by the university or other organizations

1.4 Feedback System

1.4.1 Feedback from students regarding the curriculum

The University receives feedbacks from students about the performance of the faculty members through the mode of Evaluation of Teachers by Students. These feedbacks are used by the faculty to augment efforts in areas that are indicated as deficient. Departments discuss the teaching-learning-evaluation process at the department committee meetings. The University provides data sheets for students' feedback on the teaching-learning-evaluation process. Many departments utilize the alumni reunion as a forum to discuss the teaching-learning-evaluation process.

1.4.2 Feedback on the curriculum from national and international faculty

Feedback on the curriculum from national and international faculty is both sought and received. Such feedback is facilitated through interaction during seminars and conferences. The Boards of Studies have members from the national level academic community. In different departments members of the faculty have served in national and state level committees. Departments of the University comprise the academic groups of many national and international journals as editorial board members. The Faculty Councils have representatives from national level academic community. Their views are considered by the faculty in developing the curriculum.

1.4.3 Mechanism through which affiliated institutions give feedback on curriculum enrichment

Affiliated institutions like colleges communicate their feedback on curriculum enrichment through discussions at the Under-Graduate Boards of Studies and the Under-Graduate Faculty Councils.

1.4.4 Quality sustenance and quality enhancement measures to ensure effective development of the curricula

The Departmental Board of Studies invites experts from different fields and reviews the curriculum according to the requirements of the service sector, current research trends, societal relevance etc. Sometimes, draft syllabus is sent to eminent faculties, research scientists of national and international repute. Often workshops are arranged by the department for syllabus enrichment.

CRITERION II: TEACHING-LEARNING & EVALUATION

2.1 Student enrolment and profile

2.1.1 Publicity and transparency in the admission process

Publicity of the admission process is ensured by placing, well before the time of admission, notification in national and local dailies. Notices are posted on the university website and notice-board as well. Transparency of the process is ensured by indicating the merit criteria of admission of successful students.

2.1.2 Process of admission put in place by the university / criteria for admission

(i) Merit: 60% of the total number of seats in the PG Courses is filled up, strictly on the basis of merit, with students passing out of colleges affiliated to this university.

(ii) Merit with entrance test: 40% of the total number is filled through selection by entrance test. This system, introduced at the behest of the state government two years ago, replaces the earlier one of filling up to 95% of the seats with students from the affiliated colleges and 5% from other universities.

(iii) Merit, entrance test, and interview: Only in the case of admission to the PhD and M. Phil programmes is the entrance test followed by an interview by respective departmental Ph.D. committees consisting of external experts from other state universities and teachers of the departments of the university.

(iv) Common entrance test conducted by state agencies and national agencies: The proposal for holding a common entrance test by state agencies is still to be implemented by the state universities.

(v) Other criteria followed by the university (please specify):

In case of admission to the MCA courses selection is made on the basis of tests conducted by JECA. The candidates seeking admission into MBA courses under this university need to clear any of the following tests: GMAT, MAT, CAT and ones conducted by this university.

Prize-holders at international/national/state sports and cultural meets are considered separately; trials are held for the same. 1% percent of the total number of students to be admitted in a given year is set aside for such achievers.

2.1.3 Admission process in the affiliated colleges

The university specifies the intake capacity of its affiliated colleges in respect of the subjects taught. Colleges need to follow the guidelines prepared by the Undergraduate Council of the university. The final list of the students admitted on the basis of merit is sent to the university authorities for information. For the B.Ed. course, taught in some B.Ed colleges affiliated to this university, however, the admission-process is conducted centrally by the university from its campus.

2.1.4 Annual review of the admission process and student profile

The Faculty Council reviews the admission process for the PG courses and offers suggestions for its improvement annually. While extending the facilities of PG teaching to some of its affiliated colleges, the university has, mainly on the advice of the Faculty Council, decided to enhance the scope of the students' mobility by allowing a student to shift, if he or she so desires, from one college to another, or from the college to the university, depending on the availability of seats. The filling up of the seats, as and when they fall vacant, is made strictly on the basis of merit.

2.1.5 Strategies adopted to increase/improve access for students belonging to special categories:

***SC/ST:** The University is guided by the government norms in increasing/ improving access for students belonging to the SC/ST communities. 22% of the total number of seats is reserved for the SC candidates and 6% for those from ST communities.

***OBC:** They are not included in the reserved category.

***Women:** Although no quota exists for women, the number of female students seeking admission is increasing with every passing year.

***Persons with varied abilities:** 3% of the total number of seats is reserved for them

***Economically weaker sections:** Although there is no reservation for economically weaker section, there is provision for Full Free and Half Free studentship. In addition to that there are govt. fellowships for meritorious students.

***Outstanding achievers in sports and other extracurricular activities:** 1% of the total number of seats is reserved for them.

2.1.6 Number of students admitted in university departments in the last four academic years:

Table 2.1: Number of students admitted in the university in last four years

YEAR	GENERAL		SC		ST		OBC		MINORITY/ PH	
	M	F	M	F	M	F	M	F	M	F
2013-14	1172	1045	389	208	125	88	195	116	58	45
2012-13	598	520	194	97	74	40	86	60	26	26
2011-12	525	571	185	85	78	31	63	36	41	29
2010-11	560	520	169	60	69	36	57	23	42	19

2.1.7 Demand ratio for the various programmes of the university departments and affiliated colleges

Table 2.2: Demand ratio of different courses

Programmes	Number of applications				Number of students admitted				Demand ratio			
	2010	2011	2012	2013	2010	2011	2012	2013	2010	2011	2012	2013
UG	43303	48653	51120	53675	39367	44230	46473	48796	1.09	1.1	1.1	1.1
PG	5403	5543	9836	9738	1775	1644	1721	1703	3.04	3.37	5.71	5.72
M. Phil.	NA	NA	20	22	NA	NA	11	13	NA	NA	1.81	1.69
Ph.D.	-	962	*	1155	68	245	-*	270	-	3.93	-	4.28
B.Ed.	11465	11915	9556	11456	1700	1700	2300	2300	6.74	7.00	4.15	4.98

*The Ph. D. entrance Examination was not held

The demand ratio of PG courses has been increased gradually. However in UG courses the demand ratio remains more or less the same although the number of applications for these courses has been notably increased. The number of seats for these courses has been increased in most of the colleges. The decrease in demand ratio of B. Ed. Course is due to opening of this course in different colleges as well as opening of new B. Ed. Colleges.

2.1.8. Programmes discontinued/staggered by the university in the last four years

There is no case of any programme, introduced by the university during the last four years, having been discontinued.

2.2 Catering to Diverse Needs of Students:

2.2.1 Orientation/induction programme for Freshers

The University does not organize any orientation/induction programme for the freshers. However, in the freshers' welcome programmes, organized by the students union at the beginning of the academic session, Vice-Chancellor, Registrar, Dean of Science and Arts faculties meet the students and explain different academic systems and facilities offered by the university. Feedbacks from the students are taken through the students union.

2.2.2 Analysis of “differential requirements of the student population” after admission and before the commencement of classes

Counselling sessions are organized by a few departments like MBA, AMT etc after admission of students through entrance test to help the weaker students cope with the syllabus and to supply their deficiencies.

2.2.3 Bridge/remedial/add-on classes

All the academic departments offer remedial coaching to students coming from the disadvantaged sections of society so that they do not lag behind others. The classes for the remedial coaching are accommodated in the time table either at the beginning or at the end of the normal class-hours. Apart from providing remedial coaching to the slow learners, steps are taken to prepare them for entry into service.

Teachers also take add-on classes as per requirement of the students regarding projects, review, seminar presentation of the students etc beyond the time of usual class routine.

2.2.4. Academic growth of students from disadvantaged sections of society Although the academic departments normally do not hold examinations at the end of the remedial courses, the fact that the students participating in such courses end up by competing successfully with the rest is a measure of the effectiveness of such courses.

2.2.5 Identifying and responding to the learning needs of advanced learners

All the academic departments hold tests for internal assessment which are the sure means to identify the needs of the advanced learners. The teachers hold tutorial classes to provide individual attention to all such students.

To meet the needs of students who are intelligent but lack adequate exposure, the university has installed a language laboratory, which, besides honing their communicative skills, exposes them to diverse possibilities of interaction through audio-visual aids.

The following strategies are employed for the advanced learners:

- Provision of additional learning and reference material
- Preparation of assignment on current and latest topics
- Student seminars on selected reference topics
- Participation in quiz, debate etc
- Student project work based on theoretical data/practical work/survey data/case studies

2.3 Teaching- Learning Process

2.3. 1. Planning and organizing the teaching, learning and evaluation schedules

Before the commencement of the session, the Faculty Council oversees the preparation of the Academic Calendar, of at least 80 teaching days for each semester, to be followed strictly by each academic department. The calendar specifies the working days for teaching-learning as well as the dates of the end-semester examinations. The departments enjoy the liberty of fixing the dates of internal assessment of their own students.

Teachers of every department prepare teaching plans according to the academic calendar and students are informed about this teaching schedule at the beginning of the semester.

Every department makes schedule for internal assessment at the beginning of the semester and it is notified to the students. The results of the internal assessment are given to the student within a short period of the examination. Students are allowed to see the answer scripts of the internal examinations after evaluation. Semester examination is conducted after a brief preparatory leave. The answer scripts of theoretical papers are evaluated by the internal as well as external examiners. Twenty five percent of total papers of a semester are evaluated by the external examiners. The practical examinations are conducted and evaluated by the internal as well as external examiners (mandatory). The controller of examination fixes a time frame for publishing the results.

2.3.2 Course outlines and course schedules

Academic departments usually provide their students with the course-outlines as well as course-schedules at the beginning of the academic session. Since the course-schedule is framed strictly in accordance with the academic calendar prepared by the university, this facilitates the teaching-learning process.

2.3.3 Challenges in completing the curriculum within the stipulated time frame and calendar

As things stand today, the PG departments have to depend on the timely publication of results at the UG-level where the semester-system is yet to be introduced, for the fullest utilization of the academic session (particularly) in the first semester. The office of the Controller of Examinations is taking all possible measures to ensure early publication of results at the UG level, which include spot -evaluation of the answer-scripts.

2.3.4. Student-centric learning

Depending on the nature of the subjects taught, the students are given practical training in laboratories, encouraged to undertake field-studies and project-work, prepare term papers and dissertations, and give seminar-presentation etc, all under the watchful eyes of their teachers. Laboratories are always made accessible to the students for the learning/research purposes. The internet facilities are shared by the teachers and the students for access to data-base and e-journals. Students are also encouraged to present papers in seminars/conferences both in their own departments as well as in those of other universities and publish articles singly or jointly with teachers.

2.3.5 The university's policy on inviting experts/people of eminence

The university provides funds annually from UGC Unassigned Grant to all departments to organize seminars/conferences; to facilitate the inclusion of out-of-the-state and international experts, it provides extra financial help over and above regular grants. The university organizes endowment lectures annually so that eminent persons may be invited. The departments are advised to see to it that the academic deliberations in the seminars and the lectures delivered by the experts are geared to the need of the students.

2.3.6 Blended learning by using e-learning resources

Although the university does not issue any formal guide-lines for the use of e-learning resources by its teachers, it makes available to the teachers e-learning-resources which they might use while teaching in the classroom.

The University encourages blended learning by using e-learning resources. The computer aided learning is given priority in our educational system. The internet connections made available in all the departments and the library enhance the scope of e-learning. The University is privileged to have INFLIBNET and INFONET facilities.

2.3.7 Technologies and facilities used by the faculty for effective teaching

The teachers habitually use e-learning resources to enhance their teaching quality; students are encouraged to use e-learning facilities like the internet/Wi-fi/JSTOR etc available at the university.

2.3.8 Designated group to monitor the trends and issues regarding developments in Open Source Community

A whole body of computer-analysts and system-designers work in tandem with the staff of the University Central library and the faculty members to monitor the development of Open Source Community and ensure optimum utilization of the facilities thereof.

2.3.9 Conversion of traditional classrooms into 24x7 learning places

In an era of e-learning and information-boom, education can no longer be imparted exclusively within the four walls of the class-room. The teaching-process often spills over beyond the class-hours into the social-networking sites where teachers and students interact over matters taught in the classroom and exchange information about seminars, examinations etc. With the Wi-fi system now in place in parts of the campus, such interaction between the teachers and the students, through free use of the internet, can take place any time with a mere click of the mouse.

2.3.10 Services of counselors / mentors/advisors.

Though, the services of Counsellors, Mentors have not been provided in a formal way, there is an informal way of counseling the students regarding their academic, personal, psychological, and social problems. Sufficient care is taken in each individual case. The Dean, Students' welfare, the Committee on Sexual Harassment and Health unit have been attending to and shouldering the responsibility. Since most of the teachers stay on the campus, they are constantly available to the students for guidance and advice

2.3.11 Innovative teaching approaches/methods/practices adopted/put to use by the faculty during the last four years

In the last few years, many teachers have developed ICT enabled course material. These are provided to the students in the form of CD or they are given facility to take soft copies of the same. Most of the departments are supplied with audio visual teaching aids which are also used to teach students. Learner centered activities like participative learning, interactive sessions, students' seminars, case studies, project work, assignments, problem solving exercises and field work are followed.

2.3.12 Instilling and nurturing creativity and scientific temper among the learners

Students are encouraged to participate in state-level and national competitions held both within the institution and outside to showcase their creative abilities; students of this university have regularly won prizes in such competitions. In order to instill a scientific

temper, the university holds talks and seminars in collaboration with organizations like Paschimbanga Bijnan Mancha that work to disseminate knowledge about the deadly effects of superstitions and regressive social practices.

2.3.13 Student projects as part of the learning programme

* **Number of projects executed within the university:** Many of the academic departments of the university include students' project in their curriculum and treat them as mandatory. Out of the 28 departments in the University, student projects are mandatory in 22 departments. The percentage of marks allotted for such student projects ranges from 50 marks out of a total of 800 to 300 marks out of a total of 4500.

* **Names of external institutions associated with the university for student**

Project work: Ejob-India; Limtex Infotech Pvt. Ltd; NIVL; Ardent; Computer Maintenance Corporation; ASNDS; Indusnet Technology; Mindtech India Ltd; National Library; Ramkrishna Mission Institute of Culture; Jawaharlal Nehru University.

* **Role of faculty in facilitating such projects:**

The faculty guide students throughout; they go on field trips with students and facilitate their work at institutions all over the state.

2.3.14 Pool of human resource to meet the requirements of the curriculum

Over the years the university has filled its posts with teachers capable of meeting the growing demands of the curriculum. While the overall aim is to be self-sufficient, the departments sometimes choose to invite teachers from other universities for the benefit of the students. Every year many departments invite Visiting Professors and Fellows and organize Extension Lectures; care is taken to invite such faculties from universities outside the state and, if feasible, from abroad too.

2.3.15 Computer-aided teaching/learning materials

The faculty has access to computers with internet facility round the clock and they can now also reap the benefits of the Wi-fi now in place in some parts of the campus and make use of the data base and the e-journals subscribed to by the university.

The Faculty members often upgrade themselves by attending training programs / workshops on ICT arranged in the university or other organizations.

2.3.16 Evaluation of teachers by the students/alumni

The university has introduced from 2013 a system of evaluation of teachers by students. Students are asked to evaluate the qualities of teachers in terms of their over-all performance in the class-room and regularity of attendance. The feedback is kept confidential and teachers are expected to take it into account in upgrading their performances.

2.4 Teacher quality

2.4.1 Planning and managing the university's human resources to meet the changing requirements of the curriculum

- Recruits faculties in specialized fields.
- Encourages faculties to attend advanced courses related to curriculum.
- Encourages to attend National/international workshops / seminars / conferences/ conventions etc

2.4.2 Furnish details of the faculty:

Table 2.3: Number of teachers according to their qualification

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc. / D.Lit	1	0	0	0	0	0	1
Ph.D.	35	1	23	4	26	9	98
M.Phil.	2	0	4	0	2	2	10
PG	-	-	4	1	16	10	31
Temporary teachers							
Ph.D.	0	0	0	0	6	2	8
M.Phil.	0	0	0	0	0	1	1
PG	0	0	0	0	3	3	6
Part-time teachers							
Ph.D.	54	08	105	09	113	10	299
M.Phil.	0	0	0	0	0	0	0
PG	0	0	0	0	103	09	112

2.4.3 Diversity in its faculty recruitment

Table 2.4: Diversity of the faculty

Department/ School	% of faculty from the same university	% of faculty from other universities within the State	% of faculty from universities outside the State	% of faculty from other countries
Arts and Commerce Faculty				
Bengali	0	100		
Commerce with Farm Management	14	86		
Economics with Rural Development	14	86		
English	24	76		
Hindi	0	100		
History	33	33	33	
Library and Information Science	29	71		
Masters in Business Administration (MBA)	0	100		
Philosophy and Life world	14	84		
Political Science with Rural Administration	16	48	32	
Sanskrit	0	100		
Santali	0		100	
Sociology	0	75	25	
Science Faculty				
Anthropology	48	32	16	
Applied Mathematics with Oceanology and Computer programming	0	100		
Aquaculture	70	30		
Biomedical Lab. Sc. And	30	70		

Management				
Botany and Forestry	14	72	14	
Chemistry and Chemical Technology	42	58		
Computer Science	0	100		
Electronics	32	64		
Geography and Environment Management	16	84		
Human Physiology with community Health	0	100		
Microbiology	70	30		
Physics and Technophysics	15	70	15	
Remote Sensing and GIS	0	100		
Zoology	0	100		

2.4.4 Appointment of qualified faculty for new programmes/ emerging areas of study

- Faculties are recruited through open advertisement in newspaper.
- Faculties are selected through screening and interview by experts in the field.
- Number of faculties in new program in emerging areas:
PG diploma in Quality control in Microbial technology: 02
PG diploma in Mass communication and Videography: 01

2.4.5 Emeritus / Adjunct Faculty / Visiting professors on the rolls of the university

Table 2.5: Number of Visiting professors and extension lecturers in last four years

Year	Visiting Professors and Fellows	Extension Lecturers
2012-2013	7	6
2011-2012	11	8.
2010-2011	5	11
2009-2010	5	19

2.4.6 Policies/ systems to academically recharge and rejuvenate teachers

Faculties are encouraged to submit proposal for research grants to different funding agencies like UGC, DST, DBT, ICSSR, ICMR etc.

- University provides Personal Research Grants to the faculty members.
- Faculties are granted study leave for advanced research/ training.
- Faculties are nominated to attend workshop, seminar, conferences and training courses.
- Funds are provided to the departments to organize national or international conferences/ workshops.
- Faculties are encouraged to participate in in-service training like, Refresher course, orientation course etc.

2.4.7 Awards/ recognitions for excellence in teaching received by the faculty during the last four years

National level: Three.

1. Prof. Madhu Mangal Pal - Bharat Jyoti Award
2. Dr. Amal K. Mondal- Shiksha Ratna Award
3. Dr. Sujata Maiti Choudhury- Shiksha Ratna Award

2.4.8 Number of faculty members who underwent staff development programmes during the last four years

Table 2.6: Number of faculty underwent staff development programmes

Academic Staff Development Programmes	Number of faculty
Refresher courses	20
HRD programmes	-
Orientation programmes	10
Staff training conducted by the university	-
Staff training conducted by other institutions	6
Summer/ Winter schools, workshops etc	-

2.4.9 Percentage of the faculty

- Invited as resource persons in workshops/ seminars/ conferences organized by external professional agencies?
10 %
- Participated in external workshops/ seminars/ conferences recognized by national / international professional bodies?
30%
- Presented papers in Workshops/ Seminars/ Conferences conducted or recognized by professional agencies?
80%
- Teaching experience in other universities/ national institutions and other institutions?
10%
- Industrial engagement?
2%
- International experience in teaching?
2%

2.4.10 Academic development programmes for the faculty aimed at enriching the teaching-learning processes

Curriculum development and modifications take place once in three years (average). Sometimes workshops are organized to develop and reform UG syllabus. Minor reforms of examination are made as and when required. Major examination reforms have been necessitated by the shifting of yearly mode curriculum to semester mode curriculum.

2.4.11 Mechanism to encourage

* Mobility of faculty between universities for teaching?

Guest faculties from other universities take classes regularly. University also appoints visiting professor / Fellow as per the proposal of the academic departments. Faculties from our university also take classes in other universities. They also act as visiting professors / fellows in other universities.

*Faculty exchange programmes with national and international bodies? If yes, how have these schemes helped in enriching the quality of the faculty?

Such programmes are yet to be started in the masters' programmes. However, some exchange programmes have been started in relation to the research activities. University has signed a

MoU with National Institute of Cell sciences, Pune and Dept. of Human Physiology. Dept. of Biomedical laboratory Science has an Indo-Tunisia Bilateral Research programme.

2.5 Evaluation Process and Reforms

2.5.1 Awareness of all the stakeholders about the evaluation processes

The academic staffs of the university and college departments, and the students and their guardians remain apprised of the time of examinations well ahead of schedule – mainly through the academic calendars. The students can see the evaluated answer-scripts of the internal assessments and feel free to demand review of their results of the final examinations, if need be.

The regulations for evaluation are updated and incorporated in the Prospectus of the University which is available on the website of the University.

2.5.2 Examination reforms initiated by the university

UG: A 3 tier examination system is in force in colleges, with continual assessment (10% marks).

PG: A semester system is in force in the university departments (4 semesters), with continual internal assessment (20% marks). There is External examiner system for theoretical papers (25% of all paper in a semester) and in all practical examination (100%). Projects / dissertations are evaluated by external examiners (100%).

Ph. D and M. Phil.: An entrance test and a course work have been introduced for the Ph. D. registration of the students. Ph. D. Thesis is examined by the internal as well as external examiners. The same rules are followed in case of M. Phil. Programme also.

The internal assessment of the students has ensured continuous evaluation which, in its turn, has motivated the students to attend classes more regularly.

As the internal assessment often includes, besides written examination, preparation of term-papers, viva-voce and seminar presentation on select topics, there is scope for holistic assessment of the student-performance.

2.5.3 Average time taken by the University for the Declaration of examination results

For the UG courses, results are declared within 3 months of the completion of examinations. For the PG courses, results are put up on the university notice-board and sent to the departments. UG results are sent to the colleges, where they are put up on notice boards. UG results are posted on the university website. Students also have the option getting to know results via SMS.

2.5.4 Transparency in the evaluation process

The evaluation process is completely transparent and confidential. Panels of paper-setters, examiners, moderators, and reviewers are prepared by UG/PG Boards of Studies in meetings convened by UG/PG Secretaries and sent to the Vice Chancellor in sealed envelopes for his approval. The Vice Chancellor sends such prepared lists to the Controller of Examinations for necessary action. Boards of Studies have external experts from other universities in the state; UG boards have members from colleges as well. The board of moderators is usually comprised of external members in addition to internal members.

After the examinations are over, the following process is followed: (i) Assessment by approved panel of examiners, both Internal and External. (ii) Scrutiny of answer scripts. (iii) Marks posted by data entry operators and checking by Tabulators. (iv) Results considered by

Boards of Examiners (PG only). (v) Results approved and formally published by the university's Executive Council.

2.5.5 Integrated examination platform for the following processes:

* **Pre-examination processes – Time table generation, OMR, student list generation, invigilators, squads, attendance sheet, online payment gateway, etc.**

* **Examination process – Examination material management, logistics, etc.**

* **Post-examination process – Attendance recording, OMR-based exam result, auto-processing, generic result processing, certification, etc.**

Pre-examination processes:

The examination section works along with the Departmental Heads. The schedule of examinations for theoretical papers is prepared centrally by the examination section and the schedule for practical examination is prepared by the concerned academic department within a time frame given by the controller of examination. Student lists are prepared after considering their credit of attendance. The candidates lacking attendance credit below 75% are not allowed to sit for examinations. The eligible students register themselves for examinations through payment. An 'Admit card' is issued by the examination section to the students. Attendance sheet and lists of invigilators are made well in advance.

Examination process – Examination material management, logistics, etc:

All the examinations are held at the academic departments. The examination materials and logistics are centrally provided by the office of the Controller of Examinations involving secretarial staff where as invigilation is taken care of by teaching staff of the department.

Post-examination process – Attendance capture, OMR-based exam result, auto processing, generic result processing, certification, etc.

The particulars of attendance are checked and the sealed answer scripts are sent to the examination section. The examination section sends the scripts to the examiners. After evaluation of answer scripts tabulation of marks is done by some external tabulators appointed by the controller of examination. The tabulated marks are placed in a meeting of the Board of Examiners and the results are published after approval of the Vice-Chancellor. Computer software is used for tabulation of marks and preparation of mark sheets.

OMR based examination has been introduced for PG entrance test.

UG examination: For conducting examinations in affiliated colleges, the University appoints the Principal of a college or his/her nominee as Officer-in –Charge of the examination center and he/she will be given full powers to conduct the examinations. The Officers-in –Charge have been empowered to appoint required number of invigilators for hall supervision. The University also appoints inspection squads to make surprise visits to all the examination centers to curb malpractices.

2.5.6 Reforms in the Ph.D. evaluation process

The university, in accordance with UGC norms, has introduced Ph. D. Entrance test for initial screening and coursework for the enrolled Ph.D. students. To speed up the evaluation process, the examination of the dissertation by a foreign examiner is made optional. The evaluation is made by experts from other states alongside those from other universities of West Bengal to ensure transparency of the evaluation process. The degree is awarded on the successful completion of the viva- voce.

2.5.7 Provision for including the name of the college in the degree certificate

College names are not included in degree certificates and mark-sheets. However, the university is considering providing autonomy in the running of the PG courses in its affiliated colleges. In such cases there may be provisions for including the name of the college in the degree certificate.

2.5.8 Redressal of grievances with reference to examinations

The mechanism for redressal of grievances with reference to examinations includes post-publication scrutiny, review, and special review. Internal assessment answer scripts are shown to students.

2.5.9 Streamlining the operations at the Office of the Controller of Examinations

To streamline and improve the process and functioning of the office of the Controller of Examinations/Examination section, all related work is computerized.

2.6 Student Performance and Learning Outcomes

2.6.1 Articulation of the university's Graduate attribute

The university articulates its graduate attributes in a productive and meaningful manner. Building of self confidence, courage and sincerity among the students has been the principal objective of all courses. Efforts are made through NSS to make students aware of their social role and responsibility. Every year new students are encouraged to join it, and they do so enthusiastically. Some of the programmes undertaken by the university NSS unit are: Blood donation camps; Health camps in adopted village; Mass literacy programme in adopted village; Awareness seminars and workshops on the dangers of HIV+, smoking, malaria etc. This is apart from regular cleaning and garden beautification drives carried out by the participating students. University provides facilities for improving the soft skills of students to improve their employability opportunities. The University inculcates in its students attitude for continued self learning and aptitude to pursue research in any chosen field.

2.6.2 Clearly stated learning outcomes for the university's academic programmes

The University logo mentions Shiksha (Education), Gnan (Knowledge) and Progati (Progress) as its cherished goals. These goals are stated in the Vision and Mission documents of departments, students and staffs are constantly apprised of such goals.

2.6.3 Structuring of the university's teaching, learning and assessment strategies

Located in a part of the state which is inhabited largely by a socially disadvantaged population, this university brings education to families of first-generation learners and tries to equip their members adequately for the job-market.

The University has structured its own teaching, learning and assessment strategies to facilitate achievement of intended learning outcomes. Some quality enrichment measures have been undertaken in the teaching and learning process. The curriculum has been modernized based on the social requirement and employability. Feedback is taken from the stakeholders. In addition to that, modern teaching aids are employed in teaching and learning process and learning activity is facilitated through internet and virtual learning centre. Transparency in the evaluation system has been ensured. The teaching learning activity is assessed through the teachers by conducting periodical class test, mid-semester evaluation and viva-voice component in all the practical examinations. Besides, subject experts deliver special lectures on recent trends and developments in their fields of expertise to the students

2.6.4 Overcoming the barriers to learning

The academic departments remain more or less in touch with their alumni, either through personal contact or through reunions held periodically on the campus. The steps taken by the University to broaden its programme are based on perceptions provided by the feed-back.

2.6.5 New technologies deployed by the university in enhancing student learning and evaluation

The establishment of a language laboratory on the campus, extension of the wi-fi facilities to parts of the campus, the collection of e-resources is all geared to the need of our changing times.

CRITERIA III: RESEARCH, CONSULTANCY AND EXTENSION

3.1 Promotion of Research

3.1.1 Research Committees to monitor and address issues related to research

a) The research programme of the Vidyasagar University is monitored by the Executive Council through the Board of Research Studies constituted for a period of four years. The Board of Research Studies (BRS) consists of:

- (i) The Vice-Chancellor – Chairman
- (ii) The Dean of the Faculty concerned
- (iii) Two Senior Professors of the Faculty concerned to be nominated by the Executive Council
- (iv) Two outside experts (not below the rank of Professors) to be nominated by the Vice-Chancellor.
- (v) The Registrar – Secretary
- (vi) The Secretary, Faculty Councils for P.G. Studies – Joint Secretary.

b) In each department there is a Ph. D. committee, which monitors all routine activities of Ph. D. program. At present the university has 26 Ph. D. committees. Each Ph. D. committee consists of the following members to implement the programme:

- (i) The Vice-Chancellor-Chairman
- (ii) The Dean of the Faculty to which the Post-Graduate Department belongs will act as Chairman in absence of Vice - Chancellor
- (iii) The Head of the Post-Graduate Department concerned who acts as the secretary to the committee.
- (iv) Three teachers of the concerned department / concerned Faculty not below the rank of Associate Professor (to be decided by the concerned Departmental Committee)
- (v) Two experts, not below the rank of Professor of a university or institute of higher learning or scholar of eminence from outside the Vidyasagar University to be nominated by the Vice-Chancellor out of a panel of five experts recommended by the Departmental Committee.

c) The University also has Institutional Ethical Committee that approves and regulates research involving animal and human experimentation.

In addition to the Ph. D. programme the university has also provisions for M. Phil. Programme and the Degree of Doctor of Literature (D. Litt.)/ Doctor of Science (D. Sc.). The BRS is empowered to monitor and streamline issues related to D. Sc and D. Litt. Awards.

Some of the recommendation of BRS and their impact:

- i. The mandatory requirement of publishing at least one article in a peer reviewed journal for submission of thesis towards the award of Ph. D. was one of the recommendations of these committees, which has resulted in the increase of number and frequency of publications under the University.
- ii. To speed up the evaluation process, all communications to the adjudicators are made electronically. The electronic submission of thesis and synopsis, along with the hard copies, has become mandatory.

iii. The presence of external expert at Ph. D. Committee meetings has become mandatory. This has gone a long way in systematizing and enhancing the quality of research in the university.

3.1.2 Promotion of research in affiliated colleges

- Vidyasagar University has a definite policy for promoting research in its affiliated colleges. The Ph. D. regulation of the university permits the teachers of the affiliated colleges with requisite experience and qualification to act as research guides. They may also supervise jointly with the faculty members of the Vidyasagar University.
- The college teachers are encouraged to conduct research projects in their institution. The teachers having major research projects are given some relaxation for acting as supervisors.
- The university encourages the colleges to initiate processes for post-graduate teaching so that the faculty there might get motivated to conduct research.

3.1.3 Proactive mechanisms adopted by the university to facilitate the smooth implementation of research schemes/ projects

Vidyasagar University ensures smooth implementation of research schemes/ projects by the following means -

- Quick evaluation of the research project by the ethical committee of the university.
- The process for forwarding the application for research project proposal by the authority is simple and less time consuming
- After receiving the sanction letter of the project, a token grant subject to the approval of Hon'ble Vice Chancellor, is extended for expediting the process of implementing the research project.
- A fixed seed money noted as Personal Research Grant (PRG) is also provided annually by the administration to all faculty members who is of immense help at the initial stage of the implementation of the project.
- Principal Investigator (PI) enjoys full freedom to purchase items below Rs.10,000/ -. For systematic use and transparency of research grant, university has introduced e-tender facilities for purchasing research items/ equipments exceeding Rs. 10,000/-.
- The purchase committee of the university meets at regular intervals to expedite the process of purchase of instruments, books and other materials sanctioned under the project.
- The university sanctions money for contingency expenditure as an advance within 24 hours of the application by the PI.
- The university provides necessary support for the utilization of the research fund during the project tenure.
- The university verifies the audited balance sheet submitted by the Principal Investigator (PI) and ensures the quick submission of utilization certificate to the concerned funding agencies.
- Overhead charges of the projects are being used to enhance the research infrastructural facility of the university.

3.1.4 Promotion of interdisciplinary research

Vidyasagar University promotes interdisciplinary research activities in different departments both under the Science and Arts & Commerce faculties. Faculties are encouraged to undertake the Ph. D. programme with other departments. Some of the research projects are also interdisciplinary in nature involving several departments.

The faculty working in various departments often collaborates to intensify research activities in high priority interdisciplinary areas (*viz.*, nanoscience, theoretical computing, characterization of functional Metal Organic Frameworks (MOFs), interaction of bioactive alkaloids with nucleic acids and serum proteins, Ethnobotany, *etc.*). Fabrication of Hybrid solar cells gives a possibility of interdisciplinary research between Physics and Chemistry. The investigations of inorganic semiconductor nanoparticles embedded into semiconducting polymer combine the unique properties of inorganic nanoparticles with the film forming properties of polymers. The photo-voltaic performances of inorganic/organic hybrid solar cells are the field of new research. The conservation of the existing natural resources (renewable and non-renewable) is nurtured by using biotechnological tools and the results are also examined by physical and chemical methods in the lieu of modern sciences.

The followings are some of the interdisciplinary researches in the university:

- i. The research projects of Department of Geography are carried out with the Department of Zoology and Botany.
- ii. Several Ph.D. programmes of Department of Geography are in collaboration with the Department of Remote Sensing and GIS.
- iii. The environmental history and regional languages of janglemahal areas within the districts of Paschim Midnapore, Bankura and Purulia are enriched through the community learning. The language laboratory was also established in Department of English to fulfill the basic needs of the community. The restorations of the traditional cultures are also the thrust area for extensive research programmes.
- iv. Department of Economics with Rural Development is also doing interdisciplinary research work with the Department of Business Administration of this university.
- v. Dept of Human Physiology is concerned with collaborative research with Chemistry (nanobiology) as well as with medical faculties.
- vi. Dept. of Chemistry carries out collaborative research with Botany and Microbiology.
- vii. The SAP program of English department is run with active participation of the faculties of Bengali and Santali Departments.
- viii. Department of Zoology performs collaborative research with Saha Institute of Nuclear Physics, Zoological Survey of India, Wetland Research Institute and National Institute of Cholera and Enteric Diseases (NICED), Kolkata

3.1.5 Workshops/ training programmes/ sensitized programmes conducted by the university to promote a research culture on campus

The Vidyasagar University regularly conducts workshops for research scholars, faculty and students to update latest developments in all branches of Arts & Commerce and Science. Apart from that, an international Conference on 'Historicizing Sub-Regional Cooperation in South Asia: Society, Culture and Politics in Bangladesh and Eastern India', May 30- June 1, 2012 was organized by this university in collaboration with the Dhaka University, Bangladesh and Maulana Abul Kalam Azad Institute of Asian Studies (MAKAIAS), Kolkata. An international conference & workshop was also organized by Vidyasagar University at Bangkok, Thailand entitled 'Managing Development in Developing Countries' on dated March 27-31, 2012 to develop the inter-disciplinary approach of research.

Workshop organized:

Some of the important workshops related to promotion of research are mentioned:

- Dept. of Commerce organized UGC sponsored National Workshop on Research Methodology for 10 days in November, 2010

- Dept. of Commerce organized UGC sponsored National Workshop on Research Methodology organized for 7 days in November, 2012.
- Dept. of English organized a one-day workshop on the phonetic transcription of the oral literary specimens of the Adivasi communities in West Bengal on November 7, 2012. Funding agency: UGC
- Dept. of Philosophy organized UGC sponsored workshop on Western Logic from 24 – 25 March, 2010.
- Dept. of Philosophy organized UGC sponsored Organised National level workshop on West Bengal **Marine GIS**, during 7-8 September, 2013 at Digha, Purba Medinipur, West Bengal Funded by – NRDMS(NSDI), DST
- Dept of Aquaculture management and technology Organised National level workshop on West Bengal Aquaculture GIS, during 16- 17 January, 2013 at Mandarmoni, Purba Medinipur, West Bengal. Funded by – NRDMS, DST
- Dept of Biomedical laboratory science organized a 5- day workshop on Advanced Technique in Bio-Medical Sciences in 2010 (sponsored by UGC, ICMR DST)
- Dept. of Computer Science organized UGC sponsored workshop on modern computer technology
- Dept. of Microbiology organized DBT sponsored workshop on Computational Biology from 6th -7th January 2009
- Dept. of Microbiology organized DBT sponsored workshop on Genome Proteome Analysis from 12th -13th January, 2009
- Dept. of Microbiology organized DBT sponsored workshop on Genomics and Proteomics from 2nd-4th September, 2009
- Dept. of Microbiology organized DBT sponsored workshop on Computational and Structural Bioinformatics from 8th-10th September, 2009
- Dept. of Microbiology organized DBT sponsored workshop on Computational Biology from 6th -7th January 2009
- Dept. of Microbiology organized DBT sponsored workshop on Application of Bioinformatics on Modern Biology – Refresher Course from 8th-21st March, 2010
- Dept. of Microbiology organized DBT sponsored workshop on Application of Support Vector Machine in Biological from 1st-2nd November, 2010
- Dept. of Microbiology organized DBT sponsored workshop on Application of R in Bioinformatics from 19th -20th December, 2011
- Dept. of Microbiology organized DBT sponsored workshop on Current Trends of Biological Research at Crossroads of Science from 17th-23rd, 2012
- Dept. of Physics organized National Workshop on Electron Dynamics in Quantum Systems (NWEDQS) in 2010 (sponsored by S. N. Bose National Center for Basic Sciences; Centre of Theoretical Studies, IIT, Kharagpur; UGC)
- Dept. of Physics organized National Workshop on Quantum Perspective of Advanced Materials (QPAM-11) in 2011 (sponsored by S. N. Bose National Center for Basic Sciences; Centre of Theoretical Studies, IIT, Kharagpur; UGC)
- Dept. of Physics organized National Workshop on Quantum Perspective of Advanced Materials (QPAM-12) in 2012 (sponsored by S. N. Bose National Center for Basic Sciences; Centre of Theoretical Studies, IIT, Kharagpur; UGC)
- Dept. of Physics organized National Workshop on Electron Dynamics in Magnetic Materials (EDMM-2013) in 2013 (sponsored by S. N. Bose National Center for Basic Sciences; Centre of Theoretical Studies, IIT, Kharagpur; UGC)

- Dept of Zoology organized 7 day vocational training on 'Vermitechnology and its applicability to Aquaculture, Horticulture and Sericulture' sponsored by Distance Education Council, New Delhi, 18th to 24th March, 2013.
- Women Study center organized State level workshop on '*Social Exclusion and Needed Action: Focus on Weaker Section, Poverty and Gender in India*' organized by V.U in collaboration with centre for the study of Social Exclusion and inclusive policy, University of Calcutta, 18th March, 2008.
- Women Study center organized National workshop on "*Empowerment of Women through Science and Technology*" in collaboration with NISTADS, Govt. of India, 6th-7th August, 2008.

Training programme:

- Seven day vocational training on 'Vermitechnology and its applicability to Aquaculture, Horticulture and Sericulture' organized by D.D.E, V.U. sponsored by Distance Education Council, New Delhi, 18th to 24th March, 2013.

Training/Certificate Courses Conducted by the Computer Centre of the University during 2009-2013:

1. Office Automation & Internet Technologies For PG&UG Students, M-I, 17th September, 2013
2. Diploma course in Advance Office Automation & Internet Technologies For PG&UG Students of the University M-III 10th April, 2013
3. Office Automation & Internet Technologies for PG&UG Students of the University. M-I September, 2012 to April, 2013
4. Office Automation & Internet Technologies, For PG&UG Students of the University M-I September, 2011 to April, 2012
5. Diploma course in "Office Automation & Internet Technology. For PG&UG Students of the University, M-II 10th September' 2011 to March, 2012
6. "Office Automation & Internet Technology. For PG&UG Students of the University, M-I March, 11
7. Certificate Course in "Information Technology" Madhyamik & H.S. Appeared Students March, 2010– June , 2010
8. Post Graduate Diploma in Applied Computer Science, VU-CMC Collaboration Programme, M-IV August, 2010-April, 2011
9. Post Graduate Diploma in Applied Computer Science, VU-CMC Collaboration Programme, M-III May, 2010- August, 2010
10. Post Graduate Diploma in Applied Computer Science, VU-CMC Collaboration Programme, M-II January, 2010 – May, 2010
11. Post Graduate Diploma in Applied Computer Science, VU-CMC Collaboration Programme, M-I August, 09 – January, 2010
12. Post Graduate Diploma in Applied Computer Science VU-CMC Collaboration Programme, M-IV May, 2009 – October, 2010
13. Post Graduate Diploma in Applied Computer Science VU-CMC Collaboration Programme, M-III August, 2009 – October, 2010
14. Post Graduate Diploma in Applied Computer Science, VU-CMC Collaboration Programme, M-II January, 2009- April, 2009
15. Diploma course in "Advance Office Automation and Internet Technologies" For PG Students of the University, M-II August, 2009 – 30th March, 2010

16. Certificate Course in “Office Automation & Internet Technologies” PG Students of the University, M-I August,2009 - January,2010
17. Certificate Course in “Information Technology” Madhyamik & H.S. Appeared Students March, 2010 – June, 2010
18. Certificate Course in “Office Automation & Internet Technologies” For PG&UG Students of the University, M-I August,2009
19. Certificate Course in “ Information Technology” Madhyamik & H.S. Appeared Students April.,2009 – June , 2009

3.1.6 Visits by researchers of eminence to the campus

The University has not appointed any adjunct professor. However, the University has made special provision under UGC unassigned grant to invite Visiting Professor/ Visiting / Scholars Senior Faculties of National Institutes. During their visits, the university extends all facilities and treats them at par with the regular faculty of University. The names of the eminent personalities are enlisted here.

Table 3.1: Visiting professors / fellows appointed in last five years 2008 - 2009

Sl. No.	Name and Affiliation of the Visiting Professor/ Fellow	Appointed in the Department
1.	Dr. Soumitra Barua Superintending Anthropologist (Physical) Retd., Anthropological Survey of India, Kolkata	Anthropology
2.	Dr. Bithi Sircar Former professor Tripura University and Vidyasagar university and Principal, Srishiksyatan College, Kolkata	Human Physiology
3.	Dr. Asim kumar Chakravarty Retd. Professor of Zoology, N.B.U., Darjeeling	Zoology

2009 - 2010

Sl. No.	Name and Affiliation of the Visiting Professor/ Fellow	Appointed in the Department
1.	Dr. Diptiman Roy Choudhury, Professor, Department of Electronic Sciences, University of Calcutta	Electronics
2.	Dr. B.N. Borthakur, Retd. Professor, Department of Sociology, Dibrugarh University, Assam	Sociology
3.	Dr. Santi Gopal Pal, Professor, Department of Zoology, University of Calcutta	Zoology
4.	Dr. Asim kumar Chakravarty Retd. & Emeritus Professor of Cell Biology and Immunology, Department of Zoology, N.B.U., Darjeeling	Zoology
5.	Dr. Bithi Sircar Former professor Tripura University and Vidyasagar university and Principal, Srishiksyatan College, Kolkata	Human Physiology

2010 -2011

Sl. No.	Name and Affiliation of the Visiting Professor/ Fellow	Appointed in the Department
1.	Dr. Bithi Sircar Former professor Tripura University and Vidyasagar university and Principal, Srishiksyatan College, Kolkata	Human Physiology
2.	Dr. Sourangshu Mukhopadhyay Professor, Department of Physics, Burdwan University	Electronics
3.	Dr. Minati Sen Professor, Department of Home Science, University of Calcutta	Nutrition
4.	Dr. G. K. das , Former Vice-Chancellor of Utkal university, Ex-Director of Delhi university, south Campus	English
5	Prof. Anita Singh , BHU	English

2011 – 2012

Sl. No.	Name and Affiliation of the Visiting Professor/ Fellow	Appointed in the Department
1.	Dr. Asim kumar Chakravarty Retd. & Emeritus Professor of Cell Biology and Immunology, Department of Zoology, N.B.U., Darjeeling	Zoology
2.	Dr. Bithi Sircar Former professor Tripura University and Vidyasagar university and Principal, Srishiksyatan College, Kolkata	Human Physiology
3.	Dr. R. N. Chattopadhyay, Retd. Professor, Department of Architecture & Regional Planning, IIT, Kharagpur.	Geography
4.	Dr. Partha Sarathi Chakraborti Chief Scientist, Geo Informatics & RS Cell DST, Govt. of W.B.	Geography
5.	Dr. Mamata Bandopadhyay, Former Professor, University of Burdwan	Philosophy
6.	Dr. Apurba Mukhopadhyay Professor, Department of Pol. Science, Netaji Institute of Asian Studies.	Political Science
7.	Dr. Anjan Biswas, Former Associate Professor, Presidency University, Kolkata	Bio-medical Lab science
8.	Dr. Shayma Prasad Biswas, Professor, Department of Life Science, Dibrugarh University, Assam	Aquaculture Management & Technology (AMT)
9.	Dr. Pratap Kr. Mukhopadhyay Principal Scientists Central Institute of Freshwater Aquaculture, Bhubaneswar	Aquaculture Management & Technology (AMT)
10.	Dr. Suresh Valiya Veethil	Aquaculture

	Associate Professor, National University, Singapore	Management & Technology (AMT)
11	Prof. Suneetha Rani, prof. of English ,Dept of Women's studies Hyderabad Central University	English

2012 – 2013

Sl. No.	Name and Affiliation of the Visiting Professor/ Fellow	Appointed in the Department
1.	Dr. Tanmoy Bhattacharya Former Professor of Zoology, Tripura University and Vidyasagar University	Zoology
2.	Dr. Umesh Ch. Goswami Professor, Department of Zoology, Guwahati University	Zoology
3.	Dr. Bipul Ch. Bhadra Professor, Department of Sociology, Jadavpur University	Sociology
4.	Dr. Tanmoy Bhattacharya Former Professor of Zoology, Tripura University and Vidyasagar University	Zoology
5.	Dr. Anjan Biswas, Former Associate Professor, Presidency University, Kolkata	Bio-medical Lab science
6.	Dr. B. N. Pandey Retd. Professor, Department of Zoology, Magadh University, Bihar	Zoology
7.	Dr. Diptiman Roy Choudhury, Professor, Department of Electronic Sciences, University of Calcutta	Electronics

Such lectures by the eminent academicians motivate the PG students of this university to concentrate on their respective areas of interest. Research scholars also attend these lectures for their interest to improve their knowledge and scientific abilities.

3.1.7 Percentage of the total budget earmarked for research

The Vidyasagar University is a prime academic institute where the faculty members of Arts, Commerce and Science streams are actively involved in the research programmes of various fields. The percentage of the total budget is earmarked for research is as follows –

Table 3.2: Budget allocation for research

Sl. No.	Financial year	percentage of the total budget for research
1.	2008 – 2009	4.11%
2.	2009 – 2010	4.72%
3.	2010- 2011	4.22%
4.	2011 – 2012	4.63%
5.	2012 – 2013	5.53%
6.	2013 – 2014	5.58%

Table3.3: Year wise utilization of projects

Year.	% of Utilization
2009-10	76.69
2010-11	75.09
2011-12	66.09
2012-13	81.50

3.1.8 Earmarking funds for promotion of research in affiliated colleges

There is no budget allocation for promoting research in the affiliated colleges of the University.

3.1.9 Post Doctoral Fellowships/ Research Associateship

Vidyasagar University encourages post doctoral research. Required facilities are provided to the research students for performing research. Administrative and other helps are extended to them for getting fellowship from different funding agencies.

Table: 3.4 : Post doctoral fellows funded by different agencies

Departments	Post doctoral fellow	Supervisor	Projects
Anthropology	Dr. Santanu Panda Post doctoral fellowship	Dr. Abhjit Guha	ICSSR
Bio-medical	Dr. Chhanda Mallick	Prof. Debidas Ghosh	DST
Chemistry	Dr. Sayantani Dutta	Dr. Sudipta Dalai	CSIR

3.1.10 Sabbatical leave offered to the faculty for pursuit of higher research

On account of the paucity of faculties the university is not in position now to make provision for sabbatical leave. However, the University generously sanctions the study leave to the faculty members. The faculties have utilized study leave for pursuit of higher research in premier institutions. The following teachers enjoyed study leave recently: **Dr. Debdulal Banerjee**, Assistant Professor, Department of Botany and Forestry – **Montana University, USA (May 2009 to February 2010)**; **Dr. Kuntal Chatterjee**, Assistant Professor, Department of Physics – **Institute of Physics, Academia Sinica, Taipei (May 2012 to July 2012)** and **Dr. Biswajit Sarkar**, Assistant Professor, Department of Applied Mathematics with Oceanography and Computer Programming – **Department of Industrial Engineering, Pusan national University, South Korea (May 2012 to April 2013)**.

3.1.11 National and international conferences organized by the university**Table 3.5 Seminar / workshop organized by Arts and Commerce faculty in last 5 years**

Dept.	Seminar	Workshop	source of funding
Bengali	4	1	UGC
Economics	9		UGC, ICSSR, West Bengal State University and West Bengal Higher Education Council
English	2	1	UGC
History	7		UGC, MAKAIAS, ICHR
Pol Sc	3		UGC
SANSKRIT	1		UGC
Santali	6		UGC

Sociology	4		UGC
Philosophy	3	1	UGC
MBA	4		UGC
Library sc.	6		UGC
Hindi	2		UGC
Commerce	6		UGC, NABARD, ICSSR
Total	57	3	

Table 3.6 Seminar / workshop organized by Science faculty in last 5 years

Dept.	Seminar	Workshop	source of funding
Biomed lab	3		DST, ICMR, UGC
Math	5	1	UGC
Chemistry	5		
Antropology	1	1	UGC
AMT	1	2	UGC,DBT, DST,CSIR, NRDMS
Botany	3		UGC
computesc	2	1	UGC
Electronics	1		UGC
Geography	2		UGC
Mcrobiology		11	Department of Biotechnology, Govt. of India
Physics	9		UGC
Zoology	1		Distance Education Council, New Delhi, 18th to 24th March,2013.
Human Physiology	4		UGC, ICMR,CSIR,DRDO, DST,
Total	37	16	

3.2 Resource Mobilization for Research

3.2.1 Financial provisions made in the university budget for supporting students' research projects

The Vidyasagar University admits research students into Ph.D. and M. Phil programme through an entrance examination in accordance with the UGC Regulation 2009. Students generally receive financial support from the different national funding agencies such as CSIR, UGC, DST, DBT, DRDO, ICHR, ICSSR, ICMR, NCERT, RFSMS scheme (UGC), Rajib Gandhi Fellowship, Inspire Fellowship, Ministry of Environment and Forest, State DST, Moulana Azad National Fellowship for Minorities, West Bengal Pollution Control Board, State PHE Department, *etc.* for Ph. D. programme. Apart from that, a portion of the total financial budget is allocated in different year for promoting research. The allocation of fund is furnished below –

Table 3.7: Financial provisions for supporting students' research

Sl. No.	Financial Year	Budget for supporting students' research (Rs.)
1.	2009- 2010	1.50 Cr.
2.	2010-2011	2.00 Cr.
3.	2011- 2012	3.00 Cr.
4.	2012 – 2013	4.50 Cr.

3.2.2 Encouraging the faculty to file for patents

University always encourages and supports faculty members for filing patents. Special lecturers on modalities of filing patents are arranged time to time by the University for creating awareness about the patents.

Table 3.8: Patent filed by the faculty members of the university

Name of the Faculty	Department	Registration No.
Prof. Braja Gopal Bag	Department of Chemistry and Chemical Technology	1161/KOL/2008
Prof. D. Ghosh	Bio-Medical Laboratory Science and Management	248596 dt. 27 th July, 2011
Prof. Somnath Roy	Dept. of Human Physiology with Community Health	1. Patent title: a nano drug carrier and also to a process of preparation thereof. patent file no: ipr/4.19.5/08089/2009 2. Patent title: Chitosan based nanoparticles and processes for preparing them. Patent file no: ipr/fa/11029-1/2011

3.2.3 Ongoing research projects of faculty members:

The lists of ongoing research projects are shown in the following tables

Table 3.9: Research grant received in last four years

Research grant received in the year 2009				
Sl. No.	Name of Project	Sanctioning authority and date	Principal Supervisor / for the Project	Gross Sanctioned amount (Rs.)
1.	Remedial effects of ingredients diabetic male wistar rat. -	UGC – Major Research Project 34-494/2008(SR) dt. 26/12/08	Dr. Debidas Ghosh, Deptt of BMLSM.	9,25,300/-
2.	A study into investors Grievance in India.	UGC – Major Research Project 5-76(1)/2009 (HRP) dt. 25/03/2009,	Prof. Arindam Gupta, Dept. of Commerce	5,21,200/-
3.	The Groveling Muslim	, UGC – Major Research project, 5-	Dr. S.A.H. Moinuddin,	5,05,800/-

 Districts of W.B.	102(1)/2008(HRP) dt. 07/01/09 Project.	dept. of Sociology	
4.	Formulation of Health awareness package Paschim Midnapur Districts, W.B.	4-51(494) DERPP/08/137 dt. 13/03/09 – NCERT Project	Dr. Debidas Ghosh, Deptt of BMLSM.	2,00,550/-
5.	A Proto type Experiment At North East Sundarans, West Bengal”	ICSSR	Dr. Ramkrishna Maity, Dept of Geography	5,93,000/-
6.	Production of microbial tannase and its application in detannification of foodstuff	UGC support for MRP 36- 330/2008(SR) dt. 28/3/09	Dr. Pradeep Das Mahapatra, Dept. of Microbiology	5,67,000/-
7.	Organoboron in organized molecular systems: synthesis and self –organization studies of selected pyridinyl- boronic acid surfactants and their salts in water	DST, Govt. of India. SR/FT/CS-026/2008 dt. 13/2/09	Dr. Sumita Roy, Dept. of Chemistry	18,81,000/-
8.	“Evaluation of Anti hepatic –fibrosis”	34-568/2008(SR) dt. 15/1/09	Dr. Sandip Chattopadhyay, Dept. of BMLSM.	1,00,000/-
9.	Molecular and Proteomic approach for monitoring drug resistant malaria parasite in the malaria endemic zone in West Bengal.	DST, Govt of India	Dr. S. Roy, Dept of Human Physiology	19,22,600/-
10.	Application of nano particles for delivery of drug to drug resistant bacteria and oral squamous carcinoma cell line	DBT , Govt of India	Dr. S. Roy, Dept of Human Physiology	40,24, 000/-

11.	'Identification of Quorum Sensing Regulation on Flagellum-Dependent Signal Transduction Pathway Controlling Biofilm Formation and Virulence Gene Expression in <i>Vibrio cholerae</i> '.	DST , New Delhi	Prof. Chandradipa Ghosh, Dept of Human Physiology	22,00000/-
12.	Study on the functional at high altitude.”	DRDO Project TC/336/TASK-160(KCM)/DIPAS/2009 dt. 9/9/09	Dr. Keshab Chandra Mondal, Dept. of Microbiology	9,93,000/-
13.	“Evaluation of occupational health hazards of women agricultural workers engaged in rice and vegetable cultivation, application of Ergonomic check points and redesigning of small Hand Tools	DST Project, Govt of India. CO/RP/MOI/07 dt. 31/7/09	Prof. P C Dhara, dept of Human Physiology	16,83,200/-
14.	A Study on Measurer of Reference to EVA.”	UGC, MRP 576(2)/2009 (HRP) dt. 30/3/09	Mr. Tagarlal Khan, Dept. of Commerce	80,000/-
15.	Biobleaching of industrial kraft pulp by xylanase from both free and immobilized bacterial cells	CSIR Project 38(1234)/09/EMR-II dt. 1/12/09	Dr. Keshab Chandra Mandal, Dept. of Microbiology	11,87,000/-
16.	“Dietary babits West Bengal.”	ICMR, Govt. of India. 5/9/63/2008 RHN dt. 23/11/09	Dr. Sudip Dutta Banik, Deptt of Athropology	2,94,700/-
17.	Possible antihyperglycemic effects of active ingredients	ICMR 59/9/2006/BMS/TR	Dr. Debidas Ghosh, Dept.	11,48,000/-

	present in the effective extract of seed of <i>Tamarindus indica</i> in STZ-induced diabetic rats and its chemical characterization	M	of BMLSM.	
18.	Diversity of ant plant interactions: Protective efficacy in species with extra floral nectarines (EFNs) in the Flora of Midnapore, West Bengal	UGC, New Delhi	Dept of Botany	1400000/-
19.	Fabrication of a fluorimeter coupled with a phase sensitive detection system to study magnetic field effect on exciplex luminescence.	DST, Govt of India/ 2006	Dr. Ajoy Kr. Misra, Deptt of Chemistry	8,22000/-
20.	An Investigation on the Detection of Electron Deficient Aromatic Compounds: Design, Synthesis and Study	DRDO, Govt of India, 2008-20010	Prof. Braga Gopal Bag, Dept. of Chemistry	5,68600/-
21.	Engineering of transition metal – organic coordination polymers using azide and dicarboxylate bridging ligands, towards application in molecular magnetism: An experiment - theory correlation	DST, Gov.t. of INDIA	Dr. Sudipta Dalai, Dept of Chemistry	1,7,00000/-
22.	Development of eco-friendly grower feeds for indian major carps using non-conventional feed ingredients of west bengal.	UGC , New Delhi	Dr. Joydeb maity, Dept. of AMT	1,00000/-
23.	Development of Haldia Urban Industrial Complex and Displaced: A Study with Reference to Changes in Livelihood and Human	ICSSR	Prof. S N Sau, Dept. of Economics	3,63,000/-
24.	Prospect of Sustainable Tank Irrigation Options	ICSSR	Prof. S K Jana, Dept. of	2,87,000/-

	in the Dry Zones of West Bengal		Economics	
25.	Rural Non-Farm Employment: Pattern Determinants and Impact (A Households Level Study in Two Districts of West Bengal)	UGC	Prof. P. Das, Dept. of Economics	80,000/-
26.	Background research, economic and status survey of terracotta and dokra crafts of west bengal	Directorate of Cottage and Small-scale Industries, Govt. of West Bengal	Dept of Anthropology	2,40,000/-
Total: 24386950/-				
Research grant received in the year 2010				
Sl. No.	Name of Project	Sanctioning authority and date	Principal Supervisor for the Project	Gross Sanctioned amount (Rs.)
1.	“South Asia through Russian Prison.”	UGC-MRP 5-327/2009(FDIII) dt. 12/1/2010	Dr. Rajkumar Kothari, Dept of Political science	5,26,500/-
2.	“Synthesis of water Waste water.” (75)	UGC-MRP 37-476/2009(SR) dt. 11/1/10	Prof. B R De, Dept. of Chemistry	6,85,200/-
3.	Germplasm conservation of Endangered fish species of South –West , West Bengal	Dept of Env., WB	Prof. B. C. Patra, dept of Zoology	5,90,000/-
4.	Development of live fishfood to promote growth and production of freshwater ornamental fishes.	UGC-MRP 37-621/2009(SR) dt. 12/1/10	Dr. Basudev Mondal, Dept. of AMT	1,45,000/-
5.	“Ecotourism development Jungle Mahal in West Bengal.”	UGC-MRP, New Delhi.37-651/2009(SR) dt. 12/1/10	Dr. Abhishek Chakraborty, Dept of	1,85,000/-

			RS-GIS	
6.	Hydro-Biology and Geomorphology of Subarnarekha and Kasai River Basin and their Interfluves.	Central Pollution Board, Calcutta. V	DR. A. K pal , Dept of Geography	42,000,00/-
7.	To study the effect of hexavalentpaniculatanees	UGC-MRP, New Delhi. 37-1/2009/WB(SR) dt. 11/1/10	Dr. Sankar Kr Dey and prof. S. Roy , Dept of Human Physiology.	9,43,300/-
8.	Water quality monitoring of five rivers of West Bengal viz. Kansai, Dwarkeswar, Subarnarekha, Shilabati and Rupnarayan.	West Bengal Pollution Control Board	Prof. Susanta Kumar Chakraborty, Deptt of Zoology	38,03,000/-
9.	Compilation, analysis and interpretation of water quality parameters of last five years during 2004-2010 of five rivers of West Bengal viz. Shilaboti, Rupnarayan, Subarnarekha, Dwarkeswar & Kansai	West Bengal Pollution Control Board	Prof. Susanta Kumar Chakraborty, Deptt of Zoology	1000000/-
10.	Core Shell Nanoparticles and Nanowires – the Novel Materials for Future Technology	DST, Govt. of India, SR/FTP/PS-II/2009 dt. 28/9/10	Dr. Kuntal Chatterjee, Deptt of Physics	17,76,000/-
11.	A study of plant	UGC, MRP F.37-552/2009(SR) dt. 23/12/10	Dr. Ashis Kr Nandi, Deptt of Botany.	1,86,500/-
12.	Investigation on Directional Control Response Stereotype and Hand Arm Strength of the Population in Eastern	DRDO, Govt. of India DLS/81/48222/LSRB -214/IPB/2010 dt. 2/8/10	Dr. P C Dhara, Deptt of Human Physiology.	15,00,000/-

	India			
13.	Development of herbal spermicide from <i>Stephania hernandifolia</i> , <i>Achyranthus aspera</i> and <i>Cestrum parqui</i> using rat and human sperm	DST, Govt of India DST/NT/TUN/P1(2)/ 2009 dt. 2/8/10	Dr. Debidas Ghosh, Deptt. of BMLSM	5,10,000/-
14.	Samaresh Basur Chotogalpe Kathya Bangla Bhashar Prasango	UGC Minor Research Project	Dr. Sujit kr Pal, Dept of Bengali	1,22,00/-
Total: 16062700/ –				
Research grant received in the year 2011				
Sl. No.	Name of Project	Sanctioning authority and date	Principal Supervisor / for the Project	Gross Sanctioned amount (Rs.)
1	Teaching Shakespeare: Trends in Shakespeare-studies in Indian Universities since Independence with special reference to West Bengal	UGC, Major Research Project No. 5-511/2010(HRP) dt. 7/3/11	Dr. T D Purakayastha, Deptt. of English	3,80,200/-
2	L(h,k) labeling on intersection graph	DST, Govt. of India SR/54/MS-655/10 dt. 21/2/11	Dr. Madhumangal Pal, Deptt. of Mathematics	8,71,000/-
3	Evaluation of Work Related Health Hazards of Rural Women Performing Agricultural Activities and Application of Ergonomic Check Points for Reducing Job Related Drudgery	ICMR, New Delhi	Prof. prakash C Dhara, Dept of Human Physiology	19,35,000/-
4	Assessment of efficiency and antimicrobial activity of Biostadt aqua products	BIOSTADT INDIA LTD. Mumbai, Sanct. No. 2097 dt.	Dr. Pradeep Kumar Das Mahapatra, Dept of	4,34,000/-

		21/6/2011	Microbiology	
5	Production of exopolysaccharide from endophytic fungi	UGC-MRP Sanction no. 40-131/2011(SR) dt. 4/7/2011	Dr. Debdulal Banerjee, Dept of Botany	5,00,000/-
6	Studies on the microbial profile and antimicrobial characteristics of Haria, a rice based fermented beverage	UGC-MRP Sanction no. 40-124/2011(SR) dt. 4/7/2011	Dr. Keshab Chandra Mondal, Dept of Microbiology	8,99,800/-
7	Open source Drug Discovery	CSIRSanction no. OSDD/HCP001/11F YP/2011-12 dt. 8/11/11	Dr. Sirajul Islam, Dept of Chemistry	18,00000/-
8	Hydrogeological study of subsurface water flow/storageunder Purulia, Bankura and Birbhum districts'	Government of West Bengal, Directorate of Public Health Engineering, Kolkata-	Dr. A. K. Pal Dept. of Geography	25,000,00/-
9	Proteomic and Genomic study of testicular tissue in streptozotocin-induced diabetic rat..... of <i>Eugenia jambolana</i> as anti apoptotic phytomolecule for germ cell	DST, Govt. of India Sanctionno.SR/80/HS -171/2010(G) dt. 30/9/11	Dr. Debidas Ghosh, Dept. of BMLS	51,62,000/-
10	Possible antihyperglycemic and antihyperlipidemic effects on active ingredient (s) present in effective extract of endosperm of <i>Swietenia mahagony</i> in STZ induced diabetic rat	ICMR... 2011	Dr. Debidas Ghosh, Dept. of BMLS	8,24,700/-
11	Linker based luminescent MOFs (metal organic frameworks) of zinc(II) and cadmium(II): Syntheses, structure and luminescence study	UGC , 2011	Dr. Sudipta Dalai, Dept of Chemistry	1,10000/-

12	Visual Detection of Electron Deficient Aromatic Compounds	DRDO	Prof. Braga Gopal Bag, Dept of Chemistry	16,63600/-
13	Resource mapping, conservation & artificial propagation of fish germplasm in arunachal pradesh with emphasis on promotion of aquarium fish trade	DBT, govt. of India	Pro. Bidhan C Patra, Dept of AMT	56,61000/-
14	Synthesis of Noble metal nanoparticles having higher aspect ratio through seed mediated growth processes and their functionalization with organic fluorophore.	CSIR, Govt. of India 2011/ ...	Dr. Ajay Kumar Misra, Dept of Chemistry	7,50000/-

Total – 23491300/-

Research grant received in the year 2012

Sl. No.	Name of Project	Sanctioning authority and date	Principal Supervisor for the Project	Gross Sanctioned amount (Rs.)
1	Electron Dynamics in Magnetic Materials [EDMM-2013]	DST(SERB) SERB/F/4846/2012-13 dated 29.11.2012	Prof. Radha Raman Pal, Dept of Physics	80,000/-
2	Design synthesis Mateerials	CSIRSanction no. 01/2536/II/EMR-11, dt. 12/12/11	Dr. Sudipta Dalai, Dept of Chemistry	12,00000/-
3	Interrogating Nationalism: Critical perspectives on the letters of Rabindranath Tagore	UGC (MRP)F-6-119/2012 (HRP) dated 05.09.2012	Dr. Joyjit Ghosh, Dept of English	1,50000/-
4	Assessment of the toxic effects of synthetic pyrethroid Cypermethrin on	UGC (MRP) F.41-150/2012 (SR)	Dr. Sujata Maiti (Choudhury)	12,99,800/-

	biochemical, hormonal and oxidative stress parameters of reproductive system and its alleviation through supplementation of zinc and α - lipoic acid in animal.	dated 1307.2012), Dept of Human Physiology	
5	Fine structural demonstration of olfactory neuroepithelium of <i>Pseudapocryptes lanceolatus</i> (bloch and schneider) with special reference to electron enzymology and x-ray microanalysis.	UGC Major Research Project	Prof. S. K. De , Dept of Zoology	11,41,800/-
6	Assured Opportunity for Research Career (AORC)	DST INSPIRE IF-110284	Dr. Ramkrishna Maity/ Sohini Paral, Dept of Geography	2,50,400/-
7	A Critical Analysis of Migration, Construction and land alteration	UGC	Dr U Roy, Dept of Geography	1,00000/-
8	Production Planning and Inventory Control : A New Approach	UGC (MRP)F.41-1433/2012 (SR) dated 08.05.2012	Dr. Biswajit Sarkar, Dept of Applied mathematics	1,13,000/-
9	Social Protection and Poverty Reduction: A Study with Special Reference to the Backward Region of West Bengal	ICSSR F.02/33/2011/RP dated 23.10.2012	Dr. Pinaki Das, Dept of Economics	5,66,528/-
10	Evaluation of Occupational stress of Brick kiln workers and Ergonomic Design of Brick Dice.	CSIR 27(0270)/12/EMR-II dated 26.04.2012	Dr. Prakash Chandra Dhara, Dept of Human	19,01000/-

			Physiology	
11	Development of viable larval diet for striped murrel, <i>Channa striatus</i>	UGC	Dr. manoj K Pati, Dept. AMT	6,00000/-
12	Social Protection and Poverty Reduction: A Study with Special Reference to Backward Region of West Bengal	ICSSR	Prof. P. Das , Dept of Economics	5,66,525/-
13	Germplasm resource mapping and conservation of indigenous ornamental fishes of north-east region through remote sensing & GIS and live gene bank for rural development	DBT, govt of India	Dr. J. Bandyopadhyay, Dept of RE-GIS	75,01,000/-
14	Fluorescent and magnetic inorganic-organic hybrid compounds: synthesis, structure, property and non-covalent interactions in the crystal structure	DST (SERB) SERB/F/5574/2012 -13 dated 28.11.2013	Dr. Subal Chandra Manna, Dept of Chemistry	2630000/-
Total 18100053/-				
Research grant received in the year 2013				
Sl. No.	Name of Project	Sanctioning authority and date	Principal Supervisor / the Project	Gross Sanctioned amount (Rs.)
1	Study of the Self-assembly of Renewable Nano-sized Triterpenoids	CSIR, Govt of India, 2013	Prof. Brajagopal Bag, Dept of Chemistry	22,00000/-
2	L (h.k.) Labeling on Intersection groups	DST(SERB)SERB/F/1830/2013-14 dated 20.06.2013	Dr. Madhumangal Pal, Dept of Applied mathematics	3,00,000/-
3	Development of a model for sustainable backward poultry farm (Integrated farming)	RKVY ,Govt. of India and Deptt. of Animal Resource	Dr. Basudev Mamdal, Dept of	1,76,00,100/-

		Development, Govt. of WB	AMT	
4	Evaluation of antifertility activity of seed of <i>Cuminum cyminum</i> (Jeera) in male albino rat: An approach through genomics and proteomics	DST Govt. of India, ...2013	Dr. debidas Ghosh, Dept of BMLS	11,56,000/-
5	Effect of NANO-DAB (nano particle tagged herbal product) on reproductive disorder in streptozotocin-induced diabetic rat	DST Govt. of India, ...2013	Dr. debidas Ghosh, Dept of BMLS	20,02,000/-
6	Refinement of Hatchery technology for large scale seed production and grow out culture of Indian Prawn <i>Macro-brachium malcolmsoni</i>	DST (SERB) SR/FT/LS-49/2012 dated 12.12.12, SERB/F/3048/2013 -14 dated 13.08.2013	Dr. Prasanti Mishra, Dept of AMT	20,30,000/-
7	Development of Graphene quantum dot nano composites for optoelectronic applications	DST(SERB)SERB/ F/2375/2013-14 dated 22.07.2013	Dr. Surajit Ghosh, Dept of Physics	19,44,000
8	Germplasm resource mapping and conservation of indigenous ornamental fishes of north-east region through remote sensing & gis and live gene bank for rural development	DBT , govt of India SERB/F/0265/2013 -14 dated 23.04.2013	Dr. Bidhan Chandra Patra, Dept of AMT	75,01,000/-
9	Synthesis Characterization and optical properties of metal and metal dielectric core shell nanoparticles	UGC (MRP) F.42- 1069/2013(SR)	Kuntal Chatterjee, Dept of physics	200000/-
10	A Study on Nonlife Insurance in India during the Deregulated period.	UGC (MRP) F-6-47/2013 (SRP) dated 29.03.2013	Dr. Abhijit Sinha	1, 32, 815/-
11	Delineating signal cascades induced by colonization factor CFA/I of	UGC (BSR)F.20- 33/2013(BSR)dated	Dr. Sagar Acharya,	600000/-

	enterotoxigenic <i>Escherichia coli</i> .	09.12.2013	Dept. of Zoology	
12	Development of viable larval diet for striped murrel, <i>Channa striatus</i>	UGC-BSR F.20-32/2013 (BSR) dated 13.12.13	Dr. Manoj Kumar Pati, Dept of AMT	6,00000/-
13	Blood Plasma Protein inorganic material / nanoparticle interaction and bioengineering formation	UGC (MRP) F.41-1401/2011(SR) dated 30.07.2012	Dr. Satyjit Saha, Dept of Physics	2,00000/-
14	Study of soft set theory and its application	UGC (MRP) F.42-994/2013 (SR) dated 25.03.2013	Dr. Shyamal Kumar Mondal, Applied Math	170000/-
15	An Enquiry into the Effect of Macro Economics variables on Security prices in India during the Liberalized period	UGC (MRP) F6-52/2013(HRP) dated 26.03.2013	Dr. Tarak Nath Sahu, Dept of Commerce	92,000/-
16	Task Force Project, Entitled: National Hospital Based Rotavirus Surveillance Program - Peripheral site at Medinipur	ICMR, New delhi	Prof. Chandradip a Ghosh, Dept of Human physiology	45,00000/-
17	UGC BRS start-up grant	UGC (BSR) F.20-4(17)/2012 (BSR) dated 08.03.2013	Dr. Sumana Sarkhel, Dept of Human physiology	5,40,000/-
18	Prevalence of chronic obstructive pulmonary disease (COPD) and pulmonary function and its lifestyle correlates among various occupational groups of midnapore town, west bengal, india	UGC (BSR) 20-6(17)/2012 (BSR) dated 03.03.2013	Dr. Sovanjan Sarkar, Anthropology	600,000/-

19	Nature of non-elephant conflict in Panchet forest division Banrura West Bengal: A Inter disciplinary Approach	ICSSR F.02/315/2011/SC /RP dated 05.01.2013	Dr. Nilanjan Das Chatterjee	647150/-
20	Criminal Tribe to Primitive Tribal Group and the Role of State towards	ICSSR F.3-49/2013-14 PDF	Dr. Santanu Panda	6,72000/-
21	Resource Mapping, Conservation & Artificial Propagation of Fish Germplasm In Arunachal Pradesh With Emphasis on Promotion of Aquarium Fish Trade	DBT NER TWINING PROGRAMME	Dr. J. Bandyopadhyay, dept. of RS-GIS	118, 80,234/-
22	Interaction of single strand and double strand RNA with phenothiazinium dyes: A comparative spectroscopic and thermodynamic study.	UGC/ ...2013	Dr. M. Hossain	6,00,000/-
23	Fluorescent and Magnetic inorganic organic Hybrid Sompounds: Synthesis structure, property and non covalent interaction in the crystal structure	CSIR 01 (2743)/13/EMR-II dated 18.04.2013	Dr. Subal Chandra Manna	7,17000/-
24	Fermented foods of Ladakh region:Standardization of process parameters for hygienic and quality food preparation related to the Economic development of the high altitude societies	DST , CODER	Dr. K C. Mondal, Dept of Microbiology	50,00000/-
Total - 61884299/-				

Grand Total amount of Ongoing Projects (2009 - 2013) = Rs. 143925302 /-

3.2.4 Projects sponsored by the industry / corporate houses

The university has received the following project sponsored by Industry / Corporate House.

Table 3.10: Project sponsored by the Industry

Dept	Name of the project	Funding agency	Grant received
Dept of Microbiology (Dr. P. K. Das Mahapatra and Dr. K. C. Mondal)	Assessment of efficiency and antimicrobial activity of Biostadt aqua products	Biostadt India Ltd. Mumbai (Industrial project)	4.34 lakh

3.2.5 Departments of the university have been recognized for their research activities by national / international agencies

The Vidyasagar University is one of the well-known institutions of higher learning in the country. The faculty and the departments are known for their research contributions in their respective fields of study. In recognition of their research potentials and contributions different funding agencies have provided special grants to accelerate research activities in many Departments.

Table 3.11: Financial assistance received by the departments from different funding agencies

Sl. No.	Name of the Departments	Year	Recognition by National/ International agencies	Amount received
2	Botany	2010	UGC Infrastructure Development Grant	Rs. 10 lakh
		2011 - 2016	UGC (SAP)	Rs. 45 lakh
3	Chemistry	2004-2009	DST-FIST	Rs. 60 lakh
		2008-2011	UGC-SAP	Rs. 64 lakh
		2012-2017	DST-FIST	Rs. 240 lakh
		2012-2017	UGC-DSR	Rs. 20 lakh
4.	English	2009 - 2014	UGC SAP-III DRS-I	Rs. 35.5 lakh
		2012	UGC Infrastructure Development Grant	RS. 10 Lakh
5.	Human Physiology	2012	UGC Infrastructure Development Grant	RS. 10 Lakh
6	Microbiology	2011	UGC Infrastructure Development Grant	RS. 10 Lakh
7	Physics	2007 - 2012	DST-FIST	60lakh
		2009 - 2014	UGC SAP	57.8 lakh
		2009	UGC Infrastructure Development Grant	20 lakh
		2011	UGC Infrastructure Development Grant	20 lakh
Total				Rs.662.3 lakh

Two major outcomes:

1. The Dept of English under the SAP programme has published two volumes – i. Survival and other Stories: Bangla Dalit Fiction in Translation and ii. Towards Social Change: Essays on Dalit Literature – from Orient Black Swan, the well known publishing house. Another two volumes on the languages of West Bengal are in press.
2. Dept of Physics established an XRD set up, which is required for material characterization, from DST-FIST grant. This set up , with state recognition, now serves the needs of researchers of the university and other institutions of higher education like, Burdwan University , IIT Kharagpur, etc.

3.2.6 Details of

a. research projects completed and grants received during the last four years (funded by National/International agencies).

b. Inter-institutional collaborative projects and grants received

i) All India collaboration

ii) International

Table 3.12: project completed in last four years

a) Projects completed in the year 2009-10

Sl. No.	Name of Project	Sanctioning authority and date	Principal / Supervisor for the Project	Amount Received (Rs.)
1.	“Possible anti-hyperglycemic effects of active Tamasindus indica in”	59/9/2006/BMS/TRM	Dr. Debidas Ghosh, Dept of BMLS	11,21,985/-
2.	“A Proto type Experiment At North East Sundarans, West Bengal” (38)	ICSSR	Dr. Ramkrishna Maity, Dept. of Geography	2,37,000/-
3.	Formulation and implementation Industries of Midnapur, W.B. – (87)	DST/GIA/7126/2007-08/ dt. 21/4/08, Project no. CO/FP/G136/07 (DST –2)	Dr. Debidas Ghosh Deptt of BMLSM	3,45,000/-
4.	Studies on endophytic potentials	UGC –MRP New Delhi 32-577/2006(SR)	Dr. D. Benerjee, Dept. of Botany	6,80,100/-
5.	An Investigation on the Synthesis and study	DRDO Project	Dr. B.G. Bag., Dept. of chemistry & chemical Tech.	568600/-
6.	Development of Eco-Friendly Feed ingredients of W.B.	UGC – MRP (Minor Research Project) w.e.f. 1.4.08 to	Dr. Joydev Maity, Dept of AMT	100,000/-
7.	Formulation of Health awarness package Paschim Midnapur Districts, W.B. – (36)	4-51(494) DERPP/08/137 dt. 13/03/09 – NCERT Project	Dr. Debidas Ghosh, Deptt. BMLSM	2,00,550/-
8.	Fabrication of a fluorimeter coupled with a phase sensitive detection system to study magnetic field effect on exciplex luminescence.	Dst , GOI	Dr. Ajaoy K Mishra, Dept of Chemistrey	8,22000/-
Total:				4075235/-

b) Research projects completed in the year 2010 – 2011

Sl. NO	Name of Project	Sanctioning authority and date	Principal / Supervisor for the Project	Amount Received (Rs.)
1.	Molecular approach malaria endemic zone in WB. – (50)	DST, Govt. of India, SR/SO/HS-106/05 Dt. 17/10/2007	Prof. A K Hati. & Dr. Somenath Roy, Deptt of Human Physiology.	19,00,000/-
2.	Testicular germ cell apoptosis MTEC and its clinical trial. – (88)	DST Govt. of India Sanction No.SR/SO/HS/-88/2006 Dt. 04/02/2008	Dr. Debidas Ghosh. Deptt of BMLSM.	20,41,000/-
3.	Production of chitinase and erustacean through bacterial fermentation. - (92)	UGC New Delhi F-33-218/2007 (SR) Dt. 28/02/08 (MRP UGC)	Prof. B R Pati. Deptt of Microbiology	8,11,160/-
4.	“South Asia through Russian Prison.” (72)	UGC-MRP 5-327/2009(FDIII) dt. 12/1/2010	Dr. Rajkumar Kothari, Deptt. Pol. Science	3,56,500/-
5.	“Synthesis of water Waste water.” (75)	UGC-MRP 37-476/2009(SR) dt. 11/1/10	Prof. B R De, Deptt of chemistry & chemical Tech.	3,79,200/-
6.	“Dietary babits West Bengal.” (78)	ICMR, Govt. of India. 5/9/63/2008 RHN dt. 23/11/09	Dr. Sudip Dutta Banik, Deptt of Athropology	2,94,740/-
7.	Development of live fish foodornamenta l fish (81)	UGC-MRP 37-621/2009(SR) dt. 12/1/10	Dr. Basudev Mondal, Deptt of AMT	95,000/-
8.	Synthesis, characterization and optical...core shell nanoparticles	DST, Govt. of India, SR/FTP/PS-II/2009 dt. 28/9/10	Dr. Kuntal Chatterjee, Deptt of Physics	10,00,000/-
9.	A study of	UGC, MRP F.37-552/2009(SR) dt. 23/12/10	Dr. Ashis Kr Nandi, Deptt of Botany.	66,500/-
10.	Investigation on....	CSIR, Govt. of India	Dr. Ajoy Kr. Misra, Deptt of chemistry & chemical Tech.	3,75,000/-
11.	Teaching Shakespear Special ref to W.B.”	UGC, Major Research Project No.5511/2010 (HRP) dt. 7/3/11	Dr. T D Purakayastha, Deptt. of English	2,39,200/-
12.	Isolation Characterization and Standardization of mushroom polysachharides (33)	DST Govt. of India Sanction No. SH/SI/OC-52/06 Dt. 19/02/2007	Dr. Syed Sirajul Islam. Dept. of chemistry & chemical Tech.	18,00,000/-
13.	Identification of Quorum sensing regulation on..... expression in vibrio cholerae. – (45)	DST/GIA/1281/07-08 Cash Govt of ndia DST Dept. Sanction No SR/SO/HS-43/2006 Dt. 26/06/2007	Dr. Chandradipa Ghosh, Dept of Human Physiology	22,00,000/-
14.	Engineering of	DST, Govt. of India,	Dr. Sudipta Dolai.,	14,00,000/-

Sl. NO	Name of Project	Sanctioning authority and date	Principal / Supervisor for the Project	Amount Received (Rs.)
	transition experiment theory correlation. (55)	New Delhi SR/FTP/CS-26/07 Dt. 05/10/2007	Dept. of chemistry & chemical Tech.	
15.	Govt. of West Bengal, department of Environment - DST {State} – (58)	EN/P/2017/T-VIII-2/004/2007 dt. 15/10/07	Dr. J K Kundu, Dr. B C Patra, Dept. of Zoology	5,25,000/-
16.	Study of Supply Chin models using Fuzzy logic and soft computing techniques – (71)	25(0166)/08 EMR-II Dt. 17/01/2008	Dr. S K Mandal, Dept. of Applied Mathematics	3,24,000/-
17.	A molecular approach to the development... intraspecific polymorphism in marsilea. – (77)	UGC New Delhi F-33-158/2007 (SR) ,Dt. 31/01/2008 (MRP UGC)	Dr. Amal Kr. Mandal. Dept. of Botany.	5,83,000/-
18.	Development of Haldia Urban displaced people. –(74)	Indian Council of Social Science Research F.No. RP-02/0078/2007/RP Dt. 17/03/2008(GOI)	Prof. S N Sau Dept. of Economics.	3,39,600/-
19.	Evaluation of hepatoprotective antihepatic fibrosis	UGC (Minor)	Dr.SandipChatterjee, Dept of BMLS	1,00,000/-
20.	(15)	F-33-478/2007(SR) dt. 28/2/08 UGC – MRP (Minor Research Project)	Mr. Biplab Mondal, Dept of Zoology	50,000/-
Total -				14879900/-

c) Research projects completed in the year 2011 – 2012

Sl. NO	Name of Project	Sanctioning authority and date	Principal / Supervisor for the Project	Amount Received (Rs.)
1.	“Application of Nano Particles for Carcinoma cell line.” (8)	BT/PR10861/NNT/28/131/2008, Govt of India, DBT Project , Ministry of Sc. & Tech. Department of Biotechnology.	Prof. Somenath Roy, Deptt of Human Physiology.	30,51,000/-
2.	Remedial effects of ingredients diabetic male wistar rat. - (18)	34-494/2008(SR) dt. 26/12/08 UGC – Major Research Project	Dr. Debidas Ghosh Deptt of BMLSM	925300/-
3.	“Evaluation of Small hand tools” (58)	DST Project, Govt of India.CO/RP/MOI/07 dt. 31/7/09	Dr. P C Dhara, Deptt of Human Physiology	14,25,000/-

4.	Fuzzy – Stochastic Variable making problems. (94)	33-101/2007(SR)	Prof. Manoranjan Maiti, Dept. of Applied Mathematics	3,67,000/-
5.	A study into investors Grievance in India. – (21)	5-76(1)/2009 (HRP) dt. 25/03/2009, UGC – Major Research Project	Prof. Arindam Gupta, Dept of Commerce	4,82,000/-
6.	The Groveling Muslim Districts of W.B. – (25)	5102(1)/2008(HRP) dt. 07/01/09, UGC – Major Research Project.	Dr. S.A.H. Moinuddin, Dept of Sociology	3,16,800/-
7.	“Production of Microbial.....detannification of foodstuff”. (42)	36-330/2008(SR) dt. 28/3/09 UGC support for MRP	Dr. Pradeep Das Mahapatra, Dept of Microbiology	2,68,000/-
8.	“Organoboron in organized their salts in water” (45)	DST, Govt. of India.SR/FT/CS-026/2008 dt. 13/2/09	Dr. Sumita Roy, Dept of Chemistry	15,00,000/-
9.	“Implementation of methodology ... Algorithms.” (49)	UGC – MRP 33-449/2007(SR) dt. 3/9/08	Dr. Sankar Kumar Roy, Dept. of Applied Mathematics	30,000/-
10.	Study on the functional at high altitude.”	DRDO Project TC/336/TASK-160(KCM)/DIPAS/2009 dt. 9/9/09	Dr. Keshab Chandra Mondal, Dept of Microbiology	9,93,000/-
11.	A Study on Mesurer of Reference to EVA.” (62)	UGC-MRP 5-76(2)/2009 (HRP) dt. 30/3/09	Mr. Tagarlal Khan, Dept of Commerce	50,000/-
12.	Development of live fishfood.....ornamental fish(81)	UGC-MRP 37-621/2009(SR) dt. 12/1/10	Dr. Basudev Mondal, Dept of AMT	95,000/-
Total : 95,03100/-				

List of completed project session of 2012-2013

	Name of project	sanctioning authority & date	Supervisor(s) of the projects	Amount received
1.	Possible antihyperglycemic and antihyperlipidemic effects on active ingredient (s) present in effective extract of endosperm of <i>Swietenia mahagony</i> in STZ induced diabetic rat	ICMR F. No. 59/ 30/2008/ BMS/ TRM	Prof. Debidas Ghosh, Dept of BMLS	11,48,000/-
2.	Water quality monitoring offiveriversofWest Bengalviz.Kansai,Dwar keswar, Subarnarekha, Shilabati and	WBPCB, Kolkata	Prof. S K Chakraborty, Dept of Zoology	7,84,000/-

	Rupnarayan.			
3.	Hydrobiological study of sub-surface water flow/storage water characteristics for creation of sustainable source of rain fed river for semi-arid and fluoride effected Blocks in connection with comprehensive water security plant under Purulia, Bankura and Birbhum districts	Public Health Engineering Department, Govt. of West Bengal.	Prof. S K Chakraborty, Dept of Zoology	42,20,000/-
4.	Investigation on Directional Control-Response Stereotype and Hand Arm Strength of the Population in Eastern India	DRDO, Govt. of India DLS/81/48222/LSRB-214/IPB/2010 dt. 2/8/10	Prof. P.C.Dhara, Dept of Human Physiology	15,04 000/-
5.	Development of herbal spermicide from <i>Stephania hernandifolia</i> , <i>Achyranthus aspera</i> and <i>Cestrum parqui</i> using rat and human sperm	DST. Govt of India F.No DST/NT/TUN/ P1 (2)/ 2009	Prof. Debidas Ghosh, Dept of BMLS	5 10,000/-
6.	Linker based luminescent MOF of Zn(II) and Cd(II): Synthesis, structure and luminescent study	UGC 12-01-2011	Dr. Sudipta Dalai, Dept of Chemistry	82,500/-
7.	Visual detection of electron deficient aromatic compound	DRDO 28-02-2011	Prof. Braja Gopal Bag, Dept of Chemistry	16,63,600/-
8.	Organoboron in organized molecular synthesis, structure, selfprganization studies of selected pyridinyl boric acid surfactant and their salt in water	DST	Dr. Sumita Roy, Dept of Chemistry	18,81,000/-

9.	Hydro-Biological and Geomorphological studies of Subarnarekha and Kasai River basins and theirmanagement ”	WBPCB	Prof.Susanta Kumar Chakraborty, Dept of Zoology	20,00,000/-
10.	Hydrobiological study of sub-surface water under Purulia, Bankura and Birbhum districts	Govt. of WB Directorate of PHE, Planning Circle-1,	Prof.Susanta Kumar Chakraborty, Dept of Zoology	66,00,000/-
11.	Biobleaching of industrial kraft pulp by xylanase from both free and immobilized bacterial cells	CSIR 38(1234)/09/EMR-II	Dr. Kesab Chandra Mondal, Dept of Microbiology	10,36,000/-
12.	Production of microbial tannase and its application in detannification of food stuff	UGC 36-330/2008(SR)	Dr. Pradeep Kumar Das Mahapatra, Dept of Microbiology	4,53,000/-
13.	Assessment of efficiency and antimicrobial activity of Biostadt aqua products	Biostadt India Ltd. Mumbai-18	Dr. Pradeep Kumar Das Mahapatra, Dept of Microbiology	2,32,000/-
14.	“Ecotourism development Jungle Mahal in West Bengal.”	UGC-MRP, New Delhi. 37651/2009(SR) dt. 12/1/10	Dr. Abhishek Chakraborty	1,62,500/-
15.	To study the effect of hexavalent.....paniculatane es(86)	UGC-MRP, New Delhi. 37-1/2009/WB(SR) dt. 11/1/10	Dr. Sankar Kumar Dey	7,41,800/-
Total - 23018400/-				

Grand Total amount of completed Projects (2009-12 to 2012-13) = Rs.- 51476635/-

Inter Institutional collaboration

The faculty members of this university have been invited to collaborate with other research institutes both within and outside the country. They have also been awarded fellowships by those organizations.

3.3 Research Facilities

3.3.1 Efforts made by the university to improve its infrastructural requirements to facilitate research

- I. Beginning its journey in 1981 with a clear vision of ‘Gyan, Siksha and Progoti’ (Education, Knowledge and Progress) the University has come a long way in terms of providing its scholars research aid, ambience and infrastructure. To enhance the research, the

infrastructure facilities like laboratory, uninterrupted power supply, internet facility, common instrumentation facility and, staff to maintain the lab, water facility, etc., have been enhanced by the university.

- II. Grants from different funding sources like DST-FIST, UGC –SAP, UGC-infrastructure, DBT etc have been received and utilized for creating advanced level infrastructure to facilitate research. For example, In the Dept of Physics an XRD set up has been created from DST FIST grant, which has got a state recognition.
 - a. The Vidyasagar University has spent a significant amount to develop infrastructure for research. To motivate the research activity, facilities in the University Scientific Instrument Center (USIC) have been significantly enhanced with the addition of a large number of sophisticated instruments.
 - b. The university possesses infrastructure for uninterrupted power supply. We had one substation with 2 x 300 KVA dry indoor type transformer with modified H.T. switch gear and L.T. panels. The installation of new substations completed and charged on 18th April, 2013. The whole work was executed by P.W.D. (C. B.), Govt. of West Bengal. Two 250 KVA Diesel Generator set of Kirloskar Make was commissioned on 5th September 2013. The work for new lines for distribution of D.G supply at deferent building was done in 2 phases. The 1st phase of this work was completed on September-2013 and 2nd phase of this work was completed very recently.
- III. Local area network (LAN) and Digital Library facilities are also available.
- IV. The university allocates fund for research in its annual budget under budgetary heads Viz., equipments, laboratory maintenance, chemicals, glassware, etc to up keep the laboratories.
- V. The University always makes an effort to provide extra space to develop laboratories for the emerging disciplines like GIS & GPS, biomedical laboratory science, Microbiology etc. Researchers in these fields are encouraged to utilize facilities and expertise available across disciplines.

3.3.2 Information Resource Centre to cater to the needs of researchers.

A fully automated modern library is on its way to become an outstanding learning resource centre catering to the ever growing and uncompromising intellectual requirements of the students, faculty, and researchers. It is housed in a separate building having four floors on a plinth area of 1000sq. meters. The library has a collection of 75000 volumes which includes Text Books, Reference Books and Bound vols. of Journals, Standards etc. The Library subscribes to about 135 current Journals. Library operations have been automated with the help of an integrated library software package, SOUL The book database is accessible through OPAC (Online Public Access Catalogue). It has a good collection of Electronic resources in its Digital Library. It is a close-access library and remains open from 8:30a.m. to 5:30 p.m. on weekdays and from 10.30 a.m. to 5.30 p.m. on Saturday . Library has a well-equipped photocopying facility. The users can avail of this facility on payment of a nominal charge. It has also a good IT infrastructure.

The library is an institutional member of Indian Institute of Technology (IIT). It is also a beneficiary Member of UGC - Infonet Consortium, which provides Desktop Access to high quality e-resources (online journals). The library has an e-learning package considering the present day need of teaching and learning process.

3.3.3 University Science Instrumentation Centre (USIC)

The Vidyasagar University has a University Science Instrumentation Centre (USIC) with sophisticated instruments within the campus. Both faculty members and research scholars extensively use the available instrumental facilities of USIC.

Presently the instruments like Gas liquid Chromatography (GLC), Spectrophotometer, RT-PCR, Gel Documentation system; Cryomicrotome, Cold Centrifuge, etc. are available to the faculty members as well as research personnel. Phase Contrast Microscope, Polarizing Microscope, Fluorescence Microscope are also available to conduct structural research. Scanning electron microscope (SEM) and NMR are installed in the Department of Chemistry and Chemical Technology.

Funding allotted during 2009-2013: Rs. 150 Lac.

3.3.4 Residential facilities to facilitate research

Although there is no separate residential provision for research scholars, some seats are reserved for research scholars in the boys and girls hostels of the university.

Visiting Scholars/ Visiting Professors/ Senior Scientists, etc. is accommodated at the University Guest House. Another guest house of International standard is now under construction for Visiting Scientists as well as Visiting Professors.

3.3.5 Specialized research centre/ workstation on-campus and off-campus

Although the University has no specialized research centers/ workstation to conduct research, the extension centers of the university, viz, computer center, USIC, Women Study Center support research at advanced level in various fields of study.

3.3.6 Centres of national and international recognition/repute

The university currently does not have any center of national or international recognition / repute. However, some departments have been able to develop certain facilities, which are used by researchers from other institutions of higher education. For example the Dept of Physics has established an XRD set up, which is required for material characterization, from DST-FIST grant. This set-up, with state recognition, now serves the needs of researchers of the university and other institutions of higher education like, Burdwan University, IIT Kharagpur, etc.

3.4 Research Publications and Awards

3.4.1 Publication of research journal(s)

Several Departments of Vidyasagar University publish Journals on regular basis. The published journals are listed below –

Table 3.13: Journals published by the university departments

Sl No.	Name of Departments	Name of the Journals
1.	Bengali	Bangla Bibhagiyo Patrika
2.	Commerce with Farm Management	Vidyasagar University Journal of Commerce
3.	Economics with Rural Development	Vidyasagar University Journal of Economics
4.	English	Journal of Department of English , Vidyasagar University
5.	Geography and Environment Management	Indian Journal of Geography and Environment Management
6.	History	Vidyasagar University Journal of History
7.	Library and Information Science	Vidyasagar University Journal of Library and Information Science
8.	Philosophy and Life world	Journal of Philosophy and Life world
9.	Political Science with Rural Administration	Politics and Society
10 .	(i) Anthropology, (ii) Botany and Forestry, (iii) Human Physiology, (iv) Zoology	Indian Journal of Biological Science
11 .	(i) Applied Mathematics with Oceanology and computer Programming, (ii) Chemistry and Chemical Technology, (iii) Physics and Techno Physics	Journal of Physical Sciences

Table 3.14: Published journals and composition of editorial board

Name of the Journal	Journal of Physical Sciences(ISSN: 0972–8791)
Editor-in-Chief : Professor Madhumangal Pal Department of Applied Mathematics with Oceanology and Computer Programming Vidyasagar University ,Midnapore – 721 102, West Bengal, India , email : mmpalvu@gmail.com Board of Editors 1. Professor Krassimir T. Atanassov, Bulgarian Academy of Sciences, Bulgaria. 2. Professor Michael Gr. Voskoglou, Graduate Technological EducationalInstitute, 26334 Patras-Greece. 3. Professor Neculai Andrei, Research Institute for Informatics (ICI), Romania. 4. Professor J.E.Macias-Diaz, Universidad Aut´onoma de Aguascalientes, Mexico. 5. Professor Young Bae Jun, Education Gyeongsang National University, Korea. 6. Professor Adrian I. Ban, University of Oradea, Romania. 7. Professor Chin-Hong Park, Sunmoon University, Korea. 8. Professor Carsten Gundlach, University of Southampton, Highfield,Southampton, UK, 9. Professor M.S. Sunitha, National Institute of Technology Calicut, India.	

10. Professor Yi-min Shi, Northwestern Polytechnical University, China. 11. Professor S. Rezvani, Imam Khomainsi Maritime University of Nowshahr, Iran. 12. Professor Asis De, I.A.C.S, India. 13. Professor Parameswar De, Calcutta University, India. 14. Professor Samresh Bhattacharjee, Jadavpur University, India. 15. Professor S. N. Behera, Institute of Physics, Bhubaneswar, India. 16. Professor Pritam Prasad Roy, Viswabharati, India. 17. Professor R. N. P. Choudhury, IIT Kharagpur, India. 18. Professor P. N. Ghosh, Calcutta University, India. 19. Professor Y. C. Sexena, I.P.R., Bhat Gandhinagar, India. 20. Professor Anjan Mukherjee, Tripura University, India. 21. Professor G.C.Layek, The University of Burdwan, India. 22. Professor Ranjit Biswas, Jamia Hamdard, New Delhi, India 23. Professor S. K. Samanta, Viswabharati, India. 24. Professor Rajat K. Pal, Calcutta University, India.	
Name of the Journal	Vidyasagar University Journal of Commerce (ISSN: 0973-5917)
Editor in Chief : Prof. K.C.Pal, Vidyasagar University Executive editor Prof. Samir Ghosh, Vidyasagar University Associate Editors: A. Gupta, Vidyasagar University, K. Bandopadhyay, Vidyasagar University, T. L. Khan, Vidyasagar University, A. Sinha, Vidyasagar University, T. N. Sahu, Vidyasagar University B. Pal, Vidyasagar University Members: Amit Kr. Mallik Achintya Ray Mohd. Akbar Ali Khan, Jaydeb Sarkhel Sudipti Banerjee K. Eresi, S. Gurusamy R. S. Pradhan Lalit Gupta, Bharati V. Pathak A. K. Singh Asim Kumar Mukherjee, Malabika Deo Umesh Holani Himachalam Dasaraju Former V.C. Tennessee State University, V.C., Telangana University, University of Burdwan USA, University of Burdwan University of Calcutta Bangalore University University of Madras Tribhuban University, Nepal J. N. Vyas University Gujarat University Delhi School of Economics Allahabad University Pandicherry University Jiwaji University S.V. University	
Name of the Journal	Indian Journal of Biological Sciences (ISSN: 0972-8503)
Editor – in – Chief: Prof. Prakah C. Dhara, dept. of Human Physiology, Vidyasagar University , Midnapore, W. B. Board of Editors: Mr. Ram Kumar Bhakat, Dept. Of Botany, V.U. Prof. Jayanta Kumar Kundu, Dept. Of Zoology, V.U. Dr. Kaushik Bose, dept of anthropology, V.U.	

Name of the Journal	Vidyasagar University Journal of Economics (ISSN: 0975-8003)
Editor – in – Charge: Debasish Mondal Editors: Debesh Chakraborty, Former professor, Department of Economics, Jadavpur University, Kolkata Sukumar Nandi, Former Professor, Indian Institute of Management, Lucknow, UP Ratan Khasnobis, Former Professor, Department of Business and Administration, University of Calcutta Manas Ranjan Gupta, Economic Research Unit, Indian Statistical Institute, Kolkata Kailash C. Sarap, Department of Economics, Sambalpur University, Orissa Mihir Kr. Pal, Department of Economics with Rural Development, Vidyasagar University, West Bengal, India Sebak Jana, Department of Economics with Rural Development, Vidyasagar University, West Bengal, India Joydeb Sasmal, Department of Economics with Rural Development, Vidyasagar University, West Bengal, India Chandrima Chakraborty, Department of Economics with Rural Development, Vidyasagar University, West Bengal, India Pinaki Das, Department of Economics with Rural Development, Vidyasagar University, West Bengal, India Sudipta Jha, Department of Economics with Rural Development, Vidyasagar University, West Bengal, India	
Name of the Journal	Vidyasagar University Journal of History (ISSN: 2321-0834)
Executive Editor Dr. Sujaya Sarkar, Dept. of History , V. U. Associate Editors: Ujjayan Bhattacharya, Dept. of History , V. U. Gautam Chando Ray, Dept. of History , V. U. Shamita Sarkar, Dept. of History , V. U.	
Name of the Journal	Politics and Society (ISSN: 0975-2609)
Editorial Board: Prof. Tarun Kumar Banerjee, Dept. of Political Science and Rural Administration Dr. Raj Kumar Kothari,, Dept. of Political Science and Rural Administration Prof. Anil Kumar Jana, Dept. of Political Science and Rural Administration Prof. Ambarish Mukhopadhyay, Dept. of Political Science and Rural Administration Dr. Budh Bahadur Lama, Dept. of Political Science and Rural Administration	
Name of the Journal	Vidyasagar University Journal of Library and Information Science (ISSN: 0972-8570)

Editor-in-Chief: Prof. Pijush Kanti Jana, Dept. of Library and Information science Editorial Board Juran Krishna Sarkhel, Krishnapada Majumdar, Arjun Dasgupta Editorial Committee: Pijush Kanti Jana, Durga Sankar Rath, Smita Sett, Soumen Mallik, Nivedita Bhattacharya	
Name of the Journal	Indian Journal of Geography and Environment (ISSN:0972-7388)
Editor-in-Chief: Dr. Ashis Paul Executive editor: Dr. soumendu xhatterjee, Utpal Ray, Ms. Nilanjana Das Associate Editors: Dr. Ramkrishna Maiti Members: Prof. Sunil Kr. Munsu, Prof. Chittaranjan Pathak, Prof. Manatosh Bandhyopadhyay, Prof. Ranjan Basu, Prof. Guruprasad Chattopadhyay, Prof. Sunando Bandyopadhyay	
Name of the Journal	Philosophy and the life world (ISSN: 09758461)
Editor-in-Chief: Bhupendra chandra Das Assistant editor : Sumana Bera, Tapan Kr. De, Shewli Dutta Associate Editors : Ramdas Sirkar, Papia Gupta Founder Editor : Prabhat mishra Members : Rajendra Prasad, G. C. Nayek, Sanat Kr. Sen, S. R. Bhattachariya, D. N. Tiwari, Somnath Chakraborty, Tusar K. Sarkar, Kalyan Kr. Bagchi, G. C. Khan, Dikshit Gupta, A. K. Mukharjee, Shefali Maitra, Karuna Bhattacharaya, Raghunath Ghosh, Subir Ranjan Bhattacharaya, S. Abujkali Sen Mitra, Madhabendra Nath Mitra, A. N. Bhattachariyay, Hiranmoy Bandhopadhyay, Dilip Kr. Chakraborty.	
Name of the Journal	Bangla Bibhagiyo Patrika
Editor-in-Chief : Dr. srutinath chakraborty Members : Dr. Bani Ranjan De, Dr. Chhanda Ghoshal, Dr. Monajali Bandyopadhyay, Dr. Saroj Kumar Pan, Dr. Sujit Kumar Pal	
Name of the Journal	Journal of Department of English, Vidyasagar University
Editor-in-Chief : Dr. Indranil Acharya Members : Dr. Tithankar Das Purokyaatha, Dr. Sankar Prasad Singha, Dr. Debidas Bandyopadhyay, Dr. Indrani Datta (Chaudhuri), Dr. Joyit Ghosh, Dr. Subhajit Sen Gupta	

3.4.2 Publications by the faculty:

Total Research Papers Published=1267

Books/ Articles Published) =290

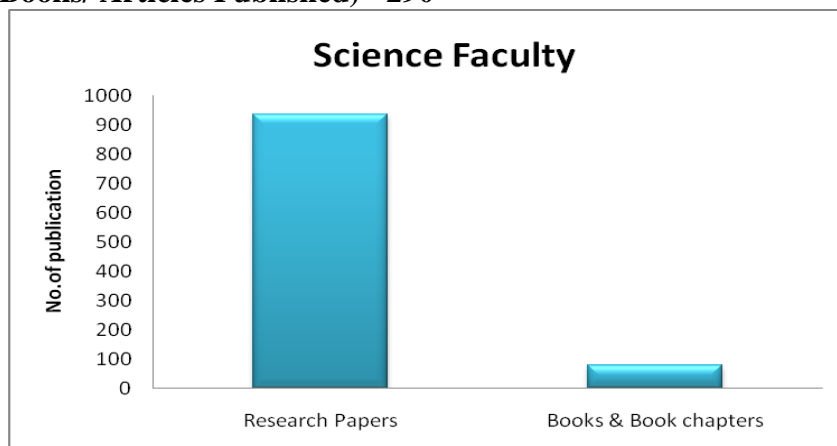


Fig. : Publication of Science faculty

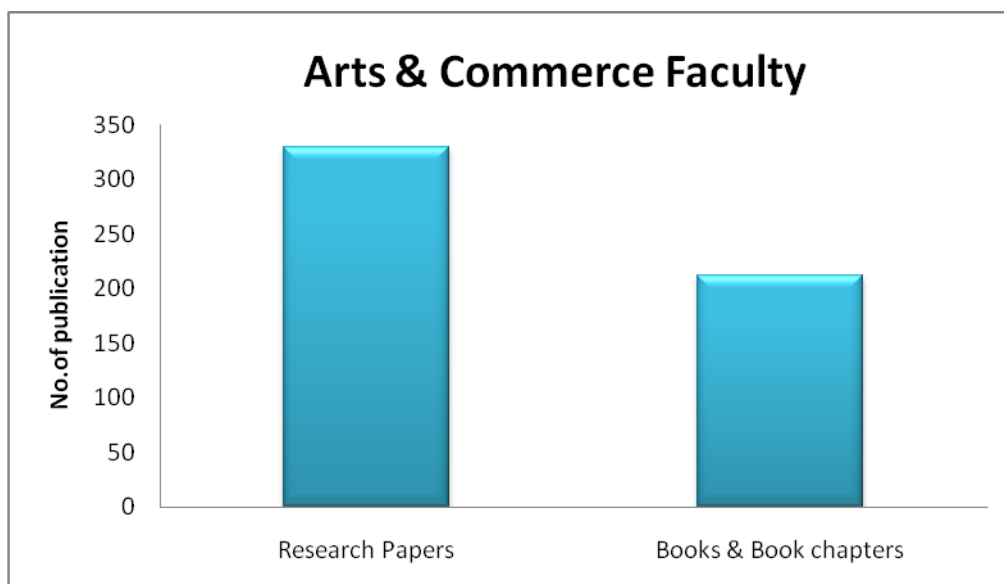


Fig. : Publication of Arts and Commerce faculty

3.4.3 Details of faculty serving on the editorial boards of national and international journals

Table 3.15: Faculties of the university serving on the editorial boards of national and international journals

Name of the Department	Name of the Faculty and Journal
Anthropology	<p>Dr. Abhijit Guha 1). <i>The Journal of Anthropology</i> (New York), 2). <i>Anthropological Forum</i> (Perth); 3). <i>Journal of the Indian Anthropological Society</i>, Kolkata (Associate Editor)</p> <p>Dr. Kaushik S. Bose *Editor of the <i>Journal of Life Sciences</i> 1) <i>Internet Journal of Biological Anthropology</i> 2) <i>Journal of Anthropology</i> 3) <i>Food and Nutritional Sciences</i> 4) <i>Research and Reviews: A Journal of Health Professions</i> 5) <i>Human Biology Review</i> 6) <i>Journal of Biomedical Sciences</i> 7) <i>Asian Journal of Biological and Life Sciences</i> 8) <i>International Journal of Anthropology and Archeology</i> 9) <i>South Asian Anthropologist</i>.</p> <p>Dr. Dipak Midhya : <i>The Journal of Anthropology</i></p>

Botany	<p>Prof. N. K. Verma: Expert committee member on Major Research Project Evaluation.</p> <p>Mr. R. K. Bhakat: Indian Journal of Biological Science Journal of Social Biology and Environmental Research</p> <p>Dr.D.Banerjee: Microbiology insights Research Journal of Microbiology, Biotechnology, International journal of Botany, Asian journal of Biotechnology, Microbiology journal</p> <p>Dr. A. K. Mondal: Journal ARANYA -(Nature and Wildlife Conservation Society)</p>
Bio medical Lab science	<p>Prof. Debidas Ghosh <i>Executive Editor:</i> Journal Community Nutrition and Health <i>Member of -</i></p> <ol style="list-style-type: none"> 1. Journal of Community Nutrition and Health (<i>Executive Editor</i>) 2. Life Science 3. The Anthropologist 4. Indian Journal of Biological Science <p>Dr. Sandip chattopadhaya</p> <ol style="list-style-type: none"> 1. African Journal of Food Science, Academic Journal. 2. Asian Pacific Journal of Reproduction. 3. International Journal of Innovative Technology & Adaptive Management.
Commerce	<p>Prof. Arindam Gupta :Associate Editor of Indian Journal of Accounting Editor-in-Chief of Vidyasagar University Journal of Commerce Member, Review Board, African Journal of Business Management Member, Review Board, Emerald's Social Responsibility Journal</p> <p>Prof. Samir Ghosh Executive Editor of Business Spectrum, Published by IAA, Midnapore Branch Associate Editor of Vidyasagar University Journal of Commerce</p> <p>Prof. Kalpataru Bandopadhyay;Executive Editor of Vidyasagar University Journal of Commerce</p> <p>Tagar Lal Khan:Associate Editor of Vidyasagar University Journal of Commerce</p> <p>Dr. Abhijit Sinha:Associate Editor of Vidyasagar University Journal of Commerce</p> <p>Tarak Nath Sahu:Associate Editor of Vidyasagar University Journal of Commerce</p> <p>Dr. Brajaballav Pal:Associate Editor of Vidyasagar University Journal of Commerce</p>

Chemistry	<p>Prof. Braja Gopal Bag:Editorial Board Member, International Journal of Research in Chemistry and Environment Editorial Board Member, International Journal of Applied Chemistry Editorial Board Member, World Journal of Organic Chemistry Prof. Syed Sirajul Islam:Editorial Board Member, Bioactive Carbohydrates and Dietary Fibers Dr. Sudipta Dalai:Editorial Board Member, Indian Journal of Material Science</p>
Economics	<p>Prof. D. Mondal:Member, District Human Development Preparation Committee Dr. Joydeb Sasmal:Associate Editor, Artha Beekshan, Kolkata Dr. Sebak Jana Member, Executive Committee, Bengal Economic Association, Kolkata Member, Editorial Board, Samabayika, The Journal of Assam University Member, List of Reviewers, Sociology, David Publishing Company. Member, Advisory Committee, Interdisciplinary Journal, Garhbeta College, West Bengal.</p>
English	<p>Dr. Tirthankar Das Purakayastha Member of the Editorial Board, The Journal of the Department of English, V.U Dr.Indranil Achrya : 1. Advisory Editor of the Journal of Indian Folkloristics, Mysore, India, December 2012 onwards. 2. <i>Member of the Editorial Board, The Journal of the Department of English, V.U</i> 4. <i>Serving as Reviewer for the Rupkatha Journal of Interdisciplinary Studies.</i> Dr. Indrani Dutta choudhury <i>In the editorial board of the Journal of the Department of English, Vidyasagar University.</i> ii. <i>In the editorial board of the e-journal www.rupkatha.com Life member of: MELUS IACLALS</i> Dr. Subhajit sengupta Subhajit Sen Gupta. Member, Advisory Board. <i>Middle Flight</i> [a National Level Peer Reviewed Journal of English Literature and Culture (ISSN 2319-7684)]</p>
Geography	<p>Dr A.K.Paul Editor, Indian Journal of Geography and Environment Member, Editorial Board, Journal of Coastal Science Dr R.K.Maiti Associate Editor, Indian Journal of Geography and Environment Dr. S. Chatterjee Member, Editorial Board, Indian Journal of Geography and Environment Dr. N. Das Chatterjee Member, Editorial Board, Indian Journal of Geography and Environment Dr. U. Roy Member, Editorial Board, Indian Journal of Geography and Environment</p>
History	<p>All faculties are the editorial member of All faculties are the editorial member Vidyasagar University Journal of History</p>

Human Physiology	<p>Prof Somnath Roy Member of the editorial board of “Al Ameen Journal of Medical Sciences”</p> <p>Prof. Prakash Chandra Dhara Editor-in Chief, Indian Journal Of Biological sciences</p>
Mathematics	<p>Dr.Madhumangal Pal :Editor-in-Chief of the international journal</p> <ol style="list-style-type: none"> 1. <i>Annals of Pure and Applied Mathematics</i> 2. Journal of Physical Sciences, VU <p>Member of the Editorial Board</p> <ol style="list-style-type: none"> 1. Advanced Modeling and Optimization, Romania 2. International Journal of Applications of Fuzzy Sets and Artificial Intelligence, Greece, 3. International Journal of Logic and Computation, Malaysia 4. ISRN Discrete Mathematics, India 5. International Journal of Engineering Science, Advanced Computing and Bio-Technology, India, 6. International Journal of Computer and Information Technology, 7. International Journal of Fuzzy Mathematical Archive, India 8. Mathematics and Informatics, China <p>Dr. Biswajit sarkar</p> <ol style="list-style-type: none"> 1. The Yugoslav Journal of Operations Research, 2. Mathematica Aeterna 3. African Journal of Business Management 4. Annals of Pure and Applied Mathematics <p>Associated Editor in Journal of Business Process Management</p> <p>Dr. sankar K. Roy</p> <ol style="list-style-type: none"> 1. Journal of Mathematical Sciences and Applications 2. American Journal of Modeling and Optimization 3. American Journal of Applied Mathematics
Philosophy	<p>Prof. P. K. Misra: Member of Ethical Committee of the Department of Zoology of IIT, Kharagpur. P. G. Board of Studies in Philosophy, Kalyani University</p> <p>Dr. B. C. Das member of the Human Ethical Committee of Vidyasagar University</p>
Physics	<p>Prof. R. R. Pal”Member of Editorial Board : Lecture Notes on Photonics and Optoelectronics (LNPO, ISSN 2301-3753)</p> <p>Dr.K.Chatterjee: Reviewrs Committee; Elsevier Journal</p>

Political Science	<p>Prof. Ambarish Mukherji Member, Editorial Board, West Bengal Political science Review; Member, Editorial Board, Politics and Society (Journal of the Dept. of Political Science, Vidyasagar University)</p> <p>Prof. Anil Kumar Jana Editor and Publisher, Samaj Jijnasa (Journal of the Vidyasagar Centre for Social Sciences, Midnapore) Member, Editorial, Politics and Society (Journal of The Department of Political Science, Vidyasagar University)</p> <p>Dr. Raj Kumar Kothari Member of Editorial Board, Politics and Society, (Journal of the Department of Political Science, Vidyasagar University). Member of the Editorial Board-Tribal Society, Darjeeling, W. B. Reviwer of the College Journal, Jhargram Raj College.</p> <p>Mr. Eyasin Khan- Editor, Nabyasrote, (jounal of the Nabyasrote patrika Gousthi),</p>
Sociology	<p>Prof. S.A.H Moinuddin, West Bengal Sociological Review (Editorial Boards)</p> <p>Dr. Debarshi Talukdar Associate Editor, Charcha (Bengali bi-monthly journal).</p>
Zoology	<p>Prof J. kundu Editor, Indian Journal of biological sceences.</p>

3.4.4 Details of research awards received by the faculty and student and national and international recognition received by the faculty from reputed professional bodies and agencies

Table 3.16: Research awards received by the faculty

Name of the Department	Name of the Faculty Research Awards
Anthropology	<p>Mr. Amit Kr. Kisku Awarded the Government of India Doctoral Fellowship to undertake necessary work at School of Oriental ad African Studies (SOAS), University of London, and September, 2011.</p> <p>Dr. Dipak Midya Availed UGC-IUC (Post-Doctoral) Associateship for 3 years (since 2012) at the Indian Institute of Advanced Studies, Shimla.</p> <p>Sovanjan Sarkar Awarded the “DST travel award” for attending International Conference</p>
Botany and Forestry	<p>Dr. A. K. Mondal Best Lecture Award in the State Science Congress, Fishery and Animal Husbandry University, Kolkata (2010)</p> <p>Dr. Debdulal Banerjee BOYSCAST fellowship to attend post doctoral training programme at USA</p>

Chemistry	<p>Prof. Braga Gopal Bag</p> <ul style="list-style-type: none"> Received Alexandervon Humboldt travel grant 2013 for lecture presentation in PAT 2013 held at Berlin, Germany. Received Alexandervon Humboldt travel grant 2010 for lecture presentation in ISBOMC 2010 held at Bochum, Germany. <p>Dr. M. Hossain</p> <ul style="list-style-type: none"> Received IUPAB (International Union for Pure and applied Biophysics) young scientist travel award in the 17th international biophysics congress (17th IBC) Oct.30-Nov.3, 2011 in Beijing, China. Received Prof. G.N. Ramachandran Young Scientist Travel award By Indian Biophysical Society (2011).
English	<p>Debabis Bandopadhyay</p> <ol style="list-style-type: none"> Charles Wallace Postdoctoral Fellow at St. Antony's College, Oxford University, UK (2011-2012) OUCIP, Hyderabad, Postdoctoral Fellow (2012-2013) Fulbright Doctoral Fellow, California State University, Fresno, CA, USA
Geography	<p>Mr. Koushik Ghosh</p> <p>Best Poster Award for Younger Geographer from Dept. Of Geography, BHU during 18-20 Feb, 2010</p>
Political Science	<p>Dr. Raj Kumar Kothari</p> <p>Ford Foundation Research Fellow</p>
Physics	<p>Dr. K. Chatterjee</p> <p>Academia visiting scholar position in Institute of Physics, Academia Sinica, Taiwan during 14th May 2013 to 14th July, 2013.</p>
Microbiology	<p>Dr. P. K. Das Mohapatra awarded as Junior scientist in the year 2008 by National Environmental Science Academy, New Delhi – 110 019.</p> <p>Dr. P. K. Das Mohapatra awarded as Environmentalist in the year 2009 by National Environmental Science Academy, New Delhi – 110 019.</p> <p>Dr. P. K. Das Mohapatra awarded as Fellow of the Society for Applied Biotechnology (FSAB), India from 2011.</p>
Zoology	<p>Ms P. Haldar</p> <p>Awarded the R.K. Sur Memorial Medal 2011 in Young Scientist category for unpublished original piece of research work in Animal Science, conferred by the Zoological Society, Kolkata.</p>

Table 3.17: Recognition received by the faculty from reputed professional bodies and agencies

Name of the Department	Name of the Faculty and Research Awards
Botany and Forestry	<p>Dr. A. K. Mondal</p> <p>Fellow of Linnean Society (FLS), London</p> <p>Siksha Ratna award from India International Friendship Society, New Delhi</p>

Biomedical lab science	Professor Debidas Ghosh : Received gold medal award for Presenting Sukuntala Dasgupta Memorial Lecture, Organized by PSI in Section of Medical Sciences and Physiology, Science Congress, Bhubennesswar-2010.
Chemistry	Prof. Braga Gopal Bag 1. has been offered Alexandervon Humboldt travel grant 2013 for lecture presentation in PAT 2013 held at Berlin, Germany. 2. Prof. Braja Gopal Bag has been offered Alexandervon Humboldt travel grant 2010 for lecture presentation in ISBOMC 2010 held at Bochum, Germany." Dr. M. Hossain 1. received IUPAB (International Union for Pure and applied Biophysics) young scientist travel award in the 17 th international biophysics congress (17 th IBC) Oct.30-Nov.3 , 2011 in Beijing, China. 2. Dr. M. Hossain received Prof. G.N. Ramachandran Young Scientist Travel award By Indian Biophysical Society (2011).
English	Prof. Debasis Bandopadhyay 3. Charles Wallace Postdoctoral Fellow at St. Antony's College, Oxford University, UK (2011-2012) 2. OUCIP, Hyderabad, Postdoctoral Fellow (2012-2013) 3. Fulbright Doctoral Fellow, California State University, Fresno, CA, USA Dr Indranil Acharya: Special recognition received from the President, Sahitya Akademi for conducting the People's Linguistic Survey of India West Bengal chapter successfully in 2013.
Human Physiology	Prof. Somenath Roy 1. Fellow (2013) West Bengal Academy of Science Tech. Drug Development : Medical and Veterinary Sciences 2. Smt. Sakuntala Dasgupta Memorial Oration Award 2009 by PSI Prof. Prakash C. Dhara 1. Gold medal award for Prof. S. R. Maitra Memorial Oration – awarded by the Physiological Society of India, Kolkata, 2009. 2. Become the member of Ergonomics Sectional Committee, (PGD-15), Bureau of Indian Standards, New Delhi. Dr. Sujata Maiti Choudhury 1 Fellow Award 2012 by Society for Applied Biotechnology 2. Shiksha Rattan Puraskar' by India International Friendship Society, New Delhi
Mathematics	Prof. M. Pal Bharat Jyoti Award
Zoology	Prof. S. K. Chakraborty: Identified as an expert of Environment, by the Ministry of Environment and Forest. (2008), Govt. of India
Microbiology	1. Dr. K. C. Mondal selected for Indo-Hungarian Educational Exchange Programme 2. Prof. B.R. Pati has been selected as an UGC expert for evaluation and recommendation Major Research Project 3. Dr. P. K. Das Mahapatra has selected in the Editorial board of Journal of Cereals and Oilseeds and International Journal of genuine traditional medicine

Table 3.18: Students received awards

Name of the	Name of the Student and Research Awards
--------------------	--

Department	
Chemistry	Ms. Rakhi Majumder Has been awarded International Travel Fellowship for presentation of a poster in IUPAC conference POC 2012 held at Qatar
Geography	Mr. Gour Dolai Young Scientist Award Netaji Institute of Asian Studies 2011
RS-GIS	Ismail Mondal : Special consolation Prize - student category at XXXIII INCA International Congress, held at Jodhpur, Rajasthan during 19-21 September, 2013. Kartic Bera : Best paper presentation certificate, Wadia Memorial Award in Earth System Science section in the 101st Indian Science Congress held at University of Jammu, Jammu from February 3 to 7, 2014
Human Physiology	Subhankari Prasad Chakraborti (1st) : International Conferences on Frontier in Biological research (ICFBR- 26, 27 th Feb.2012). (Best poster presentation) Debojyoti Pal (1st) Sandip Kr. Dash (3rd) National Seminar on “ <i>Emerging Issues in Physiology and Allied Sciences</i> ” dated 26 th March, 2010 at Vidyasagar University National Seminar on Health. (Best poster presentation) National Seminar on “ <i>Emerging Issues in Physiology and Allied Sciences</i> ” dated 26 th March, 2010 at Vidyasagar University National Seminar on Health. (Best poster presentation)
Microbiology	Mrs. Arpita Mandal awarded First poster presentation award in International conference on Industrial Biotechnology (ICIB), 2012, organized by Panjabi University, Patiala, Punjab, India. Mr. Atanu Adak awarded First poster presentation award in International conference on Advances in Biotechnology and Bioinformatics (ICABB), 2013, organized by Dr. D.Y. Patil Vidyapeeth, Pune, India.

3.4.5 Average number of successful M. Phil and Ph.D. scholars guided per faculty during the last four years

Table 3.19 Faculty-wise Ph.D. Registered and Awarded:

Year	Registered			Awarded		
	Arts and Commerce	Science	Total	Arts and commerce	Science	Total
2008-2009	19	50	69	07	21	28
2009-2010	18	50	68	13	24	37
2010-2011	88	157	245	16	22	38
2011-2012	-	-	-	07	23	30
2012-2013	118	152	270	07	37	44

Table 3.20: Year-wise M. Phil Awarded

Session	Awarded
2010-2011	15

2011-2012	11
2012-2013	13

3.4.6 Official policy of the university to check malpractices and plagiarism in research

- The faculty members and research scholars are very careful in following research ethics to avoid plagiarism.
- Disciplinary action can be taken as per conventional system and an enquiry
- Committee, formed by the Vice-Chancellor, can probe and take action for plagiarism in Research. The Ph. D. committee critically reviews the Ph.D. work to check the plagiarism in research.
- External experts scrutinize the thesis and point out malpractice and plagiarism (if any) in research. In due time the action can be initiated by the administration of Vidyasagar University.
- So far no case of plagiarism has been reported in the university.

3.4.7 Promotion of interdisciplinary research

- Dept Zoology has a interdisciplinary project with the department of RS-GIS
- Dept Zoology interdisciplinary project with the department of Geography
- Department of Human Physiology has a interdisciplinary project with the department of Chemistry, IIT Kharagpur

3.4.8 Institution of research awards

No special award has so far been instituted.

3.4.9 Incentives given to the faculty for receiving state, national and international recognition for research contributions

The university encourages the faculty members by providing them additional research facilities. The Vice-chancellor inspires them specially mentioning such achievements in the convocation address. Further, such performances are given due weightage at the time of Career Advancement.

3.5 Consultancy

3.5.1 Official policy of the University for Structured Consultancy

The University actively promotes consultancy with industry or other organizations. The University has norms for structured consultancy services offered by the faculties. The faculty has to get permission from the University to carry out the consultancy services. The resource generated through consultancy services are shared between the University and incumbent at the ratio of 30:70

The followings are some important consultancies undertaken by the university during the last four years:

Table 3.21: Consultancy generated

Sl. No.	Name of Department	Funding Agencies	Amount (Rs. in lakh)
1.	Botany	Forest Development Agency (2011)	Rs. 0.4 lakh

2.	Departments of Economics	ACIAR - 2011	Rs. 3.5 lakhs
3.	Remote Sensing and GIS	Pollution Control Board, Govt. of West Bengal (2011)	Rs. 6.2 lakhs
4.	Zoology	Octagon Consultancy Pvt. Ltd., Kolkata, W.B. (2009)	Rs. 3.0 lakhs
		Octagon Consultancy Pvt. Ltd., Kolkata, West Bengal (2009)	Rs. 3.25 lakhs
		S. H. Engineering Pvt. Ltd. Kolkata, West Bengal (2009)	Rs. 3.5 lakhs
		S. H. Engineering Pvt. Ltd. Kolkata, West Bengal (2010)	Rs. 3.0 lakhs

3.5.2 University-industry cell

The University is yet to develop a cell involving representatives from the industry for the promotion of research

3.5.3 Mode of publicizing the expertise of the University for Consultancy Services

The university emphasizes on the application aspect of the research output and encourages its faculty members, research scholars and others to make their research output and expertise available to the larger masses of the society. Updated newsletters and other forms of publications are in regular circulation to publicize research activities of individual teachers as well as their fields of expertise. Local newspapers also provide coverage to such contributions in the fields of science and technology, development of fisheries, production of high yielding seed varieties, spreading awareness about bio-diversity, preservation of plant species with medicinal potential and imparting practical knowledge in costing, marketing, data-analysis etc. Setting up a special cell to provide professional consultancy to students in various sectors by university experts is also in the pipeline.

The display of expertise of individual faculty in the University website is another tool which publicizes the expertise of the Faculty. However, the Faculty on their own academic reputation in their field of specialization attracts consultancy offers.

Currently, the departments like Botany, Economics and Zoology are engaged in providing consultancy services.

3.5.4 Utilization of the expertise of its faculty with regard to consultancy services

The expertise of the faculty in consultancy is utilized by involving them in similar projects within the university. They are also encouraged to lecture and demonstrate their expertise through formal programmes of the university. The resource generated through consultancy services is utilized for upgrading the infrastructure to facilitate further research.

3.5.5 Broad areas of consultancy services provided by the university / revenue generated during the last four years

Table 3.22: Broad areas of consultancy services

Sl.	Area of	Funding Agencies	Amount (Rs. in
-----	---------	------------------	----------------

No.	Consultancy		lakh)
1.	Forestry	Forest Development Agency	Rs. 0.4 lakh
2.	Irrigation	ACIAR	Rs. 3.5 lakhs
3.	Environment	Pollution Control Board, Govt. of West Bengal	Rs. 6.2 lakhs
4.	Environmental impact assessment	Octagon Consultancy Pvt. Ltd., Kolkata, W.B. , S. H. Engineering Pvt. Ltd. Kolkata, West Bengal	Rs. 12. 75 lakhs

3.6 Institutional Social Responsibility (ISR) and Extension Activities

3.6.1 Sensitization of faculty and students on the university's institutional social responsibilities

The University is located in a backward area and plays a major role in the social upliftment of this area involving faculty and students in different ways. Socially meaningful actions are regularly carried out with the help of bodies such as the Students' Union, and the National Service Scheme and the DSW's office. In the recent past, our students have rendered exemplary service for the campus community and the neighborhood population through afforestation programmes.

Programmes carried out:

- Dept. of Human Physiology with Community health conducted several awareness programmes on occupational health problems of agricultural workers in different villages of Paschim Medinipur and Bankura Districts during the period 2009 -2013
- Dept. of Human Physiology with Community health conducted several training programmes on work posture and work methods among the agricultural workers in different villages of Paschim Medinipur district during the period 2009 -2013.
- Dept. of Microbiology arranged training programmes on vermiculture technology in different villages in Midnapore district
- Women Study Center conducted an Awareness and Training programme on 'Disease Prevention and Health Promotion of Women and Adolescent girls' at Tantigeria Primary School, under the Midnapore subdivision of Midnapore (Paschim) district, West Bengal on 8th February, 2013.
- Women Study Center organized an Awareness programme on 'Health and nutrition of Female Docra Artisan' at Bikna, Bankura on 9th March, 2013.
- Women Study Center organized an Awareness programme on 'Early marriage of Adolescent girls' on 30th December, 2013 at Delua Primary School, Delua, Paschim Medinipur to increase awareness on women related issues.
- Women Study Center organized Training programme on 'Mother and Child Health Care' on 30th December, 2013 at Delua Primary School, Delua, Paschim Medinipur to increase awareness on women related issues.
- NSS Cell conducted a Rally on World Aids Day of Vidyasagar to make awareness among the people of this locality regarding HIV/AIDS on 1 December 2012. 1300 NSS volunteers were attended this programme to celebrate the auspicious occasion.
- The NSS volunteers helped local self-help groups to organize their activities in the adopted villagers in 2009.

- NSS Cell arranged Awareness programmes on Thalasaemia in 2009.
- NSS Cell campaigned against destroying female embryo in different villages in programmes in 2009.
- NSS cell organized health check up camps and distribution of medicines, Blood Group Testing, Yoga meditation camp, street drama against dowry system, literacy programmes, health awareness and First Aid Training, Pulse-polio immunization campaign etc. in 2010 and 2011.
- A Rally on World Aids Day was organized by the NSS Cell of Vidyasagar University to make awareness among the people of this locality regarding HIV/AIDS on 1 December 2012.
- NSS Units X and XI conducted Awareness programme on AIDS and Thalasaemia in 2012

3.6.2 Promotion of university-neighborhood network and student engagement

The students and teachers of the university have regularly involved themselves in activities like water conservation, promotion of Green campus, ensuring plastic free zone, creating a Biodiversity museum, and Ornamental fish culture, utilizing vermitechnology, promoting Mulberry culture and Mushroom culture, restoring medicinal plants, organizing activities of science club *etc.* to promote university-neighborhood network and student engagement, contributing to the holistic development of students and sustained community development.

3.6.3 Participation of the students and faculty in extension activities

A large number of students of the university join the NSS and they actively participate in different programmes of NSS. During the last few years, the NSS unit of the university has emerged as the most significant youth unit to devote to the community services. The major activities of NSS are enlisted below:

- The NSS Cell of Vidyasagar University arranged a Seminar on “BANOMAHOTSAV” at university campus on 25.07.2012 at Radhakrishna Hall of Vidyasagar University.
- A Rally on World AIDS Day was organized by the NSS Cell of Vidyasagar University and Paschim Banga Vigyan Mancha, Midnapore District to create awareness among the people of this locality regarding HIV/AIDS on 1 December 2012. One thousand three hundred (1300) NSS volunteers attended this programme to make it successful.
- Ninety five (95) Special Camps were organized by different colleges under Vidyasagar University during 2012-2013.
- An Orientation Training Programme for untrained NSS Programme Officers under the jurisdiction of Vidyasagar University was arranged by the NSS Cell with the financial and academic help of TORC, Narendrapur Ramakrishna Mission, Narendrapur from 22 – 28 November 2012 at Vidyasagar University.
- About 3000 saplings were planted in the University campus as per the decision of NSS Advisory Committee Meeting.
- Blood Donation Camps were organized by different NSS cells of colleges under this university.
- A Thalassaemia detection camp was organized by the NSS Unit no. X and XI of Vidyasagar University during 2012.
- A seminar about Primary Health Consciousness was held on 13-02-2013 at Radhakrishna Hall of Vidyasagar University to motivate the students and staff of the university.
- A seminar/awareness camp was organized by NSS Unit no.1, Vidyasagar University about Use of Science.
- Campus Cleaning Drive was organized by NSS Cell on regular basis to keep the campus clean and healthy and it may be treated as regular activities of each unit.
- Two Film Shows having societal relevance were organized by NSS Cell on 24.04.2012 and on 27-08-2012 at B. C. Mukherjee Hall of Vidyasagar University.

- A Seminar was organized by NSS Cell to celebrate the occasion of the 150th birth anniversary of Swami Vivekananda. In this connection, the Tableau bearing the message of 'SHASHWATA BHARATA' was displayed at the University campus on 22.02.2013.
- An induction meeting was organized by the NSS Cell on 28.11.12 at Vidyasagar University to introduce Red Ribbon Club Project at College level (32 colleges) to fight against HIV/AIDS and to generate awareness among the people regarding this silent killer disease.
- Blood Group Detection camp was organized by the NSS unit no. 5, Vidyasagar University. More than 100 members of the university community took advantage of the camp.

3.6.4 Social surveys, research or extension work undertaken by the university

Apart from carrying out meaningful social activities from time to time in the neighbourhood, National Service Scheme has mounted major efforts for empowering the underprivileged and vulnerable sections of the society through multifarious programmes like literacy programme etc.

- Departments like, Human Physiology with community health, arranged awareness and training programmes on occupational health, and nutritional health in different villages of East and West Midnapore, and Bankura districts. Labours engaged agriculture and other working sectors participated in such training programmes.
- Women's Study Centre arranged different awareness programmes for the vulnerable section of the women in neighbouring villages on different women related problems.

3.6.5 Students' involvement in various social movements / activities which promote citizenship roles

The students perform different societal activities under the guidance of a teacher or an officer. Their activities are monitored by the concerned teachers in charge. Further, to motivate student's involvement on activities that promote citizenship roles, recognition awards have been given at unit level.

Further, Office of the Dean, Students' Welfare often act as the nodal point for tracking students involvement in various social movement / activities

3.6.6 Ways in which the extension activities complement the students' academic learning experience

Students acquire practical experience in social empowerment as a necessary follow-up to the theoretical learning of social issues in the class room context. They are also closely associated with the community programmes like , biodiversity conservation, decrease the non-degradable pollutant through the concept of plastic free zone, water conservation through – 'JAL DHARO and JAL BHARO', enhancement of ethical values by celebrating the red letter days, skill development through - workshop, training, conferences, special lecture and to nurtured the concept of green campus, *etc.*

These activities help the student to improve their values inculcated and skills learnt. The benefits include , hands on experience ,communication skill, community involvement, civic sense, organizational skill, crises management ability, leadership quality etc.

3.6.7 Involvement of the community in the outreach activities of the university

- i. Dept of Human physiology frequently conducts training and awareness programmes the training among the agricultural workers regarding work safety and occupational health. The

department has published a pictorial booklet on the work safety and health, which were distributed among the villagers engaged in agriculture.

ii. The Women Study Centre of the University usually organizes awareness programmes among the women regarding different aspects of women welfare and empowerment. The following are some examples:

- a) An **Awareness and Training programme** on 'Mother and Child Health and Nutrition' was held on 27th December, 2011 at Tantigeria Primary school, Midnapore.
- b) An Awareness programme on 'Health and nutrition of Female Dokra Artisan' also organized by the Women's Studies Centre, VU on 9th March, 2013 at Bikna, Bankura.
- c) An **Awareness programme on 'Early marriage of Adolescent girls'** on 30th December, 2013 at Delua Primary School, Delua, Paschim Medinipur to increase awareness on women related issues.
- d) A **Training programme on 'Mother and Child Health Care'** on 30th December, 2013 at Delua Primary School, Delua, Paschim Medinipur to increase awareness on women related issues.

iii. Documentation programme:

- a) Women's Studies Centre, VU organized a '**Documentation programme on Female Dokra Artisan**' in March, 2013 at Bikna, Bankura.
- b) A Documentation Programme on 'Women Potua Painter' was held on 30th March, 2013. Baharjan (Jamuna), Manimala (Daughter of Baharjan) and Ruksana (Grand daughter of Baharjan) chitrakar were the potua painters.

3.6.8 Awards received by the institution for extension activities and/contributions to social/community development during the last four years

No award has been received by the University for Extension Activities.

3.7 Collaboration

3.7.1 Impact of the university's collaboration with other agencies

Vidyasagar University has made an effort for collaboration with other institute / organization / industry. These linkages help the university and linked institute in getting academic, research and monetary benefit by the way of collaborative research works, programmes, updating knowledge, training, etc. The industrial collaboration linkage in the university has brought in industry sponsored project.

The following collaborations have derived academic, research and monetary benefits to the university.

International collaborations:

- Department of Bio-medical Laboratory Science and Management (Prof. D. Ghosh) has an International collaboration: **Indo-Tunisia Bilateral Research Project; entitled "Development of herbal spermicide from *Stephania hernandifolia*, *Achyranthus aspera* and *Cestrum parqui* using rat and human sperm"**.
- Dept. of Anthropology (Dr. Koushik Bose) undertook a collaborative research with Dr. Slawomir Koziel, Director, Institute of Anthropology, Wroclaw, Poland. Dr. Koziel was awarded an Indian National Science Academy (INSA), Polish Academy of Sciences (PAS) Visiting Fellowship, December, 2011.

- Department of Mathematics (Prof. M. Pal) has following collaborative research is doing research in collaboration with - (i) Islamic Azad University, Tehran, Iran, (ii) University of the Panjab, Lahore, Pakistan.
- Dept. of Mathematics (Dr. Biswajit Sarkar) has research in collaboration with (i) Prof. W.Yun, Pusan National University, Korea, (ii) Prof. Cardenas Barron, Tecnológico de Monterrey, Colonia Tecnológico, Mexico, (iii) Prof. H.M. Wee, Chung Yuan Christian University, Taiwan, (iv) Prof. I.K. Moon, Seoul National University, Korea, (v) Prof. Gerardo Treviño-Garza, Tecnológico de Monterrey, Colonia Tecnológico, Mexico, (vi) Prof. S. Goyal, Concordia University, Canada,
- Dept of Chemistry (Professor Braja Gopal Bag) has international research collaborations with
 1. Professor Richard G. Weiss, Gerogetown University, USA,
 2. Professor Guenter von Kiedrowski, Ruhr University Bochum, Germany,
 3. Professor Michel Laguerre, IECB, Bordeaux, France
- Dept of Chemistry (Dr. Sudipta Dalai) has International research collaboration with Prof. Emrio Zangrando, University of Trieste, Italy.
- Dept of Physiology (Prof. Somenath Roy) **has research collaboration with M.D Anderson Cancer Research Center, Houston, Texas, USA**
- Dr. Kuntal Chatterjee of the Department of Physics and Technophysics has been invited to participate as a Visiting Scientist in a famous global project on Nano Science by the Institute of Physics, Academia Sinica, and Taiwan.
- Dr. Surajit Ghosh of the Department of Physics and Technophysics had been awarded post-doctoral BOYSCAST Fellowship to do research on Nano Science at the University of Central Florida, USA.
- Dr. Debdulal Banerjee of the Department of Botany had been awarded post-doctoral BOYSCAST Fellowship to do research on Nano Science at the Montana State University, USA. It may be mentioned here that Dr. Banerjee has rejoined the university and has been acclaimed as ‘the hardest working and most dedicated BOYSCAST Fellow that I have ever hosted’, by his supervisor, Prof. Gary Strobel.
- Dr. Sudip Datta Banik of the Department of Anthropology has been nominated as a Fellow, International Council of Nutrition, and North America. He has also been awarded post-doctoral Fellowship in the Department of Human Ecology, CINVESTAV at Mexico.

National and inter-institutional Collaborations:

- Dr. Kaushik Bose has conducted a collaborative project with Dr. P.R. Mondal of the Department of Anthropology, Delhi University (Project amount: Rs. 50,000.00).
- Dr. K. C. Mondal, has a collaborative research project titled “Fermented foods of Ladakh region: Standardization of process” financed by DST Govt. of India with Dr. S. N. Singh DIPAS, New Delhi and Techo India University (50 Lakf)
- Dr. Sudip Dutta Banik has conducted a collaborative project funded by Department of Science and Technology, Government of West Bengal, with Dr. P. K. Kundu, School
- The Dept of Biomedical laboratory science possesses a National collaboration with Department of Reproductive Biomedicine, National Institute of Health and Family Welfare, New Delhi, India.
- Dept of English in collaboration with ‘BHASHA Research and Publication Center, Baroda, has worked on the Peoples Linguistic Survey of India project.
- Dept of Mathematics (Prof. M. Pal) has a collaboration with NIT, Durgapur
- Dept of Mathematics (Prof. R.N. Jana) is doing research in collaboration with University of Gour Banga
-

- Dept of Mathematics (Dr. S. K. Mondal) is doing research in collaboration with Prof. Somenath Dutta, India Meteorological Department, Pune, India
- Dept of Mathematics (Dr. S. Roy) is doing research in collaboration with Prof. M P Biswal, Dept. of Mathematics, IIT, Kharagpur
- Dept of Mathematics (Dr. B. Sarkar) is doing research in collaboration with Prof. K.S. Chaudhuri, Dept. of Mathematics, Jadavpur University, India
- Dept of Chemistry (Prof. S. Islam) performing research titled “Structural and immune modulatory functional characterization of glucans from various fungi from West Bengal region.” (Rs. 1,38,08,000/- only) in collaboration with Department of Biotechnology, IIT, KGP.
- Dept of Chemistry (Prof. S. Islam) performing research titled "Evaluation of Bioactive Polysaccharides for studying antitumor and immuno- modulatory activity from wild edible Mushrooms found in Odisha." (Rs. 1,26,00,000/- only) in collaboration with Regional Plant Resource Centre (RPRC), Forest & Environment Department, Govt. of Odisha, Nayapalli, Bhubaneswar, Odisha.
- Dept of Zoology (Dr. B.C. Patra) has research collaboration with Dibrugarh University, (granted Rs. 75 lakhs)
- Dept of Zoology (Dr. S.K. Chakraborty) has Collaboration with Saha Institute of Nuclear Physics, Zoological Survey of India, Wetland Research Institute.
- Dept of Zoology (Dr. S. Acharya) has collaboration with National Institute of Cholera and Enteric Diseases (NICED), Kolkata
- Dept of Economics possesses collaboration with Jadavpur University for a project on Home Garden conducted at Global Change Programme,
- Dept of Physiology (Prof. Prakash Chandra Dhara) has research collaboration with **Regional Occupational Health Center , Kolkata**
- Dept of Physiology (Prof. Somenath Roy) has research collaboration with **National Center for Cell Sciences (NCCS), Pune**

Industrial collaboration:

Dept. of Microbiology had a collaborative Research with Biostadt India of Rs. 2.32 Lakh for the year 2011-12

3.7.2 Ways in which these linkages promote the following points

Curriculum development

Collaboration with institutions and industries help in updating the curriculum to the current trends in global context. Feedback from the eminent scientists from collaborative institutions is taken into account during revision of curriculum

Internship

The students of Biomedical laboratory Science and Management undergo internship for six months in different government and private hospitals as a part of their curriculum and training.

Students are given exposure to the industries and institutes in which they are able to get hands on training for their research and technical facilities to carry out experiments and training in important aspects.

Faculty exchange and development

The faculties are benefitted by training programmes and exchange programmes

conducted through these linkages. For example, Prof. D. Ghosh of the Dept. of Biomedical laboratory science has an Indo-Tunisia Bilateral Research Project in which faculty exchange program between India and Tunisia takes place.

Consultancy

In last few year the university has generated some amount money (Rs.65 lacs approximately) from various consultancy services rendered to the industries through linkage.

On job training: The University has not yet a mechanism for providing on job training to personnel from the industry or service sector. However, in collaboration with other institutes the university often organizes training programmes for its own employees and the students. The students of department of MBA, Aquaculture and Management Technology, Microbiology etc are assigned 'hands on training'.

The NSS cell of the university in collaboration with Training Orientation and research center of Narendrapur Rankrishns Mission, Kolkata arranged 'on the job training' programmes for 120 programme Officers from various institutions.

Placement: The University has a placement cell which is looked after by the office of the Dean of Student Welfare. The cell regularly organizes campus interview for the placement of students. The Department of Business Administration, Electronics and Computer Science rejuvenate the placement cell within their department.

The NSS cell also organized another training programme in collaboration with TCS for 'hands on training' programme for the NSS volunteers in 2011. Some of the trainees were finally absorbed in the company.

During last five years several companies arranged campus interview in our university. Some of them are as follows:

Allahabad Bank, Pradan (New Delhi), Reliance, Techno-India, IBM, WIPRO, INFOSYS, TCS, IMOS Tecchnologies and Infotech Ecospace (Kolkata), Limtox, HDFC, Allahabad Bank, IOC (Haldia) etc.

3.7.3 Signing of MoUs

A MOU has been signed with Eastern institute for integrated learning in management (EIILM), Kolkata on 14.02.2013.

3.7.4 Consequences of University-industry interactions

In recent years the university has initiated interaction with industry. Some facilities have been created as a result of such interaction, which includes development of research laboratory, procurement of some good instruments, fellowship for researchers, sponsorship for conducting seminars / training etc.

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical facilities

4.1.1 Availability of physical infrastructure and its optimal utilization

The University has a Space, Planning and Development Committee as per its statute which is responsible for making plans and decisions regarding physical infrastructural development. All development programmes basically follow a master plan adopted during formation of the university and modified from time to time.

- The committee is composed of Vice Chancellor (Chairperson), Development Officer (Convenor), Registrar, Dean of Arts and Commerce, Dean of Sciences and nominated members from Executive Council.
- The members of the committee meet at regular intervals, plan and consider physical infrastructural developments like making new buildings, expansion and renovation of existing infrastructures according to the basic development programme of the university and also grants received from different funding bodies.
- The committee also takes decision on space and infrastructural requisition received from different academic and administrative departments.
- The resolutions of the meetings are placed in the Executive Council meeting for approval.
- The university engineering department executes the decisions of Executive Council. Upon receiving the instructions from Executive Council the engineering department scrutinizes the proposals, prepares estimates for execution of the decisions and finally acts as per decision.
- The university has an overall reviewing system as per direction of Executive Council to monitor the proper utilization of the physical infrastructure allocated for any purpose.

4.1.2 Policy for the creation and enhancement of infrastructure in order to promote a good teaching-learning environment

The university has a policy for the creation and enhancement of infrastructure in order to promote a good teaching learning environment. The university has a central plan for physical infrastructural development in its two campuses comprising of 138.78 acres of land (103.74 acres academic campus and 35.04 acres residential campus) and this supports the infrastructural provision of the academic departments to maintain a good teaching learning environment.

- Recent initiatives taken
 - A. Science Building (Einstein Building) and the Silver Jubilee Building have been expanded to first floor and the Humanities Building has been expanded to 2nd floor. Moreover, a Tribal Cultural Centre has been constructed and a new Administrative Building has been developed.
 - B. All the departments are provided with separate class rooms for general and special papers.
 - C. In most departments the classrooms have been equipped with wall mounted LCD projectors, laptops, overhead projectors and other teaching aids.
 - D. The academic departments have undergone a thorough renovation during 2012 -2013 by state government funds (BRGF and OTACA) and class room (both theory & practical)

qualities have been upgraded in terms of looks of the classrooms, flooring, modern sitting arrangements and other furniture etc.

- E. In the science departments all the teachers have been provided with separate laboratory spaces. Additional laboratory spaces have also been allocated for infrastructural grants received by the departments (DST –FIST, DRS – SAP, UGC Infrastructure etc) or by individual teachers in the form of research projects from different funding agencies (DST, DBT, ICMR, CSIR, UGC etc).
- F. Laboratory infrastructures have also been upgraded with grants received from UGC XIth Plan and other funding sources (DST – FIST, DRS – SAP, UGC Infrastructure), in terms of space, water supply, electricity, fire management, air conditioning, flooring and laboratory furniture. Moreover, laboratory physical infrastructures as mentioned above have also been advanced with the aid of individual teacher's research projects.
- G. Each Science Department has also received grants from UGC XIth plan, State Government and other funding agencies (like DST –FIST, DRS – SAP for department as a whole and also in the form of research projects of individual teachers) for procuring laboratory equipment for students' training purpose and research activities as well.
- H. Proposals have been sent to open eight new science departments, eight new arts departments and two Centres for Sciences.
- I. Proposals have also been sent to develop annexure building for central library, University museum, Research Scholars' hostel (48 seats), New PG Girls' and PG Boys' Hostels (300 seats each), Teachers'-Officers' Hostel (48 units), Teachers'-Officers' Quarters (3 BHK – 16 units), VIP Guest House.

4.1.3 Creating a conducive physical ambience for the faculty

The university provides space for research laboratories in every science department to conduct practical classes depending on the demands placed by respective department according to their curriculum.

- Additional space for research laboratory is provided to individual teachers.
- Teachers having research projects sometimes get additional space according to the requirement of the project and also to accommodate project staff and equipment.
- A part of the project overhead is provided to the PIs for infrastructural development of the laboratories like requisite furniture, air conditioning and other supportive facilities.
- The university distributes among the departments the grants received from UGC, State Government etc. from time to time for procuring scientific equipment for research laboratories that also caters to the needs of the students.
- The university mobilizes the faculty members from different PG departments to apply for grants from different funding agencies like DST, UGC and DBT who provide grants for infrastructure development in the universities.
- The university also encourages individual faculty members to apply for major and minor research projects to different funding agencies as those funding are also supportive to the development of research infrastructure and ambience.
- All the academic departments have computer laboratories with a number of computers for the use of students. There are separate computers for the use of faculty members to enable them to prepare computer aided teaching/learning materials.
- All the computer laboratories are interconnected with optical fibre based gigabit campus LAN for internet facility.
- This helps the faculty members to acquire huge teaching - research resources and to get advantage of the online digital library facility of the university.

- All the departmental offices are also provided with computers including internet connection for conducting official jobs of the department.
- The academic departments who have computer courses in their curriculum are provided with greater number of computers from different grants received from time to time as per requisition.
- The university also allocates space for developing computer laboratories to the departments who receive grants from funding agencies to develop computer laboratory or computer-based laboratory.
- All the academic departments also possess laptops and LCD projectors those are used as teaching aids by a good number of faculty members. This facility is also found of great advantage for PG students during their seminar presentations as a part of learning method included in the curriculum and research presentations by research students.
- The university also has a Computer Centre with 65 computers and 06 Servers. The facilities of the Computer Centre can be availed by faculty members, research students and PG students by enrolling in the centre.
- Computer Centre offers regular training facility to the staff and the students at a nominal cost.
- The faculty members can use books and journals available in the central library for teaching and research purposes on the basis of membership in the library. Book grants received by the university from UGC, State Government etc at different points of time are distributed among the academic departments. Books and Journals are purchased according to the requisition received from each academic department. At present the university central library has a total collection of 106006 (as on 24.02.2014) purchased books. The Library subscribes at present to 110 printed Indian journals on different disciplines, 09 national newspapers and 17 general magazines.
- The faculty members of the university get advantage of the online facility available in the university library for teaching and research purposes. The university central library has acquired 439 e-books in various disciplines, also has made provision of 5000 e-journals and more than 4000 open-access journals to be accessed.
- Moreover the faculty members of the university can avail the advantage of document resources of INFLIBNET Centre, Ahmedabad as the university Central Library is a member of INFLIBNET. For teaching and research purposes the faculty members of the university can also use the library of IIT, Kharagpur and British Council Library, Kolkata and can access the documents available in those libraries by virtue of the membership of the university central library in those libraries.
- The university also provides space and furniture to the academic departments for generating departmental library and reading room facility upon receiving requisition from respective department.

4.1.4 Facilities provided to the departments

All the departments have one office room and one chamber for Head of the Department.

- The HoD's chamber is generally used as faculty meeting room.
- There are separate washrooms for girl students and women members of staff in every department.
- No separate rest room for women students and staff is there in every department.
- On the other hand, the university has developed a separate unit of Women Infrastructure Facility funded by UGC under Xth plan. The Women Infrastructure unit is situated close to the academic departments.

- The Women Infrastructure unit consists of rest rooms for women students and staff equipped with several indoor game facilities, gymnasium with multi-gym, stepper, walker, rower etc facilities and multiple wash rooms. There is also a qualified lady trainer in the gymnasium for assistance and training.
- The Women Infrastructure unit has undergone an expansion in terms of space and other facilities during 2012 -2013 under UGC XIth plan.

4.1.5 Disabled-friendly the infrastructure facilities

All the entrances of academic and administrative buildings have ramps for movements with wheel chairs.

- The stairs of the academic buildings are of low elevation and wide with firm support system.
- The central library is also provided with ramps for easy movements of the disabled students with wheel chair.
- All the proposals for new buildings include the facility of elevators.

4.1.6 Requirements of residential students of the university

A. Capacity of Hostels and Occupancy

- The University has two PG Girls' Hostels with the capacity of 190 and 120 seats respectively and those are fully occupied.
- The University has two PG Boys' Hostel with the capacity of 190 and 120 seats respectively and those are fully occupied. 20 seats within the 120 seat- capacity hostel are reserved for research scholars.
- Women research scholars have been provided with single unit residential facility in the residential campus.

B. Recreational facilities in hostel/s gymnasium, yoga centre, etc

- Hostels are provided with facilities of playing Badminton and indoor games like Carom, Chess, and Ludo etc.
- Facilities of playing Volleyball and Cricket are also provided in PG boys' hostels.
- The university has a Students' Amenity Centre for both boys and girls situated very close by to the students' hostels where the residential students can avail the facility of Gymnasium equipped with multi-gym and good number of other exercise equipment.
- The university has Yoga trainer. The residential students can also avail this facility.
- Television with cable connection and telephone are provided in the common rooms of the hostels.
- The hostels have supply of a number of daily newspapers and journals.

C. Broadband connectivity / wi-fi facility in hostels

- All the students' hostels of the university are provided with computers with internet facility from common server of the university
- Broadband or Wi-Fi connection is not provided in the students' hostels, at present only the central library has been declared as Wi-Fi enabled zone. Residential students can avail that facility.

4.1.7 Medical facilities for students and staff on campus

- The university has a Medical Unit with one qualified Medical Officer and other supporting staff.
- The Medical Unit has also infrastructural back-up to render emergency medical care during working hours.

- All the students, teachers and non-teaching staff are eligible to get free medical consultation and emergency medicines from the medical unit.
- Ambulance facility is available in the university. This facility is also extended to the hostels and other residential units beyond working hours.
- Homeopathy consultancy and medicines are also provided to all members of the university by a qualified Homeopath Practitioner.
- Doctor-on-call facility is also available for the residential students during emergency beyond working hours.
- Students' Health Home facility is provided to all the students.
- Medical Unit and all the hostels possess First Aid Boxes and Medicinal Kits for emergency uses.
- Annual health check-up programmes are conducted by medical unit for the students and staff.
- Health cards are provided by the Medical Unit to the students.
- The Medical Unit conducts several health awareness programmes for the wellbeing of the students and staff.

4.1.8 Promotion of students' interest in sports and cultural events/ activities

A. Sports

- The university has a large playground within its academic campus where outdoor games like Football, Cricket, Volleyball, Basketball, Kho Kho, Kabadi are usually played.
- Every year the university conducts Inter-College and Intra-University Athletic meet.
- Every year the university also conducts Inter-College and Intra-University Tournaments for Football (Men), Cricket (Men), Volleyball (Men), Basket Ball (Men), Kho-Kho (Men and Women), Kabadi (Men and Women), Yoga Meet (Men and Women).
- The university also has sports team for each of the above mentioned games who participate in different levels of competitions.
- The university provides special training facilities for the university team for each game including athletics, requisite equipment, and also facility of Gymnasium with all sorts of exercise and physical training related instruments along with qualified trainer.
- The university has a Sports Officer and a committee who are responsible for overall planning, supervision and execution of all sports related matters.
- The university also organises annual sports competition where all students and staff of the university take part.

B. Cultural events/ activities

- Every year the university conducts Inter-College and Intra-University Competition in cultural events like Music, Dance, Debate etc
- From these competitions a University Cultural Team is formed every year who participate in different levels of competitions i.e., Indian East Zone Competition, National Level Competition, SAARC Festival etc.
- The University Cultural Team has a record of excelling in these competitions almost in every year in the categories of Music (vocal), Dance and Debate.
- The University Cultural Team represented India in SAARC Country Festival in 2010 and 2012 in the categories of Music (vocal) and Dance.
- The University Cultural Team has become champion in Indian East Zone Competition in the categories of Music (vocal) and Dance during 2008 – 2009 and 2012 – 2013.

- The University Cultural Team gets invitation to perform in different Indian Universities on the basis of recommendation by AIU.
- The university provides special trainings to the cultural team members and possesses all sorts of requisite musical instruments and sound systems for training purpose.
- To promote students' and staff' interests into different forms of cultural events and also for recreation the university has formed a Movie Club, a Music Club and a Drama Club to organise programmes on Music, Drama and also Film Shows in the campus.
- The university has National Service Scheme (NSS) cell that has around 15,000 student volunteers and more than hundred programme officers who conduct several societal need-based programmes in the university and surrounding communities by adopting villages and slums.
- The programmes usually undertaken by NSS units are plantation of trees, blood donation camps, participation in National Integration camp, Sarva Siksha Aviyaan, construction of road-side sheds, repairing of village roads, health check up camps and distribution of medicines, blood group testing, yoga meditation camp, street drama against dowry system, literacy programmes, health awareness, First Aid training, swimming competition, pulse-polio immunization campaign etc.
- Special emphasis is generally given on development of scientific minds in youths and awareness about individual's responsibility towards society through undertaking programmes that enable people to understand scientific basis of the problem addressed and the way an individual's service can be extended towards people in need.
- The NSS volunteers also get associated with local self-help groups to organise their activities in the adopted villages and slums. The programmes usually undertaken are mass education through organising seminars, awareness for thalassemia, and campaign against destroying female embryo etc. by organising special camps.
- The NSS units of the university and the affiliated colleges carry out these programmes under the over-all direction of the University Level Advisory Committee and the supervision of the NSS Cell of the university.
- The university also has a Women's Studies Centre who organise lectures, seminars, workshops and other relevant programmes at regular intervals to generate awareness of the students and staff in different gender-related issues like women empowerment in science and technology, relevance of women studies in contemporary India, legal issues related with problems of women in society, domestic violence, women harassment in workplaces, girl child abuse, women and girl child trafficking etc

4.2 Library as a Learning Resource

4.2.1 Advisory Committee of the Library

- Library has an Advisory Committee, commonly known as Library Committee. Total number of Library Committee members is 11.
- Composition: Librarian – Member Secretary, Vice Chancellor – Chairperson, Dean of Science, Dean of Arts, Finance Officer, Three PG Teachers – one of them from Library and Information Science, One UG Teacher, One non-teaching staff and Asst. General Secretary of Students' Union.

- The Committee conducts their meetings at regular intervals and takes account of the present state of affairs. It also addresses the impending issues or complaints. It also plans to improve the library state-of-the-art system and reports the same to the appropriate authority to take necessary measures.

The following are some of the significant initiatives taken:

- I. Budget allocations and expenditure for each discipline
- II. Revised the Library timing
- III. streamline of purchase procedures
- IV. emphasis on subscribing more e journals

4.2.2 Details about the Library:

- Total area of the Library: 2200 sq meters
- Total Seating Capacity: 200
- Working Hours: From 10-00 AM to 7-30 PM on weekdays and
From 10-00 AM to 5-30 PM on Saturdays and Sundays
- Layout of the Library: It is a four-storey building situated in the midst of the academic complex of the University and is the hub of all academic activities of the University. Though we don't have individual reading carrels users can comfortably read in reading room Library has a provision for huge lounge area to facilitate journal, newspaper browsing, internet surfing and relaxed reading. Wi-fi helped to access e-resources in the proximity of Library. Twelve computers have been installed exclusively for accessing OPAC searching.
- A Centre for Digital Resource Services is located at first floor with 24 Computers for the library users to access the available online resources and internet surfing. A Career Information Cell has been functioning from the Reading–cum-Reference Section in the ground floor to serve the users by providing books on competitive examinations; The Central library of Vidyasagar University has been witnessing noteworthy development in various spheres during the last few years. Growth may be seen in its holdings, users and application of technology.
- Floor Plan is displayed at the entrance of the main gate of Central Library.
- Adequate signboards, along with digital signage are distinctly visible to the users of library.
- Fire fighting equipments are placed in different strategic locations.
- Differently abled users can get access to ramp, wheelchairs, etc. as per their requirement.
- A book elevator is used for shifting books and other reading materials in different floors.
- *Power crisis problem is solved by setting up a heavy-duty automatic start-up based DG set*
- *IP based CCTVs are installed in different service areas.*

4.2.3 Details of the library holdings

- At present the university central library has a total collection 106006 (as on 21.04.2014) books purchased.

Table 4.1: Number of Books added in last three years

Year	Number of Books
2010-2011	9548
2011-2012	5880
2012-2013	6504

- Average number of books added during the last three years: 7311
- The Library has acquired 439 e-books in various disciplines. Apart from this, the library has collected 1569 CD-ROMs and received a good number of books as gift from various sources.
- The Library has subscribed to 110 printed Indian journals on different disciplines, 09 national newspapers and 17 general magazines during the period under review. Full text of more than 5000 e-journals, more than 4000 open-access journals can be accessed.
- Besides these, the library has collection of several reports on different subjects, like Census Report, World Development Report, Education Report, etc. A good no. of text books for reference, conventional reference books as well as the books for competitive examinations are available in the Reference Unit as 'Reserve Collection' for consultation whenever necessary.

4.2.4 Access to the Library resources

- **OPAC Service:-**
The Library Catalogue can be accessed online. The entire collection of University Library can be searched through OPAC of VU Central Library or through web-OPAC from any corner of the university campus as well as from outside the campus. Library Catalogue is available from the Central Library link or from the OPAC link of the VU website at hyperlink <http://www.vidyasagar.ac.in>.
- **Resource Sharing & Institutional Membership:-**
The Vidyasagar University Central Library is a member of INFLIBNET Centre, Ahmedabad where several documents data are imported and exported from time to time. The university library also has got the membership of two renowned libraries, namely IIT, Kharagpur and British Council Library, Kolkata from where our users can access their required documents. On the other hand Vidyasagar university library also offers the Institutional Membership to its affiliated colleges who had enrolled themselves as institutional members by paying the prescribed annual membership fee to make use of the library facilities. Besides borrowing facilities, other services like, periodical service, digital library service, on-line e-journal surfing service, photocopying service, etc. are provided to the institutional members. Consulting services are also provided against a nominal fee to those institutional members who need help relating to their computerization problems.
- Library has an informative website. It is a part of <http://www.vidyasagar.ac.in>.
- Initiations have been taken to extend the facilities for providing in-house / remote access to e-publications beyond the university domain.

4.2.5 Deployment of ICT in the library

- Automation, Networking and Wi-Fi -

Automation:-

The automation process at the central library was started in the year 2001 under the INFLIBNET Programme of the UGC. Since that period it had started automation of all its

house-keeping activities using SOUL software package developed by INFLIBNET centre. Now our university library is fully computerized. The library has created databases of books, theses, current journals and library memberships which can be accessed on-line from any terminals within the library or within the campus through LAN and also from outside the campus through website.

During last few years, satisfactory progress was observed in the field of library automation. The number of computer terminals has been increased in different sections of the library including users' service areas. The union databases of books, serials, theses, etc. created by INFLIBNET Centre, Ahmedabad, can be accessed from the university library. Full text of more than 5 thousand peer reviewed journals can be accessed by any member within or outside the library. Databases of books, current journals and Ph. D theses can also be accessed from anywhere. Internet and e-mail services are also provided to all the members of the central library and also the institutional members from other institutions free of charges only for their academic work.

Networking:-

The library network backbone is of 10 Gbps. The storage servers are connected to the backbone using multiple 1 Gbps paths. The library backbone supports multiple VLANs for security of the infrastructure and computing clouds.

(A) Wi-Fi:-

The entire library is declared as Wi-Fi enabled zone. Any bona fide user can access all the documents owned by the library and can download the required materials through library network. Central Library has installed WLAN on 802.11n to allow accessing Vidyasagar University computing resources (Local network and Internet) through the Wireless communication. WLAN employs mobile network access through the Wireless Access Points. Only authorized users can access the Vidyasagar University network as well as Internet Services. In Central Library of Vidyasagar University, WLAN is used to provide reliable and proper network connectivity to mobile on-campus users. They can access all servers and applications which they can access from wired structure.

(B) ICT Infrastructure -

The Library has excellent IT infrastructure to manage all the in-house operations as well as providing specialized information services to the faculties, scholars and students. A description of the physical infrastructure is furnished below:

(a) Infrastructure Servers -

- (i) 2 servers [2x6 core Intel(R) Xeon(R) CPU E5540 @ 2.53GHz and 48 GB RAM]
- (ii) 4 servers [1x4 core Intel(R) Xeon(R) CPU E5430 @ 2.66GHz and 8 GB RAM].
- (iii) 2 servers [single Intel(R) Xeon(TM) CPU @ 2.93GHz and 8 GB RAM].

(b) Storage Servers – (i) EMC NS120 with a total 6 TB usable storage capacity.

(c) Physical Machines –

- (i) Library Application Server [SOUL Server]
- (ii) CD/DVD Mirror Server
- (iii) Management server [for VMWARE Host]
- (iv) Application Server[for Thin Client Machines]

(d) Virtual Machines -

- (i) IIS WEB Server

- (ii) Database Server
- (iii) DNS Server (Primary and Secondary)
- (iv) LDAP Server (Primary and Secondary)
- (v) Windows Software updates Server
- (vi) Primary Windows Active Directory Server
- (vii) EMC Secure Remote Support Server
- (viii) VPN Server (For remote connectivity)
- (ix) Office Scan Antivirus Server
- (x) FTP server
- (xi) IP Surveillance Management Server
- (xii) Dspace
- (xiii) DHCP
- (xiv) NMS
- (xv) Digital Signage Server
- (xvi) NTP Server
- (xvii) Remote Desktop Server
- (xviii) Thin Client Management Server

(e) Desktops and other accessories –

In addition to the above infrastructure, library also has about 30 Desktop PCs, 36 Thin Client PCs, one Network Printer (for printing document through LAN), one High End Scanner (for Digitization of documents like Thesis, Manuscripts, etc.) and some Barcode Scanners (for circulation unit)

(f) **Internet Conectivity-** 1 Gbps Leased Line is used for internet connectivity.

4.2.6 Details (per month) with regard to

- Average number of walk-ins: 6000
- Average Number of books issued / returned: 2150 issues and 2000 returns.
- Ratio of library books to students enrolled: 35.
- Average number of books added during the last four years: 6770
 - 2009-2010:5148
 - 2010-2011:9548
 - 2011-2012:5880
 - 2012-2013:6504
- Average number of login to OPAC: 433000 (approx)
- Average number of login to e-resources: 2873 for e-journals alone

4.2.7 Specialized services provided by the library

- Manuscripts: Nil
- Reference: A complete section of reference documents comprising dictionaries, encyclopedias, directories, yearbooks, etc.

- The library provides photocopying services to all library users at nominal charges.
- Print Service - Library has recently installed one network printer in the CDRS lab with automatic print quota management software. This is mainly used by the registered library members to print their documents against Payment.
- Inter-library Loan Service: Members can borrow documents from British Council Library, Kolkata and IIT Library, Kharagpur.
- Information Deployment and Notification: Library notify in their web page. Users receive reminders in their e-mails. Special notices are also displayed in digital signage.
- OPAC: Online Public Access Catalogue (OPAC) - The OPAC is one of the most heavily used databases of the library and is accessible 24x7 via library web page. Besides listing, all the documents available in the library OPAC are searchable by author, title, accession number, subject and several other fields. 12 PCs are placed at the entrance lobby for OPAC searching, e-mail and internet browsing and eight computer terminals in the book stacks exclusively for searching the on-line books database.
- Internet Access: E-Journals and Online Database Service - The Central Library provides web-based access to over 5,000 full text journals and 12 databases 24 x 7 on institute-wide network.
- Downloads: Approximately 430 GB data gets transferred in each month by students, faculties and other members of the university. The increasing trend is quite steady.
- D-space Repository & E-Books - Central Library has set up an archive of publications brought out by the institute. The archive is being updated regularly to cover more publications which are permissible within the copyright regulations. The archive is expected to evolve in to a database of all publications produced by the Vidyasagar University community and is accessible on the Internet through the library homepage.
- Web Based Faculty Information & e-Circular System (with SMS and email alert) - Library has recently hosted one web based faculty information system in which all the faculty member can upload their Bio-data, communicate with their student, generate departmental notice etc. Moreover we have also hosted another information dissemination system in which all the registered users can upload notification, reports etc in the public domain and also send alert (SMS and email) to the specified group of people.
- WEB Based Email Service - This service enables you to access your mailbox from anywhere (inside or outside Vidyasagar University) via the Internet. The current service is given through Google apps with some local modifications. The email address of the user is <user name>@mail.vidyasagar.ac.in. Library is also maintaining lists server to send emails to a group of users.
- CDRS Lab – Last year central library had setup CDRS (Centre for Digital Information Service) lab with 24 numbers of thin clients. Registered library members can browse the internet for their academic purposes.
- CD/DVD Access Service - The Library has installed CD/DVD mirror server (lots of CDs have already been archived) to store the contents of CDs and DVDs and provide accessibility of digital data archive throughout the campus through local area network
- Consultancy Service - Library is also helping other institute and affiliated colleges to automate their library. Registered members are getting telephonic support or remote support in case of failure of any service. This is a paid service offered to the registered users only.

4.2.8 Details of the annual library budget and the amount spent on purchases

- Budget allocation towards library varies according to the availability of fund from UGC and State Government specifically for this purpose.
- From 2008 to 2013 (during the last five years), the central library spent on books and journals amounting to Rs. 2.5 crores (approx.) received out of UGC and State Govt. aid. Besides Rs. 50 lacs have been spent on infrastructure of central library.

4.2.9 Initiatives taken by the university to make the library a ‘happening place’ on campus

- Recently university has constructed a tower of flood lights in front of the central library, so that students can make use of wi-fi zone till late night.
- E-resources could be accessed 24X7 through different gadgets and other Bring Your Own Devices (BYOD) compatible environment.
- Digital signage is installed at the access of Central library to display new arrivals, special information, advertisements of scholarships and research opportunities.
- News alerts in the form of e-mails are being sent regularly to bring it to the notice of probable users in the university community.
- Book Exhibitions are organized time-to-time to attract readers and also the publishing houses.

4.2.10 Feedback from Library users

- Library has decided to place a complaint box in the library premises. Feedbacks of users are also obtained through Reference Desk and Circulation desk. Students are also encouraged to write to the librarian or information scientist as and when necessary.
- After receiving the feedback librarian passes it on to the respective departments like Journal Section, Reference Desk, Reading room, Circulation division, etc. so that they could improve their process and products.

4.2.11 Efforts towards the infrastructural development of the library in the last four years

- Seminar Hall is built within library premises.
- Wi-Fi capacities have been extended to facilitate more users inside and outside the library building.
- CCTV is installed all around the library premises to monitor the movement of users.
- Much more space has been provided to the Central Library than earlier.
- Advanced hardware and software have been installed to support all newly initiated servers and services.

4.3 IT Infrastructure

4.3.1 IT policy with regard to

IT Service Management

- Information Security
- Network Security
- Risk Management
- Software Asset Management
- Open Source Resources
- Green Computing

The University is having **ICT Committee and ICT Team** formed by University Authority to manage the IT related activities and services. The Committee frames various IT policies on all the above mentioned items from time to time to augment the use of ICT in the teaching and learning process and to apply it for students' services. The present comprehensive policies adopted by the University on the above items are as follows:

IT Service Management:

The present policy is to manage the services centrally provided by the Computer Centre, Central Library and Programmer's Office. Purchase of IT infrastructure, Hardware maintenance and management, Software management, Internet Services and its management, regular training and awareness on IT services, are presently done centrally.

Service Management for Computer & peripherals – Centralised Maintenance in annual mode under the dept. of programmer

Service Management for LAN - In-house experts under Computer Centre

Service Management for 1 GB NKN Link - In-house experts under Computer Centre

Table 4.2: Number of training and awareness / crash course under Computer Centre:

2008-09	2009-10	2010-11	2011-12	2012-13
05 (for students)	03 (for students)	02 (for students)	03 (for students, approx. 810 students attended)	04 (for students)
-	01 (for university teachers and officers)	02 (for Non-Teaching Staff)	01 (for Officers)	-

National Workshop conducted by Computer Centre:

1. AISHE workshop on "DATA UPLOADING on Server" for generation of statistics of AISHE for all nodal officers of the colleges on 29th August, 2013
2. NME-ICT services and its implementation on 21-22 March, 2013
3. Implementation and Management of secure computer network in a higher academic institution on 22-24 March, 2011
4. Data Mining & Decision Support on 4-5 March, 2010

• **Information Security :**

The Information mostly is provided through web based user interface where various types of users (Administrative, faculty & researchers and students, other external users) have been given different level of access to the web based information management, control and access.

Proper Antivirus, Software firewall, Access policy have been deployed in the Gateway Laboratory, proxy servers and firewall. DMZ zone has been created.

Antivirus - Trend Micro Office Scan Server based - Central control from Computer Centre.

Proxy – Linux O/S based Squid proxy server for information security

DMZ Zone created.

Firewall: Local firewall in Controller of Examination, central library

- **Network Security :**

The University have adopted Hardware Firewall based Network Security with various level of access control. Access to internet is provided through Proxy Servers. Broadcasting restricted. Network scanner is deployed for network security and malfunctioning.

ROUTER – JUNIPER M80X router under NKN Project with proper access control and routing policy,

Central Firewall – Fortinet 200B at computer centre working on 24X7

Analyzer – Fortinet 200D Analyzer at computer centre working on 24X7

IP based based Internet access authentication through **LINUX SQUID Proxy server**

- **Risk Management:**

As dependability on IT infrastructure increases, the risk on security of data increases and needed to be minimized. Redundancy, Robustness, portability, Proper Power backup, regular and routine-wise Data backup, quality IT infrastructure deployment have been the University policies on minimizing the risk associated with the use of IT. High availability infrastructure has been created in vital and important laboratories.

- **Software Asset Management:**

All softwares purchased centrally are kept in central servers to be accessed by all users. The Central Stock register maintained by Programmers department keep track of all the software assets.

Tally, SPSS, MATLAB, Mathematica, LABView, CERNLIB

- **Open Source Resources:**

Use of Open Sources has been given emphasized by the University. The Linux is being used in Central Server room at computer centre and central library. Academic departments are advised to use linux. Linux and all other open source resources, manuals are kept in FTP server for downloading.

Linux Redhat Enterprise 7.0 for DNS, Proxy, NMS, Broadband servers

Open Office – as application S/W

MRTG – Network monitoring s/w.

MYSQL - Database

- **Green Computing:**

Use of Thin Client Terminal servers and low power consuming equipments, virtualization of servers, use of Data Centre, prolonging of the lifetime of equipments, optimization of deployment, regular disposing of the hardware accessories, use of teleconferencing, videoconferencing, CCTV cameras have been the policies adopted by the university towards green computing.

4.3.2 Give details of the University's computing facilities i.e. hardware and software:

Table 4.3: Number of Systems with individual configuration :

Items	Number
Servers	24
Microsoft Windows based Server	18

Linux based Server	6
Database Servers (Windows)	3
Proxy servers	4
Virtual Servers	2
Web Servers	2
Desktop PC	850
Thin Client Terminal Servers	100
Printer (DMP)	35
Printer (Laserjet)	65
Network Printer	6

• **Number of Nodes/Computers with internet facilities: 750**

• **Computer Student ratio : 1:4**

• **Dedicated Computing facilities:**

Dedicated Computer server have been installed at various location including computer centre for computation purpose enriched with the costly software including Tally, SPSS, MATLAB, Mathematica, LABView, CERNLIB and dedicated to computation purpose.

• **LAN Facility:**

Under the expertise of computer centre, The University has state of the Art Optical Fiber based gigabit Campus wide Local area network (LAN) developed, maintained and regularly upgraded to extend LAN, Internet and computing facilities, and to enhance the communication among all the academic and administrative departments. All the academic departments, administrative departments, extension centres, central library, Directorate of Distance Education, Residential Hostels, campuses is having LAN connectivity extended. The Computer Centre is maintaining and managing the whole System.

The University has been **made WI-FI enabled** partly. Many academic departments including the Central Library is now WI-FI enable.

LAN Infrastructure

Table 4.4: number of LAN infrastructure

Items	Number
VLANs	35
Nodes	825
Core Switches	02
Building Switches	09
Fiber Segments	09
Departmental Switches	40
Other distribution switches	30
WI-FI AP	15
Network Management Server	01
Firewall	01
Network Analyser	01
ROUTER	01

• **INTERNET CONNECTIVITY :**

The University has been associated with the **NKN/NME-ICT project launched by MHRD, Govt. of India and has obtained the prestigious 1 GBPS link under the project** for utilization by the University communities for academic development. The total LAN and Internet system is being maintained and monitored by the Computer centre.

The University also has a backup broadband 4 mbps Internet Connectivity to serve in emergency situation.

The total LAN and Internetworking is operational 24X7

- **Proprietary Software:** The University purchases various proprietary software along with the hardware. Various system software and application software are purchased centrally and department-wise.

Table 4.5: List of different system and application software

System Software	Microsoft Windows – individual licensing, Linux
Application Software	Microsoft Office, MS SQL, Oracle Corel draw, Page Maker, Autocad, MATLAB, SPSS, Tally, Image processing software, Mathematica, LABView, SOUL
Antivirus	Trend Micro, Kaspersky, Quickheal
Open Source	Open Office
Browser	Internet Explorer, Firefox Mozilla
Customised Software Developed	Accounting Packages , Result Processing software, University MIS Systems, Admission, Registration, Central Admission and counselling software, Library Automation Software

- **Number of Nodes/Computers with internet facilities: 750**

4.3.3 Institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities

University is in the XII Plan period. University has the following plans and strategies for deploying and upgrading the IT infrastructure and associated facilities with the financial support for UGC and State Government:

- Upgradation of the Campus wide LAN infrastructure
- To make campus fully WI-FI enabled.
- Server virtualization
- Enriching the central computing and laboratory facilities
- Develop complete multimedia and e-Content development centre
- Deploy the complete Online University MIS System in the University administrative and academic activities.
- Make the remaining class rooms ICT-enabled.
- Use of more free and open source software.
- To provide best quality IT services to the University communities.

The University ICT committee will frame further policies for deployment from time to time.

4.3.4 Access to on-line teaching and learning resources and other knowledge and information database/packages

Teachers have full access to a huge number of on-line teaching materials in the form of text, audio, video, images. Under NME-ICT NKN project a lot of quality teaching aids are being developed through NPTEL project and are kept in public for access by the teachers. Teachers, students, Research Scholars have access to all e-learning resources, approximately 20000 electronic Journals under UGC-INFONET e-Journal Consortia, access to online video courses, Virtual Laboratories etc. to enhance the teaching-learning and research quality. MIS database, various statistical, data analysis packages, and stream specific software like SPSS, Mathematica, MATLAB etc. are made available to the users.

The necessary internet connectivity is available 24 hours. Computers, Laptop etc. are provided to the faculties, students and research scholar for accessing the materials.

4.3.5 Issues such as authenticity and copyright with regard to online resources outside the University.

- IP based authentication assigned under NKN Project
- User based authentication

4.3.6 New technologies deployed by the University in enhancing student learning and evaluation during the last four years

During the last four years

- i) Almost all Students Laboratories have been given sufficient internet connectivity through LAN and are WI-FI enabled to have all time access to e-learning resources.
- ii) To deal with the huge traffic, Campus LAN Core infrastructure has been upgraded.
- iii) Have access to these resources, Virtual Laboratories.
- iv) Are regularly trained to access these contents, use of A-View softwares
- v) Many quality softwares are deployed for use by the students.
- vi) Most departmental Class rooms have been made ICT enabled, Internet connectivity, Projectors, laptops etc.
- vii) Central Library has been made completely WI-FI enabled. Access to library has been made easy.
- viii) Online and Internet facilities have been extended to Residential Students Hostels.
- ix) Teacher-student interaction through online video chat/ email etc.
- x) Continuous evaluation, Online Examination, Assignment submission, OMR based evaluations have been adopted by some departments.
- xi) Group mailing, e-circular are used for better student-teachers interaction.
- xii) Central Computation facilities are made available in the computer centre for students access.

4.3.7 IT facilities available to individual teachers

- i) Every teacher has the computer with internet connectivity in his/her chamber to have access to online quality teaching and research materials. Software for preparation of teaching materials has been provided.
- ii) The Research laboratories of the faculties also have full ICT support.
- iii) Access to online full text e-Journals databases, e-learning materials, NPTEL Video courses, digital libraries across the world has been provided in their chamber and residence.
- iv) Access to multimedia video conferencing, chatting, Wikipedia, search engine, A-View Software, Virtual laboratories have been provided as well.
- v) Class rooms are made ICT enabled.
- vi) Regular Training and Awareness programmes are organized by Computer Centre for faculties to use the above ICT as Teaching and learning resources.
- vii) Central computational facilities for faculties from computation server having quality software are provided from Computer Centre

4.3.8 ICT-enabled classrooms / learning spaces available in the university

- i) All the academics departments have at least one ICT enabled class room having Desktop/Laptop, Internet connectivity and Multimedia Projectors. Approximately 28 departments/classrooms have been made ICT enabled.

- ii) Computer Centre: University has computer centre with 70 computer terminals and four Computer laboratories. Academic departments are allotted time slots throughout the week for use of these computer facilities for learning and practical classes.
- iii) Departmental Computer Laboratories: Apart from the central facilities from computer centre, almost all the departments have at least one Computer Laboratory with sufficient number of computer for use by their students. There is at least 30 computer laboratories in the University having more than 700 computers.
- iv) The central library also has approximately 40 computers for use by the students in the study room.
- v) Since the campus is partly WI-FI enabled, access to online teaching - learning material has become easier and are available all the time.
- vi) Teachers use these facilities to prepare quality teaching materials and use the ICT facilities in the classroom to teach and deliver lecture in a much better way.

4.3.9 Preparation of computer aided teaching-learning materials

Computer Centre Organises regular training/awareness and crash courses for the faculty members on new technologies and development in ICT and how to use the ICT in the teaching learning process. They are trained on Windows, Powerpoint, latex, Linux, MS Office, Internet and its services, on line resources, access to e-Journals etc.

University has (i) ICT experts to train/ assist the faculties (ii) Computer Centre laboratories to organize the Training/ awareness programme.

4.3.10 Maintenance of computers and their accessories

Computers and accessories are managed and maintained through Central maintenance policy. i.e. all the computers are under a single maintenance vendors for AMC. Campus wide Computer AMC agreement is signed with a single vendor at certain interval. The vendor and the Maintenance are controlled by the Programmer/Analyst department.

The AMC vendor is stationed in the campus having their office in the campus with enough number of hardware engineers.

The academic departments and faculties have no headache on keeping their system operational.

Campus-wide LAN, whole Internet 1 GB link under NME-ICT/NKN and its services, are completely maintained and managed by the expertise of computer centre in-house.

4.3.11 National Knowledge Network Connectivity

- 1 GBPS connectivity under NKN project.
- It avails of the following services:
 - Internet connectivity to 750 nodes. Increasing rapidly. Internet searching surfing, chatting, emailing, File transfer, video conferencing, use of search engine
 - 7000 full text e-Journals under UGC-Infonet e-Journal consortia
 - Access to NPTEL video courses, Virtual Laboratories
 - Use of A-View Software under Online learning
 - Use of SAKSHAT portal
 - Access to Digital Libraries and books and journals

4.3.12 Web resources such as Wikipedia, online dictionaries and other education-enhancing resources

The university encourages the faculties, students to access Wikipedia, Search Engine, dictionary, encyclopaedias to acquire knowledge.

4.3.13 Provision made in the annual budget for the updating, deployment and maintenance of computers

The university allocates budget for the update, deployment and maintenance of computers every year.

Table 4.6: Year-wise budget for computer maintenance

Head of Expenditure	2008 - 2009	2009 - 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014
Computer maintenance	700000	1000000	1750000	1925000	1500000	2000000

4.3.14 Transfer of teaching and learning from closed university information network to open environment

Space for E-Books is provided on the website. These study materials cannot be re-mixed but are very helpful as advanced references for the students. Published and unpublished written materials are stored in D-Space on the University website. Students use these materials for advanced learning and for examination preparation.

The syllabi and question papers of the courses of different departments, which should be treated as important examination preparation material, are uploaded to the University website. This facilitates accessibility for the students, teachers and the public at large. Results of different examinations are placed on the website too.

This aspect is being given careful consideration by the University and due action will be taken in near future at the departmental level. The access to IT resources made for students exposes them to outside information and learning environment.

4.4 Maintenance of Campus Facilities

4.4.1 Estate Office/designated officer for overseeing the maintenance of buildings, class-rooms and laboratories

The university has an estate section within the office of the registrar to oversee the maintenance of infrastructure. This section works with the engineering department for improving maintenance of buildings, class-rooms and laboratories. Some departments within the humanities building has undergone through renovation of floors, toilets and classrooms. New furniture are provided to the academic departments and offices.

4.4.2 Maintenance of infrastructure facilities, services and equipment

The engineering wing of the university maintains infrastructure with its own technical staff and sometimes with outside agencies. The equipment items like computers are maintained with Annual Maintenance Contract. In the Peer Team Report of the last NAAC visit it was maintained- "The overall maintenance of the infrastructure needs immediate attention."

Separate staff members are not appointed for maintenance and repair. The engineering department headed by the Engineer and supported by three SAE, electricians, plumber, helper and others generally take care of the infrastructural facilities. In order to minimize the hiring cost, the technical assistance of the engineering department is ensured first.

The university also has one Instrumentation Centre established in 2000. The sophisticated instruments in this centre are generally looked after by two employees appointed on contractual basis. The Director of this centre is engaged in general supervision. In the case of maintenance and repair technical assistants are hired from external agencies.

The University has given special attention on the maintenance of the Computer and ICT infrastructure. It is done through Centralised Maintenance mode by the department of the Programmer. All the component done done by an AMC vendors by signing an AMC agreement with the vendor selected through proper process of selection.

Generally budget allocations for maintenance are made on the basis of the estimated incomes from the funding agencies viz. state government, UGC and revenues earned by the university. The fund allocations on different heads are made strictly in compliance with the guidelines of the funding agencies.

On the other hand, while utilizing the fund, actual requirements are ascertained followed by purchase rules and strict maintenance of instrument quality. Regular audits also take place.

The budget allocations for the maintenance of land, building, furniture, equipment, computer and transport (2008-09 to 2013-14) are provided as separate attachment for proper assessment of maintenance mechanism.

CRITERION –V: STUDENT SUPPORT AND PROGRESSION

5.1 Student Mentoring and Support

5.1.1: System for student support and mentoring

Vidyasagar University has a well structured system to ensure stress free academic atmosphere in the campus as well as in hostels for the students. The Dean of Students' Welfare is the nodal officer to coordinate the activities and facilities related to the students. Right from the time of admission to the completion of the course strict transparency is insured. Preparation of merit list for admission in various departments is prepared by the secretary P.G. Faculty council as per guidelines given by the centralized admission committee of the university. Every merit list including the waiting list is displayed on notice board and made available on University Web site. Same procedure is followed by the office of the secretary, Undergraduate Faculty council and the inspector of colleges for admissions in colleges.

To take care of the students after admission, the University has developed the infrastructure facilities for addressing problems arising from time to time. These are as follows:

- For Girl students, there is a sexual harassment cell and women studies centre.
- For boys and girls both, there is anti-ragging committee which insures ragging free atmosphere in the campus and in hostels.
- For the development of sports capabilities in students the university has created the department of sports with a full fledged office supported by staff.
- As the University is located near the rural and forested / backward area some students face the problem in English speaking. To address this deficiency the department of English runs a special course on communicative English for the weaker section of students.
- The National service scheme design and execute the programs to help the students discharge their responsibility towards society.
- Merged programme funded by the UGC is fully utilized to address the specific requirements of the students of SC/ST and other backward groups. To facilities the effective implementation of the merged scheme, the coordinators keep liaison with the various departments of the University.

Financially weaker students are supported by the university through its own schemes as well as through the various scholarships made available by the government and NGOs. The Dean of the students' welfare in tandem with the Register office looks after the disbursement of free-studentships and scholarships.

5.1.2 Provisions available for academic mentoring other than classroom interaction

- Apart from class room interaction, students are taken out for field trips and educational tours of various institutions, research stations and industries located in different parts of the country. Specific programmes such as, Industrial visit, Internship programmes offer ample scope for hands on training.
- Free access to internet facilities enables the students to interact with their teachers beyond class hours. Social networking sites are used by the teachers as well as the students for academic discussions, clarification of academic problems, exchange of lecture notes, fixing of dates for classroom examinations etc.
- The teachers encourage their students to access the internet for information necessary for complementing the teaching imparted in the classroom.

- Students are encouraged to participate in discussions during seminars on subjects outside the ambit of their syllabi.

5.1.3 Personal enhancement and development schemes

The following programmes are available for personal enhancement and development of the students:

- A. The university takes initiative on a regular basis for carrier counseling of the students through various extension activities of the departments. The departments organize lectures for providing guidance for competitive examinations, like NET/ SET/ GATE/ MAT /GRE etc and civil service examinations. The Dean of students welfare arranges programmes for counseling in collaboration with the academic departments and corporate agencies. The NSS cell of the university also takes initiative with TCS (Tata Consultancy Service)
- B. The Department of English offers short term special course of three months duration in its language laboratory for all the students on first come first serve basis. Classes are held twice in a week from 3.30 to 5.30 p.m. Preference is given to S.C./S.T. students in admission and they can enroll without paying any course fee. The course fee charged from the general students is Rs. 1000/-. A certificate is also given after successful completion for the course.
- C. The university through its instructions tries to promote cultural values conducive to moral and overall well being of the students.

5.1.4 Annual updating of prospectus and handbook

The prospectus is updated and published every year and provided to the students at the time of admission. It includes information regarding programmes offered, course structures, number of availability of seats, eligibility for admission, fee structure, hostel accommodation multiple facilities available on the campus etc. and the like.

The prospectus is also available at the University web site which is updated regularly.

5.1.5 University scholarships / freeships given to the students during the last four years

Scholarships given to the students:

The university provides free-studentship for the students of each academic department. Ten percent (10%) of the students are given full free studentship and 10% of the students are provided with half-free students. Sometimes one full free studentship is divided into two half-free studentships to accommodate more students for free ship. Applications for the free studentship are placed before the departmental committee for selection. Students are selected for free ship on the basis of their merit and annual family income.

Apart from the free studentship provided by the university the scholarships received under various schemes of the state Government, Central Government and other organizations are given to the students. Other recognized organization offering scholarships are as follows:

- i. Ramkrishna Mission Welfare ,Belur Math,Howrah
- ii. W.B.Transport Workers Social Security scheme
- iii. W.B. Building and Other Construction Workers Welfare Board
- iv. New Secretariat Building, Kolkata
- v. Beedi -shramik Scholarship.
- vi. W.B. Chief Minister Relief Fund Scholarship.

The following table shows the number of students received different scholarships in last five years:

Table: 5.1: number of students received different s scholarships

W.B MERIT-CUM-MEANS SCHOLARSHIP					
FINANCIAL YEAR →	2009-10	2010-11	2011-12	2012-13	2013-14
ARTS	86	166	257	317	56
SCIENCE	115	216	182	208	24
COMMERCE	1	204	0	15	0
POST METRICS SCHOLARSHIP FOR MINORITY AWARDED BY W.B MINORTY DEVELOPMENT AND FINANCE CORPORATION					
FINANCIAL YEAR →	2009-10	2010-11	2011-12	2012-13	2013-14
All departments	27	51	115	148	19
POST METRIC SCHOLARSHIP TO S.C, S.T. AND O.B.C. S TUDENT FOR STUDIES,GOVT OF INDIA					
FINANCIAL YEAR →	2009-10	2010-11	2011-12	2012-13	2013-14
SC	179	224	232	236	ONLINE
ST	78	86	89	92	ONLINE
OBC	44	62	84	76	ONLINE
HANDICAPPED SCHOLSRSHIP BY THE OFFICE OF THE DISTRICT MASS EDUCATION EXTENTION OFFICER, PASCHIM MEDINIPUR, GOVT. OF WEST BENGAL					
FINANCIAL YEAR →	2009-10	2010-11	2011-12	2012-13	2013-14
	19	0	7	27	19
NATIONAL HANDICAPPED FINANCE AND DEVELOPMENT CORPORATION, GOVT. OF INDIA					
FINANCIAL YEAR →	2009-10	2010-11	2011-12	2012-13	2013-14
	0	0	0	0	1
UGC RANK HOLDER SCHOLARSHIP					
FINANCIAL YEAR →	2009-10	2010-11	2011-12	2012-13	2013-14
	1	1	11	ONLINE	ONLINE
INDIRA GANDHI SINGLE GIRL CHILD SCHOLARSHIP U.G.C.					
FINANCIAL YEAR →	2009-10	2010-11	2011-12	2012-13	2013-14
	16	18	41	ONLINE	ONLINE
WEST BENGAL LABOUR WELFARE SCHOLARSHIP					
FINANCIAL YEAR →	2009-10	2010-11	2011-12	2012-13	2013-14
	5	15	38	0	0
SITARAM JINDAL FOUNDATION SCHOLARSHIP					
FINANCIAL YEAR →	2009-10	2010-11	2011-12	2012-13	2013-14
	11	21	7	0	1

Table 5.2: Scholarship and Fellowship awarded to Ph.D. Students:

Sl. No.	Year	Scholarship / Fellowship	Nos. of students
1	2013-14	CSIR	15
2	2013-14	UGC (one time)	13
3	2013-14	DST (Inspire Fellowship)	11
4	2013-14	RFSMS Fellowship	15
5	2011-12	RFSMS Fellowship	22

5.1.6 Percentage of students covered under the scholarship:**Table 5.3: Percentage (%) of scholarship year wise**

Year	Scholarship (total)	Total no. of students	Percentage (%)
2009-10	582	1232	47.24
2010-11	1064	1278	83.26
2011-12	1063	1316	80.76
2012-13	1119	1387	80.68
2013-14	120	1429	8.40*

*The figures indicated against 2013-14 are based on the records kept in the university office. The dip in the number of scholarships awarded for this period is explained by the fact that many students have applied for scholarships on line, which are not taken in computation.

5.1.7 International Student Cell:

At present the University does not have any International Student Cell. Some students from Bangladesh do come to pursue some studies and they are accommodated by the concerned departments. However, the University is developing the infrastructural support system to encourage the foreign students to pursue their studies in selected programs.

5.1.8 Available student support services:

Support services are available for:

- * Overseas students
- * Physically challenged / differently-abled students
- * SC/ST, OBC and economically weaker sections
- * Students participating in various competitions/conferences in India and abroad
- * Health centre, health insurance etc.
- * Skill development (spoken English, computer literacy, etc.)
- * Performance enhancement for slow learners
- * Exposure of students to other institutions of higher learning/corporates/business houses, etc.
- * Publication of student magazines

Available student support services are as follows:

- Specific infrastructural facility for the physically disabled students was lacking in the buildings constructed earlier. But arrangements are now being made to create such facilities in the new upcoming buildings. In the library there are some facilities for differently-abled students. Differently-abled users can get access to ramp, wheelchairs, etc as per their requirement. A few brail-books on different subjects and audio documents are part of the library collection to cater to the needs of the visually challenged users. There is reservation for SC/ST/OBC students for admission in different courses as per Govt. rules. The SC/ST/OBC and economically weaker students get scholarships from different sources. SC/ST/OBC and other weaker sections of the students are supported academically through the MERGED programme to address the needs of the poor and underprivileged bona-fide students; the University has created a "Students Welfare Fund". Students contribute to this fund at the time of admission. The fund accumulated every year in the welfare fund comes, on the average, to Rs. 50,000/-. This amount is disbursed among the needy students on the basis of their eligibility. In addition to this, our Vice-chancellor also approves additional special grant to ensure that no poor student is deprived of educational facilities because of their poverty. Remedial coaching classes are conducted after the class hours to improve academic performance.
- The university provides all kinds of assistance including escorts both male and female to all the contestants for zonal /national / SAARC –level cultural competitions, selected on the basis of screening tests. The university takes care of the travel and other expenditures for the artistes and their accompanists
- Health care support is provided to the students by the Medical Unit of the University. The university has a Medical Unit with one qualified Medical Officer and other supporting staff. The Medical Unit has also infrastructural back-up to render emergency medical care during working hours. All the students are eligible to get free medical consultation and emergency medicines from the medical unit. Ambulance facility is available in the university. This facility is also extended to the hostels beyond working hours. Annual health check-up programmes are conducted by medical unit for the students. Health cards are provided by the Medical Unit to the students. All the hostels possess First Aid Boxes and Medicinal Kits for emergency uses. Apart from this Students' Health Home facility is provided to all the students. The Medical Unit conducts several health awareness programmes for the wellbeing of the students. To keep the students physically and mentally fit, university extends Multi-gym facility separately for boys and girls on payment basis. To compensate for the damage due to unforeseen events during study, the university extends general insurance policy offered by one of the Govt. insurance agencies to all its bona-fide students. A student has to pay Rs.299 /- per annum and the rest of the amount is borne by the university.
- The students may join the course on communicative English offered by the department of English in its language laboratory. Computer literacy programmes are organized from time to time for the benefit of the students.
- Each academic department arranges tutorial / special classes for the slow learners. The students are encouraged to maintain personal contact with the teachers beyond the class hours. The teachers offer special guidance to such students to help them cope with the syllabus.
- The students are taken to the field trips, educational tours to visit the various institutions, central and state research stations and industries located in the various parts of the country.

- The students publish wall magazines in their respective departments regularly. There is a magazine publication committee in each department. The student union arranges wall magazine competition every year. The Students' Union publishes a magazine named "Chhar Patra" every year with funds derived from the University. Besides in some departments (e.g. in the Department of English) students publish print journals either annually or more than once in a year.

5.1.9 Guidance for NET/SET other services

Syllabi are made by keeping in mind the contents of NET/SET syllabus. Additional coaching is arranged by the academic departments with funds provided for this purpose. Effective implementation of the MERGED Scheme Programs facilitates the students' preparations for Net/SET and other competitive examinations. From the Eleventh Five Year Plan University is running the Merged Scheme programmes for coaching for (i) NET/SET (ii) Entry into Services and for Remedial Coaching, specially of the SC, ST, OBC, Minority and Female Students. The coordinator of these programme remain in constant touch with the Heads of the departments to look after the appropriate coaching to the needy students.

The efforts are yielding rich dividends as the number of students of different academic departments clearing the NET/SET is increasing steadily with every passing year. Every year a large number of students enter School services after clearing the test conducted by the School Service Commission. Those who sit for other competitive examinations are known to have benefited from such coaching.

5.1.10 Policy of the University for participation in sports

There is provision of sports quota admission in the University which is strictly adhered to at the time of admission. This encourages the students from the time of college education itself. Many colleges have Physical Science departments which are well funded through the grants of the central and state Governments. University also allocates separate budget to take proper care of the sports activities.

Inter college sports are organized by the University every year and Inter University games are organized at frequent intervals. Teams for various events are also sent to Inter university tournaments organized at other Universities.

Additional academic support and academic flexibility in examinations for students participating in sports and other extracurricular activities are not encouraged as such. However, minor adjustments without hampering the academic sessions are considered on case to case basis. Credit of attendance is given to students participating in state and national level sports Meets.

Once a student or a team for any event is selected, special coaching and practice session is organized for them. Uniform and the play materials are provided free of cost. Free Tiffin and special dietary requirements are considered wherever necessary. These provisions are made in the annual budget of the university.

5.1.11 Student placement cell

The Dean Students' Welfare (DSW) office looks after the placement cell. His office is equipped with staff and full-fledged office facilities to communicate with the recruiting companies. The placement cell, under the guidance of Dean Students' Welfare and in consultation with the respective departments invites various organizations to conduct campus recruitment examinations and interviews. The placement cell also explores the possibilities of off campus recruitment of students through regular contacts. Some self financing departments, e.g., Computer science, Electronics, MBA, have their own placement cells. E-mail facility has made the communications fast and easy. Based on the requirement and eligibility of the

hiring company, the students are informed of place, date and time of the campus selection. Quite a good number of students have been employed through the placement cell.

5.1.12 Number of students selected during campus interviews by different employers

Details of placement of students and interviews held during the last five years are given in the following table

Table 5.4: number of students appeared and selected in campus interviews

Name of the Company	Students appeared	Students Selected
2009-10		
Pradan (New Delhi)	60	6
2010-11		
TCS	35	4
2011-12		
Wipro	60	04
Thyrocare	20	00
Allahabad bank	20	02
HDFC Bank	20	04
2012-13		
Limtex	15	09
IMOS	20	10
Haldia Petro- chemicals	04	02
TCS	250	04

Department of Computer science has formed a training and placement officer (TPO) who looks after the campus selection .The following selections were done by campus selection.

Table 5.5: Number of students selected in the interview in Computer Science Dept

year	company	No. of students selected
2013	Limitex Infotech	9
	IMOS Tech Pvt. Ltd.	10
2014	Infoway IT solution	10

5.1.13 ALUMNI ASSOCIATION

The University has a registered ALUMNI ASSOCIATION. The Association began its journey in its first General Meeting held on 20.12.2008 at B. C. Mukherjee Hall,Vidyasagar University.

The elected office bearers are as follows:

President	Dr. Pijush Kanti Jana
Vice-President	Dr. Bimal Krishna Das Smt. Sujaya De Sarkar Smt. Debjani Mukherjee
Secretary	Dr. Amal Kumar Bhunia

Asst. Secretary	Dr. Basudev Mandal Dr. Tridib Tripathi Mr. Bipul Kr. Mandal																																										
Treasure	Mr. Basubandhu Sengupta																																										
Executive Body	<table> <tr> <td>Dr. Shyamal Kumar Mandal</td><td>Mr. Ratnakar Kundu</td></tr> <tr> <td>Mr. Milan Kr. Sarkar</td><td>Mr. Sankar Adak</td></tr> <tr> <td>Mr. Santimoy Patra</td><td>Dr. Abdul Hai Mallik</td></tr> <tr> <td>Smt. Tanushree Tulsian</td><td>Dr. Sandip Chattopadhyay</td></tr> <tr> <td>Dr. Partha Pratim Maity</td><td>Dr. Chhanda Mallik</td></tr> <tr> <td>Mr. Sanatan Hansda</td><td>Dr. Pradip Das Mahapatra</td></tr> <tr> <td>Mr. Pradip Kumar Sarkar</td><td>Dr. Durga Sankar Rath</td></tr> <tr> <td>Dr. Tapan Kumar De</td><td>Dr. Tapan Kumar Pandit</td></tr> <tr> <td>Mr. Aliv Mandal</td><td>Mr. Arindam Roy</td></tr> <tr> <td>Dr. Indranil Acharya</td><td>Dr. Samiran Bisai</td></tr> <tr> <td>Dr. Indranil Chakraborty</td><td>Dr. Atanu Jana</td></tr> <tr> <td>Dr. Sujaya Maity</td><td>Dr. Ashis Kumar De</td></tr> <tr> <td>Dr. Soumitra Mandal</td><td>Prof. M. M. Paul</td></tr> <tr> <td>Dr. Sankar Roy</td><td>Dr. Keshab Mandal</td></tr> <tr> <td>Dr. Sumita Roy</td><td>Dr. Joyjit Ghosh</td></tr> <tr> <td>Mr. Tarak Nath Sahu</td><td>Mr. Eyasin Khan</td></tr> <tr> <td>Dr. Dilip Chakraborty</td><td>Mr. Amitava Mukherjee</td></tr> <tr> <td>Mr. Jitendranath Murmu</td><td>Mr. Pralay Kr. Ghosh</td></tr> <tr> <td>Mr. Susanta Kr. Ghorai</td><td>Mr. Mrityunjay Khatua</td></tr> <tr> <td>Mr. Sabyasachi Bera</td><td>Dr. Joydeb Maity</td></tr> <tr> <td>Mr. Shanti Sarkar</td><td>Dr. Shantanu Panda</td></tr> </table>	Dr. Shyamal Kumar Mandal	Mr. Ratnakar Kundu	Mr. Milan Kr. Sarkar	Mr. Sankar Adak	Mr. Santimoy Patra	Dr. Abdul Hai Mallik	Smt. Tanushree Tulsian	Dr. Sandip Chattopadhyay	Dr. Partha Pratim Maity	Dr. Chhanda Mallik	Mr. Sanatan Hansda	Dr. Pradip Das Mahapatra	Mr. Pradip Kumar Sarkar	Dr. Durga Sankar Rath	Dr. Tapan Kumar De	Dr. Tapan Kumar Pandit	Mr. Aliv Mandal	Mr. Arindam Roy	Dr. Indranil Acharya	Dr. Samiran Bisai	Dr. Indranil Chakraborty	Dr. Atanu Jana	Dr. Sujaya Maity	Dr. Ashis Kumar De	Dr. Soumitra Mandal	Prof. M. M. Paul	Dr. Sankar Roy	Dr. Keshab Mandal	Dr. Sumita Roy	Dr. Joyjit Ghosh	Mr. Tarak Nath Sahu	Mr. Eyasin Khan	Dr. Dilip Chakraborty	Mr. Amitava Mukherjee	Mr. Jitendranath Murmu	Mr. Pralay Kr. Ghosh	Mr. Susanta Kr. Ghorai	Mr. Mrityunjay Khatua	Mr. Sabyasachi Bera	Dr. Joydeb Maity	Mr. Shanti Sarkar	Dr. Shantanu Panda
Dr. Shyamal Kumar Mandal	Mr. Ratnakar Kundu																																										
Mr. Milan Kr. Sarkar	Mr. Sankar Adak																																										
Mr. Santimoy Patra	Dr. Abdul Hai Mallik																																										
Smt. Tanushree Tulsian	Dr. Sandip Chattopadhyay																																										
Dr. Partha Pratim Maity	Dr. Chhanda Mallik																																										
Mr. Sanatan Hansda	Dr. Pradip Das Mahapatra																																										
Mr. Pradip Kumar Sarkar	Dr. Durga Sankar Rath																																										
Dr. Tapan Kumar De	Dr. Tapan Kumar Pandit																																										
Mr. Aliv Mandal	Mr. Arindam Roy																																										
Dr. Indranil Acharya	Dr. Samiran Bisai																																										
Dr. Indranil Chakraborty	Dr. Atanu Jana																																										
Dr. Sujaya Maity	Dr. Ashis Kumar De																																										
Dr. Soumitra Mandal	Prof. M. M. Paul																																										
Dr. Sankar Roy	Dr. Keshab Mandal																																										
Dr. Sumita Roy	Dr. Joyjit Ghosh																																										
Mr. Tarak Nath Sahu	Mr. Eyasin Khan																																										
Dr. Dilip Chakraborty	Mr. Amitava Mukherjee																																										
Mr. Jitendranath Murmu	Mr. Pralay Kr. Ghosh																																										
Mr. Susanta Kr. Ghorai	Mr. Mrityunjay Khatua																																										
Mr. Sabyasachi Bera	Dr. Joydeb Maity																																										
Mr. Shanti Sarkar	Dr. Shantanu Panda																																										

Activities:

1. Banking on the enthusiasm of its members, the VUAA organizes many socially relevant programmes for the welfare of various beneficiary groups.
2. In collaboration with the Vidyasagar University Research Scholar's Association (VURSA), the VUAA celebrates the Birthday of Maulana Abul Kalam Azad as the National Education Day every year on 11th November. It organizes a Memorial Lecture to pay a befitting tribute to the eminent educationist Maulana Azad.
3. The VUAA also organizes Essay Competition to mark the Education Day. The unique feature of this competition is that the competitors are given the option to write essays in any of the following languages: Bengali, English, Hindi, Sanskrit and Santali.
4. The VUAA also plays a pioneering role in creating awareness about a pollution-free campus. It observes 9th December as the Environment-friendly Day. Drives are undertaken to free the campus of non-biodegradable plastic goods and ensure cleanliness inside the university premises.
5. The VUAA also organizes free health check-up and health awareness drive on the University campus. The first camp of its kind was organized on 23rd December, 2009. It was a huge success and catered to the need of the medically disadvantaged communities residing in the vicinity of Vidyasagar University.

The Association is committed to excellence. It has numerous developmental plans in its kitty and would like to implement them in near future.

5.1.14 Student grievance redressal cell, the nature of grievances reported and their redressal

Student grievance cell: There is a student grievance cell at university level and it looks after the complaints as and when lodged by the students. This cell was constituted on 21-12-2012. It has five members headed by DSW of the University. Other members of the cell are: one Professor, Inspector of Colleges and two student representatives.

After the constitution of the cell only two cases were reported in 2013. The grievances raised were resolved to the satisfaction of the complainant.

5.1.15 Promotion of a gender-sensitive environment

i) Gender-sensitive programmes:

Vidyasagar University, with its **Women's Studies Centre**, promotes study, research, documentation and publication, training and consultancy on the issues related to women, the objective being to help women from all strata of society specially from rural South-Bengal to understand their inner potentials. Our intention is to provide an interdisciplinary environment for research and allied activities related to Women.

a) Awareness programme

- **An Awareness and Training programme** on 'Mother and Child Health and Nutrition' was held on 27th December, 2011 at Tantigeria Primary school, Midnapore.
- An **'Awareness and Training programme'** was held on 8th February, 2013 on 'Disease Prevention and Health Promotion of Women and Adolescent girls'. The program was held at Tantigeria No. 1 Primary School, Tantigeria under the Midnapore subdivision of Midnapore (Paschim) district, West Bengal.
- **An Awareness programme on 'Health and nutrition of Female Docra Artisan'** was organized by the Women's Studies Centre, VU on 9th March, 2013 at Bikna, Bankura.

b) Seminar

- Women's Studies Centre organized a **National Seminar on 'Women and Domestic Violence'** on 2nd March, 2012 at Vidyasagar University campus.
- **UGC-Sponsored National Seminar** on 'Harassment of Women at Workplace' was organized on **23rd March, 2012** at Vidyasagar University campus.
- Women's Studies Centre, Vidyasagar University took an active part in organizing a Two-day UGC- sponsored National Seminar on the topic 'Education, marriage and bridal industry' on and from 19th-20th January, 2012 at Midnapore college .
- **National Seminar:** Women's Studies Centre, VU organized a **UGC sponsored National Seminar-cum-Legal literacy programme on 'Access to justice for women- issues and perspectives'** for the female students on 15th March, 2013 at Vidyasagar University in Collaboration with Midnapore College and Raja N L Khan Womens' College, Midnapore to celebrate the of Women's Day.

c) Documentation programme

- Women's Studies Centre, VU organized a **'Documentation programme on Female Docra Artisan'** on 9th March, 2013 at Bikna, Bankura.

(ii) Sexual harassment cell: The sexual harassment committee of the university is already functioning from the time when the UGC issued the UGC guide lines. Recently, on 17-04-13 it was reconstituted legally as per the Vishakha guide lines.

The following is the eight member reconstituted Cell:

- a) Dean, Students Welfare (Convener),

- b) One woman member, PG Faculty,
- c) One male member PG Faculty,
- d) One woman member, from NGO,
- e) One woman member from Class III and Class IV staff.
- f) One woman member from Research Scholars
- g) One woman member from PG students

Six cases of sexual harassment have been reported during the assessment period . All have been duly examined and settled.

(iii) Anti ragging committee:

There is an anti ragging committee working at the university level. The committee consists of the following seven members:

- a) Dean, Students Welfare (Nodal officer and convener)
- b) Dean, Science Faculty,
- c) Dean, Arts and Commerce Faculty,
- d) Secretary, P.G. Faculty Council,
- e) Secretary, U.G. Faculty Council,
- f) Inspector of Colleges
- g) Assistant Registrar

Display Boards are kept at prominent places within the campus to apprise the students of all relevant information for lodging ragging related complaints. The phone numbers of the competent authorities are displayed prominently on the display boards.

Only 13 (thirteen) cases related to ragging were reported at university level and the authorities quickly swung into action to effectively control them at initial stage, issuing strict warning to prevent their recurrence. University follows the policy of zero tolerance to ragging not only on its campus but also in its affiliated institutions

5.1.17 eliciting the cooperation of all stakeholders to ensure the overall development of its students

Overall development of students

The University ensures the overall development of its students by fostering a spirit of kinship amongst its employees, students and guardians. To promote the spirit of attachment in all its stakeholders, the University takes various steps from time to time, like, encouragement towards the employees to involve themselves in cultural and sporting activities, felicitating wards of the employees for their performance in examinations, ensuring the guardians' presence at the counseling sessions of the students seeking admission, promoting interaction between the University community, especially the residents of the campus, and the wider body of students and their guardians, promoting the university website as an interface between the wider society and the institution.

To bring the students into contact with major global and national issues the administration encourages formation of societies and clubs for debate, films and music. The faculty members and students of the departments organize cultural programmes to felicitate newcomers, old students and the teaching community. Skills related to group activities and team-work, management are fostered in the course of the students' active participation in seminars held at the departments and various cultural events.

5.1.18 Participation of women students in intra-and inter-institutional sports competitions and cultural activities

Participation of women students in sports/cultural activities

Women are encouraged to participate in all sports and cultural activities. They are given special attention and consideration, with the motivational support of women faculty members. Sports and cultural activities are regularly organized by the University. Equal opportunities are given to the male and female students. When a female student is selected to represent the University a woman teacher accompanies the team.

The university provides special training facilities for the university team for each game, including athletics. A gymnasium for women, with state-of-the-art equipment and a qualified trainer, is also available. The university has a Sports Officer and a committee who are responsible for overall planning, supervision and execution of all sports-related matters.

Details of the sports and cultural activities organized by the University are summarized below:

A. Sports

- Female as well as male students actively play outdoor games, including volleyball, basketball, kho kho and kabadi.
- Every year the university conducts Inter-College and Intra-University Athletic meet, where female students also participate.
- Female students, along with their male counterparts, participate in events such as Kho-Kho, Kabadi and Yoga in the Inter-College and Intra-University tournaments conducted by the university every year.

Table 5.6: Schedule of intercollegiate sports events organized during the last four years

Events	2012-2013	2011-2012	2010-2011	2009-2010
Kho-kho(for women)	19 th sep 2012	8 th 2011	2 nd sep 2010	12 th Nov 2009
Kabaddi (for women)	12 th ,13 th Feb 2013	16 th Nov 2011	9 th Dec 2010	–
Athletic (for women and men)	9 th ,10 th Jan 2013	8 th ,9 th Dec 2011	22 nd , 23 rd Dec 2010	10 th , 11 th Feb 2009
Chess (for women and men)	19 th Feb 2013	15 th April 2011	5 th April 2011	–

Table: 5.7: Number of women participants in different sports event

Year	Inter university		yoga	All India		khoKho
	Kho Kho	Athletic		Athletic	Yoga	
2010-11	12	-	-	04	--	12
2011-12	12	--	-	05	--	-
2012-13	--	04	-	04	07	-

B. Cultural events/ activities

- Every year the university conducts Inter-College and Intra-University Competitions in cultural events like music, dance, debate etc.
- Every year, on the basis of the results of these competitions, a University Cultural Team, including female participants, is formed which participates in different levels of competitions, i.e., Indian East Zone Competition, National Level Competition, SAARC Festival, etc.
- Every year the female students in the University Cultural team excel in these competitions in the categories of music (vocal), dance and debate.
- The University Cultural team represented India in the SAARC Country Festival in 2010 and 2012 in the category of Music (vocal) and Dance.
- The University Cultural team was the champion in the Indian East Zone Competition in the category of Music (vocal) and Dance during 2008 – 2009 and 2012 – 2013.
- The University Cultural team gets invitation to perform in different Indian universities on the basis of recommendation by AIU.
- The university provides special trainings to the cultural team members, including female members, and provides them with all sorts of requisite musical instruments and sound systems for training purposes.
- To promote the interest of students and staff in different forms of cultural events, and also for the purpose of recreation, the university has formed a Movie Club, a Music Club and a Drama Club to organize film shows and programmes on music and drama on the campus. Female students are encouraged to participate actively in such activities.

5.2 Student Progression:**5.2.1 Student strength of the university for the current academic year / Programme-wise data and provide the trends for the last four years**

Given that the students are the key factor of an educational institution, the rise in the student-strength is an indicator of the future growth of an educational institution.

The university provides scope for higher studies to its students After completion of postgraduate courses the students may go for M.Phil or Ph.D. courses, designed according to the UGC guideline. At present the M.Phil. course is being run only in the department of Political Science. The following charts reflect the upward trend in the intake of students at UG and PG levels as well as the progression of students from the Masters to the M Phil and Ph D levels.

Table 5.8: Current students' strength PG courses (2013-14)

Faculty	Total	Male	% of Total	Female	% of total
Science	1429	858	60.04%	571	39.96%
Arts and Commerce	2008	1076	53.58%	932	46.41%
Total	3437	1934	56.27%	1503	43.72%

The following charts show student strength in PG and UG courses in last five years

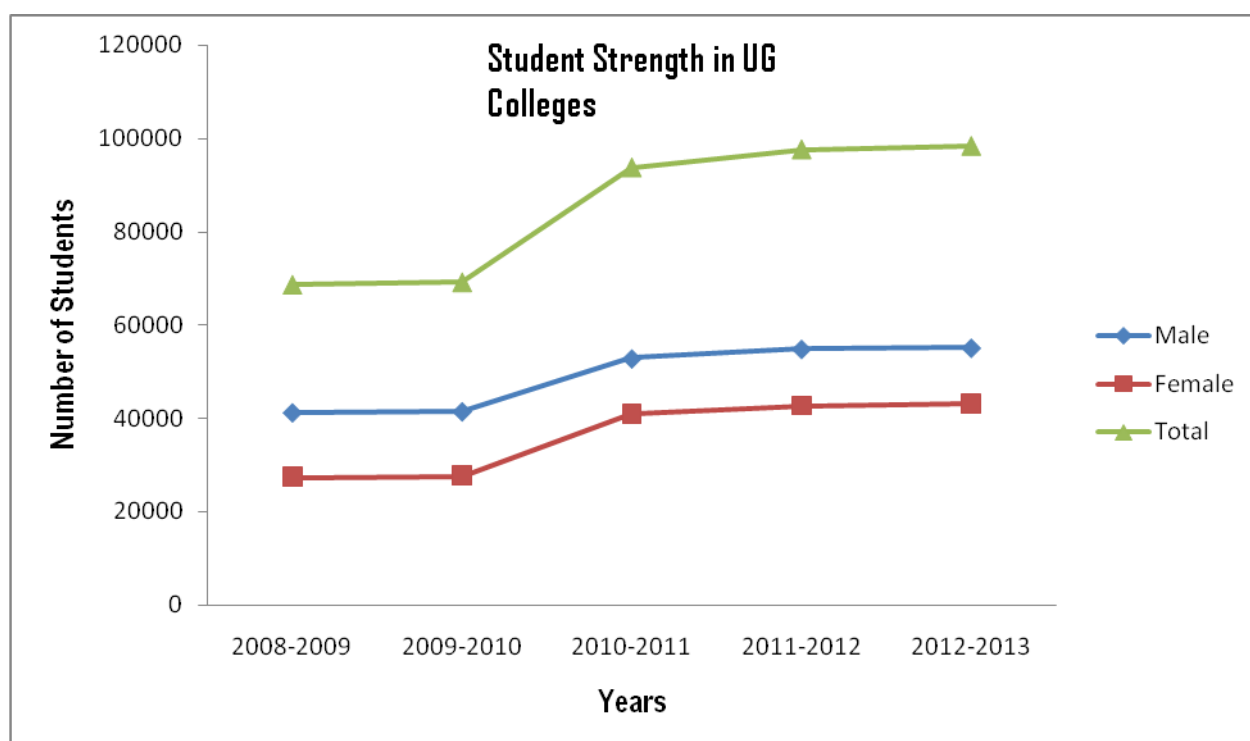
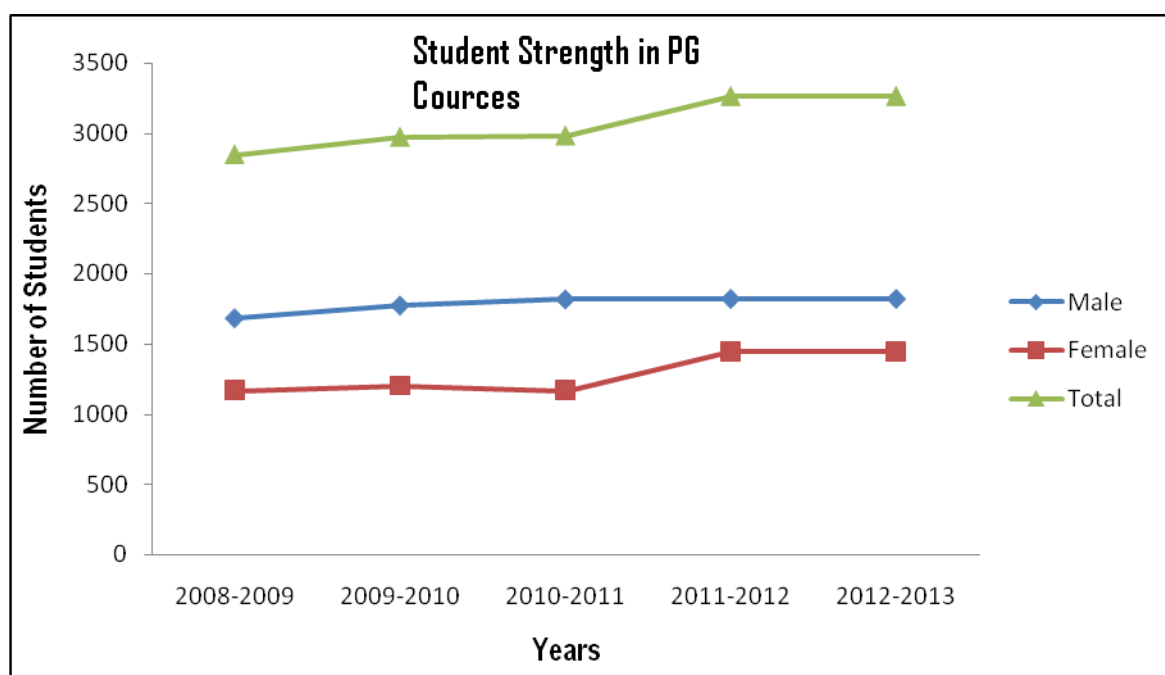
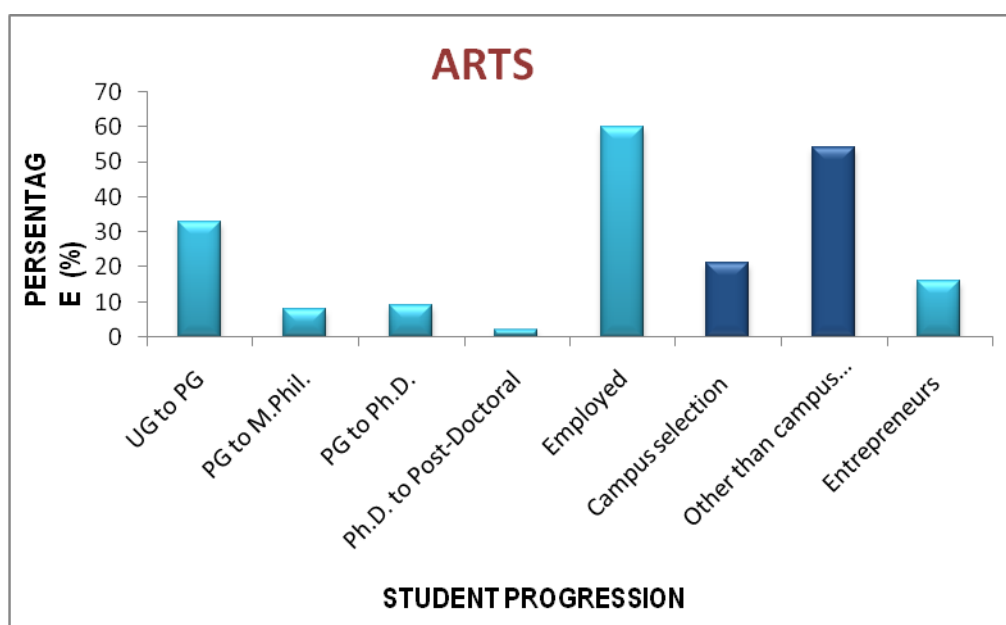
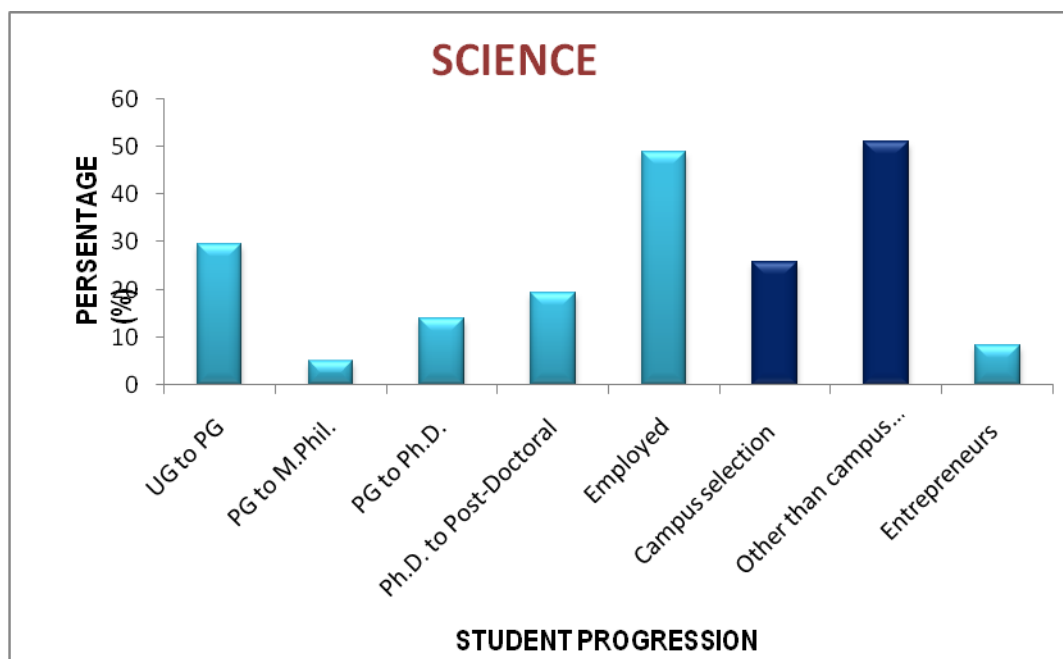


Table 5.9: Students strength of Postgraduate courses in UG Colleges :

Year	Male	Female	Total
2009-2010	256	198	454
2010-2011	306	214	520
2011-2012	302	212	514
2012-2013	304	210	514

The following charts show the students' progression for different courses in Science and Arts & Commerce faculties



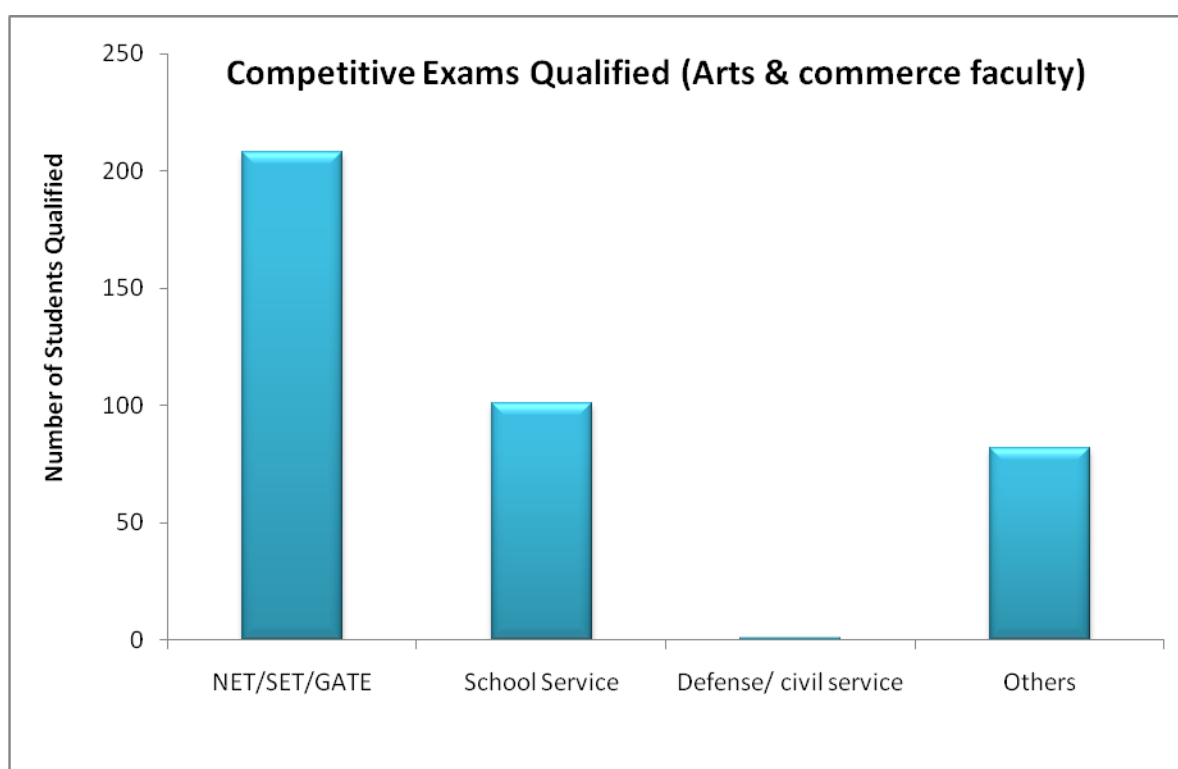
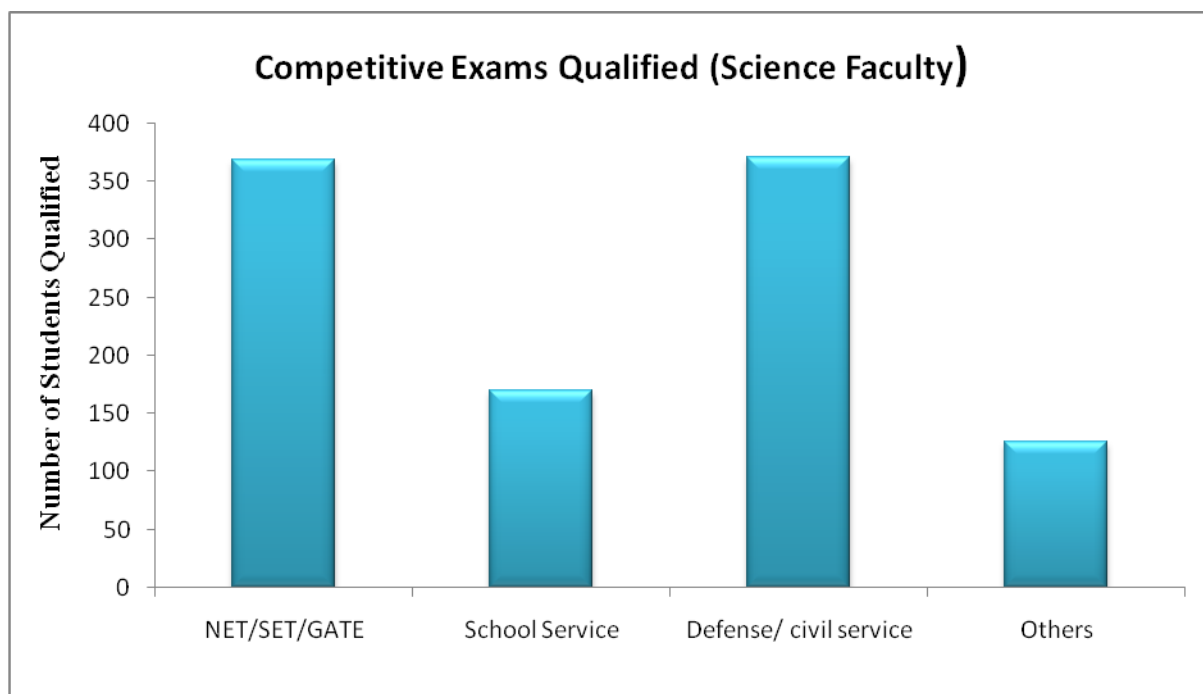
5.2.2 Programme-wise completion rate during the time span stipulated by the university

Table 5.10: Completion ratio of PG and UG courses in last five years

Year	PG			UG		
	Enrolled	passed	Completion Ratio	Enrolled	passed	Completion Ratio
2009	1840	1812	0.98	17180	14969	0.87
2010	1757	1735	0.99	18255	17209	0.94
2011	1783	1769	0.99	18598	17440	0.94
2012	1959	1949	0.99	22630	21264	0.94
2013	1936	1893	0.98	22549	21376	0.95

5.2.3 Number and percentage of students who appeared/qualified in examinations like UGC-CSIR-NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central / State services, Defense, Civil Services, etc.

As the students qualifying from this university apply for NET/SET and other competitive examinations on their own, the university has no means of recording the exact number of students taking these examinations. The Office of the Dean, Students' Welfare, however, maintains the record of students clearing different competitive examinations. The following charts give an over-all picture of the success-rate of the students from different academic departments of this university.



5.2.4 Provide category-wise details regarding the number of Ph.D./D.Litt./D.Sc. theses submitted/ accepted/ resubmitted/ rejected in the last four years.

The following table shows the year-wise data of Ph. D.

Table 5.11: Number of thesis submitted, accepted, resubmitted and rejected in last four years

Year	Thesis Submitted	Thesis Accepted (the figure includes theses submitted in the previous year)	Thesis resubmitted	Thesis Rejected
2009-10	41	37	01	Nil
2010-11	39	38	01	Nil
2011-12	34	30	02	Nil
2012-13	68	44	04	Nil

5.3 Student Participation and Activities

5.3.1 Sports, cultural and extracurricular activities available to students

Sport:

The Sports –section of Vidyasagar University organizes inter -college tournament every year and holds inter university tournaments from time to time. Both boys and girls participate in the events. Some of the events are specially organized for women. The details of the events organized by the university are given below:

Table 5.12: List of inter -university sports events in last four years

Details of Inter University Tournament– 2012-13	
1) Inter – varsity Football	1.a) Coco- Cola Elliot Challenge Shield – 2012
<ul style="list-style-type: none"> Organized by University of Burdwan Date : 24th to 31st November 2012 No of participants : 19 	<ul style="list-style-type: none"> Organized by : I.F.A Date : 13th October 2012 to 15th October 2012 No of participants : 20
b) Vidyasagar Trophy	2. Inter – varsity Kho- Kho (Men)
<ul style="list-style-type: none"> Date : 7th to 10th September' 2012 No of participants : 20 	<ul style="list-style-type: none"> Organized by : Dean Dayal Upadhyay Gorakpur University, Gorakhpur Date : 8th to 11th January 2013 No of participants : 12
3. Inter – varsity Yoga Competition	4. Inter – varsity Cricket
<ul style="list-style-type: none"> Organized by : Maharaja Krishna kumar sinhji Bhavnagar University Date : 11th to 14th March 2013 No of participants : 13 	<ul style="list-style-type: none"> Organized by : Calcutta University Date : 7th to 15th December 2013 No of participants : 16
5. All India Athletic Meet	

<ul style="list-style-type: none"> Organized by : University of Kalyani Date : 21st to 26th January 2013 No of participants: 10 	
Details of the Inter University Tournaments in the Year 2011-12	
1. Inter – university Football	1.a) Coco- Cola Elliot Challenge Shield – 2011
<ul style="list-style-type: none"> Organized by : Sambalpur University Date : 19th to 23rd September 2011 No of participants : 18 	<ul style="list-style-type: none"> Organized by : I.F.A Date : 3rd to 13rd March 2011 No of participants : 20
2. Inter – university Kho- Kho (Women)	3. Inter – university Kho- Kho (Men)
<ul style="list-style-type: none"> Organized by : Guru Ghasidas Viswavidyalaya , Bilaspur Date : 28th & 1st October 2011 No of participants : 12 	<ul style="list-style-type: none"> Organized by : Dean Dayal Upadhyay Gorakpur University ,, Gorakpur Date : 8th to 11th January 2013 No. of participants : 12
4. . Inter – university Volleyball	5. Inter – university Cricket
<ul style="list-style-type: none"> Organized by : Chitrakut University Date : 6th to 12th November 2011 No. of participants : 12 	<ul style="list-style-type: none"> Organized by : Banaras Hindu University Date : 21st to 31st December 2011 No. of participants: 16
6. All India Athletic Meet	
<ul style="list-style-type: none"> Organized by : Rajib Gandhi University of health Science. Karnataka Date : 17th to 21st December 2011 No. of participant: 08 	
The Details of the Inter University Tournament in the Year of 2010-11	
1. Inter – university Football	1.a) Coco- Cola Elliot Challenge Shield – 2011
<ul style="list-style-type: none"> Organized by : BIT Mesra, Ranchi Date : 25th to 30rd September 2010 No of participants : 16 	<ul style="list-style-type: none"> Organized by : I.F.A Date : 3rd to 13rd March 2011 No of participants : 16
2. Inter – university Kho- Kho (Women)	3. Inter – university Kho- Kho (Men)
<ul style="list-style-type: none"> Organized by : Vidyasagar University Date : 20th & 25th September 2010 No of participants : 12 	<ul style="list-style-type: none"> Organized by : Pt. Rabi Sankar Sukla University , Raipur Date : 25th & 30th September 2010 No of participants : 12
4. . Inter – university Volleyball	5. Inter – university Cricket
<ul style="list-style-type: none"> Organized by : Vinoda Vabha University Date : 6th to 11th January 2010 No of participants : 12 	<ul style="list-style-type: none"> Organized by : Ravanshaw University Date : 21st to 31st December 2011 No of participants : 16
6. All India Athletic Meet	

<ul style="list-style-type: none"> Organized by : Acharya Nabarjuna University Date : 28th to 3rd January 2010 No of participants : 08 	
The Detailst of the Inter University Tournament in the Year of 2009	
1. Inter-varsity Football	2. Inter-varsity Cricket
<ul style="list-style-type: none"> Organised by: Burdwan University Date: 2^{0th} to 3^{0th} November 2009 No. of participant : 18 	<ul style="list-style-type: none"> Organised by: Burdwan University Date: 25th to 30th December 2009 No. of participant : 16
<u>Details of Inter University Tournament– 2012-13</u>	
1) Inter – varsity Football	1 a) Coco-Cola Elliot Challenge Shield – 2012
<ul style="list-style-type: none"> Organized by University of Burdwan Date : 24th to 31st November 2012 No of participants : 19 	<ul style="list-style-type: none"> Organized by : I.F.A Date : 13th to 15th October 2012 No of participants : 20
b) Vidyasagar Trophy	2. Inter – varsity Kho- Kho (Men)
<ul style="list-style-type: none"> Venue : Markardaha Stadium, Hawrah Date : 7th to 10th September 2012 No of participants : 20 	<ul style="list-style-type: none"> Organized by : Dean Dayal Upadhay Gorakpur University Date : 8th to 11th January 2013 No of participants : 12
3. Inter – varsity Yoga Competition	4. Inter – varsity Cricket
<ul style="list-style-type: none"> Organized by : Maharaja Krishna kumar sinhji Bhavnagar University Date : 11th to 14th March 2013 No of participants : 13 	<ul style="list-style-type: none"> Organized by : Calcutta University Venue : Kolkata Date : 7th to 15th December 2013 No of participants : 16
5. All India Athletic Meet	
<ul style="list-style-type: none"> Organized by : University of Kalyani Date : 21st to 26th January 2013 No of participants: 10 	
<u>Details of the Inter University Tournaments in the Year 2011-12</u>	
2. Inter – university Football	1.a) Coco- Cola Elliot Challenge Shield – 2011
<ul style="list-style-type: none"> Organized by : University of Sambalpur University Date : 19th to 23rd September 2011 No of participants : 18 	<ul style="list-style-type: none"> Organized by : I.F.A Date : 3rd to 13rd March 2011 No of participants : 20
2. Inter – university Kho- Kho (Women)	3. Inter – university Kho- Kho (Men)
<ul style="list-style-type: none"> Organized by : Guru Ghasidas Viswavidyalaya , Bilaspur Date : 28th September & 1st October 2011 No of participants : 12 	<ul style="list-style-type: none"> Organized by : Dean Dayal Upadhay Gorakpur University Date : 8th to 11th January 2013 No. of participants : 12
4. Inter – university Volleyball	5. Inter – university Cricket

<ul style="list-style-type: none"> Organized by : Chitrakut University Date : 6th to 12th November 2011 No. of participants : 12 	<ul style="list-style-type: none"> Organized by : Banaras Hindu University Date : 21st to 31st December 2011 No. of participants: 16
6. All India Athletic Meet	
<ul style="list-style-type: none"> Organized by : Rajib Gandhi University of health Science . Karnataka Date : 17th to 21st December 2011 No. of participant: 08 	
The Details of the Inter University Tournament in the Year of 2010-11	
1. Inter – university Football	1.a) Coco- Cola Elliot Challenge Shield – 2011
<ul style="list-style-type: none"> Organized by : BIT Mesra Date : 25th to 30rd September 2010 No of participants : 16 	<ul style="list-style-type: none"> Organized by : I.F.A Date : 3rd h to 13rd March 20211 No of participants : 16
2. Inter – university Kho- Kho (Women)	3. Inter – university Kho- Kho (Men)
<ul style="list-style-type: none"> Organized by : Vidyasagar University Date : 20th & 25th September 2010 No of participants : 12 	<ul style="list-style-type: none"> Organized by : Pt. Rabi Sankar Sukla University Date : 25th & 30th September 2010 No of participants : 12
4. Inter – university Volleyball	5. Inter – university Cricket
<ul style="list-style-type: none"> Organized by : Vinoda Vabha University Date : 6th J to 11th January 2010 No of participants : 12 	<ul style="list-style-type: none"> Organized by : Ravanshaw University Date : 21st to 31st December 2011 No of participants : 16
6. All India Athletic Meet	
<ul style="list-style-type: none"> Organized by: Acharya Nabarjuna Univ. Date : 28th 3rd January 2010 No of participants : 08 	
The details of the Inter-University Tournament in the Year of 2009	
1) Inter-varsity Football	2) Inter-varsity Cricket
<ul style="list-style-type: none"> Organised by: Burdwan University Date: 20th 2009 to 30th November 2009 No. of participant : 18 	<ul style="list-style-type: none"> Organised by: Burdwan University Date: 25 to 30 December 2009 No. of participant : 16

Table 5.13: Year wise participation of VU students in different sports events

Year	Number of Students
2009	312
2010	375
2011	410
2012	400
2013	440

Cultural activities

Vidyasagar University has a vibrant cultural environment. It regularly organizes cultural events to ensure the students' involvement. The students have visited different university campuses at different points of time to participate in zonal and national Inter-University Youth festivals. The university has been maintaining an impressive track record in this regard. Given below is a list of events and participants of the last few years. It is a matter of pride for the university that it was given an opportunity to host All India and inter-varsity Youth National Festival on its campus in 2008-09 academic session. Every year, generally in the month of September, the office of the Dean Students' welfare organizes inter-college cultural competition covering a total of 19 cultural events.

Table 5.14: Student of Vidyasagar University participate in the following cultural events

1. Classical vocal	2. Light vocal
3. Group song (Indian)	4. Percussion
5. Non-percussion	6. Classical dance
7. Folk dance	8. Quiz
9. Elocution	10. Debate
11. Mimicry	12. On- the -spot -painting
13. Collage	14. Poster making
15. Clay modeling	16. Cartooning
17. Rangoli	18. One –act- Play
19. Skits	20. Installation
21. Mime	

Table 5.15: Number of cultural events conducted by the university during last five years

Description	2008-09	2009-10	2010-11	2011-12	2012-13
Number of cultural events conducted by the institute for the students	18	20	18	20	21

Table 5.16: Students participating in different cultural competitions

Name of the competition	2008-09	2009-10	2010-11	2011-12	2012-13
Intercollegiate competition	400	450	500	520	550
East zone competition	40	40	40	40	40

The university became champion in the East Zone Youth Festival 2012-13 organized by Ranchi University.

Extra Curricular Activities:

NSS:

The university has a National Service Scheme (NSS) cell that has 13500 (both university and college level) volunteers. 1100 volunteers, belonging to the university, work through the platform of NSS to perform extracurricular activities. Each and every unit has an adopted village, where the students work to gain direct experience of the locality.

The programmes usually undertaken by NSS units are tree-plantation both in the academic and residential campus, blood donation camps, participation in National Integration camp and adventure camps, Sarva Siksha Aviyaan, construction of road-side sheds, repairing of village roads, health check up camps and distribution of medicines, blood group testing, AIDS Awareness programme, Thalasaemia detection and awareness camp, yoga meditation camp, street drama against dowry system, literacy programmes, health awareness, First Aid training, swimming competition, pulse-polio immunization campaign etc, dissemination of Basic Scientific knowledge and awareness of environmental pollution.

Table 5.17: Number of NSS Volunteers who participated in different programems:

<i>Sl.no.</i>	Programmes	Number of participants	<i>Name of the Institution</i>
1	Summer Adventure Camp at Patnitop (J & K) from 8-17th June 2011.	5 (Male)	<i>Vidyasagar University</i>
		5 (Female)	<i>Mahishadal Girls' College</i>
2	Winter Adventure Camp at Narkonda (Himachal Pradesh) on 21.01.2012 to 30.01.2012.	5 (Male)	<i>Rabindra Satabarshik Mahavidyalaya, Ghatal; SBSS Mahavidyalaya, Goaltore; Vivekananda Satabarshiki Mahavidyalaya, Manikpara.</i>
		4 (Female)	<i>Rabindra Satabarshik Mahavidyalaya, Ghatal; SBSS Mahavidyalaya, Goaltore.</i>
3	Summer AdventureCamp at Uttarkashi held between 29th June to 8th July, 2012.	7 (Male)	<i>Dept. of Philosophy Vidyasagar University; Dept. of Geography & Environment</i>
		7 (Female)	<i>Management, Vidyasagar University</i>

<i>Sl.No.</i>	Programmes	Number of participants	<i>Name of the Institution</i>
4	Youth to the Edge Adventure Camps in North Eastern Region, 2012 For First Batch from 7 – 15 March 2012 AT Arunachal Pradesh	2 (Male)	<i>Vidyasagar University</i>
		2 (Female)	<i>Vidyasagar University</i>

5	Deputation of NSS Volunteers for Youth to the Edge Adventure Camps in North Eastern Region, 2012 For Second Batch from 14 – 22 March 2012 At Nagaland	3 (Male)	Vidyasagar University
		3 (Female)	Vidyasagar University
6	NSS Mega Summer Camp at Junnar (District-Pune) 18 and 29 June, 2011.	2 (Male)	V. S. Mahavidyalaya, Manikpara, Vidyasagar University
		2 (Female)	V. S. Mahavidyalaya, Manikpara, Vidyasagar University
Sl.No.	Programmes	Number of participants	Name of the Institution
7	Adventure Programme at Manali [11.01.2013 to 20.01.2013]	15 (Male)	Haldia Government College; Debra Thana SKS Mahavidyalaya; Khejuri College; NSS Unit-IV, Vidyasagar University; NSS Unit-VII, Vidyasagar University
		15 (Female)	
8	Youth Festival at Ludhiana, Punjab – 2013	1 (Female)	Mahishadal Girls' College
9	Pre Republic Day Parade at Kolkata	3 (Male)	Haldia Govt. College; Ghatal R. S. Mahavidyalaya; Jhargram Raj College;
		6 (Female)	Haldia Govt. College; Ghatal R. S. Mahavidyalaya; Jhargram Raj College.
10	Republic Day Parade – 2012 at New Delhi	1 (male)	SBSS Mahavidyalaya, Goaltore
11	Republic Day Parade – 2013 at New Delhi	1 (male)	Haldia Government College

Vidyasagar University Research Scholar Association (VURSA) arranged the following co-curricular / extracurricular activities:

Training Programme:

St. Jones Ambulance Association; First Aid training programme: February 2nd week to 3rd week of March-2009.

Awareness Programmes:

- Plastic Free Campus (VU Campus) Programme every year.
- Voluntary Blood Donation and Thalassemia Camp: 19th February, 2014.
- Maintenance of one Garden on VU Campus in collaboration with the NSS unit of the university.

Other Annual Programmes:

- World AIDS day: 1st December.
- Rakhi Bandhan Utsav.
- National Service Day: 28th February.
- Teacher's Day: 5th September.
- Hiroshima and Nagasaki Day: 7th August.

5.3.2 Achievements of students in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. during the last four years

Prizes achieved in cultural events in All India Inter University Youth Festivals (East zone)

East zone	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Classical Vocal	2	2	1	2	x
Light Vocal	2	2	1	2	2
Group song (Indian)	2	2	2	1	2
Percussion	1	1	-	-	-
Non-percussion	1	1	-	-	-
Classical Dance	2	2		1	2
Folk Dance	2	1	-	-	1
Quiz	-	-	-	-	1
Elocution	1	2	-	2	2
Debate	1	-	1	2	1
Mimicry	-	-	1	-	1
On- the -spot - Painting	1	2	1	-	1
Collage	-	-	-	1	-
Poster -making	1	2	-	-	-
Clay-modeling	-	-	1	1	2
Cartooning	-	2	1	-	-
Rangoli	-	-	-	1	1
One -Act Play	-	-	-	-	1
Skits	2	2	-	1	1
Mimicry	-	-	-	1	1
Installation	-	-	2	1	1
Mime	1	-	-	-	1

Vidyasagar University was declared champion in the East Zone Youth Festival 2012-13 organized by Ranchi University.

5.3.3 Special drives / campaigns to promote heritage consciousness in students

The university conducts special drives and campaigns students to promote heritage consciousness through the NSS units.

The district of Midnapore is dotted with heritage-sites, associated mainly with the country's struggle for Independence. Besides the birth-places of renowned freedom-fighters like Matangini Hazra, Kshudiram Bose and others, there are places associated with some of the important landmarks of that struggle. There are also important archeological sites of great antiquity. The academic departments arrange tours of these places to foster heritage consciousness in their students. The department of History takes specific programmes to develop the Heritage consciousness among the students.

Particularly with this purpose in mind, the university authorities have taken a drive to name the buildings on the campus after the illustrious sons and daughters of this district.

5.3.4 Encouragement to students to publish catalogues, wall magazines, college magazine, and other similar material

The university provides funds to the Students' Union to facilitate their multifarious activities that include publication of an annual literary journal (*Chhar-Patra*). The students contribute articles and take an active part in editing the journal. Most of the academic departments publish wall magazines, prepared by the students and supervised by the teachers. The university has provision for giving awards to the wall-magazine adjudged best in the annual interdepartmental competition.

Some departments like the Department of English have published print-journals. (*May Fair*) Though published sporadically, such journals enable the students to learn the niity-gritty of editing a journal.

5.3.5 Students' council / organization

There is a student organization at university level named "CHHATRA SANSAD". The constitution, activities and funding of the student council are as follows:

Constitution of the Students Union

The aim of constituting a Students' Union for the university students is to help forge a fraternal relationship among the students, to inculcate a scientific approach, to involve them in work with developmental trends so that they can perform their responsibilities and duties and contribute to a healthy cultural atmosphere

Article 1: Name of the Students' Union –Vidyasagar University Bishwabidyalaya Chatra Sansad

Article 2: The office of the students Union should be located within the premise of the University.

Article 3: To fulfill the ideal of the preamble the students' Union will

- a) Organize different cultural programmes for the advancement of knowledge.
- b) Publish annual magazines, wall magazines and other journals .
- c) Organize reading rooms equipped with text books.
- d) Organize sports programmes.
- e) Establish friendly relationship among students for the development of education, culture and civilization.

- f) Work for the interest of the students.
- g) Help the students who are in financial need.
- h) Organize programmes inculcating the spirit of the constitution.

Composition

Article: 4 – The duration of the central council of the Students’ Union will be one academic year.

Article 5. - Chief Patron: The Vice Chancellor of the University

- All Students whose names are included in the attendance registrar are members of the students’ Union
- A student who leaves the university will no longer be a member of Students’ Union.
- Every member is entitled to become a class representative or elect class representatives, (One person per twenty five students)
- The central council of the Students’ Union will be freshly elected at the start of each academic year. In the last meeting of the council the president with consultation with the secretary will announce the date and time of election, and the constituent members of the election committee.
- The central council will elect from the class representatives an executive committee consisting of
 - a) President b) Vice-president c) General Secretary d) Assistant secretary e) Literary Secretary f) Cultural Secretary g) Assistant cultural Secretary h) Sports Secretary i) Assistant Sports secretary j) Student welfare Secretary k) Assistant Student Welfare Secretary l) Secretary in charge of Lady Students’ Common Room m) Assistant Secretary in charge of Lady Students’ Common Room. n). Students’ Common Room Secretary o). Students’ Common Room Assistant Secretary p) Office Secretary q) Treasurer r) Auditor.

The central Council should meet at least five times within its time limit, and a notice for the meeting should be served at least three days before the meeting.

An emergency meeting may be convened on a twenty four hours’ notice.

The Chhatra Sansad is funded by the University. The present budget is 3.5 lakhs Rupees. Since its office bearers are elected every year they are aware of their accountability.

There activities include holding of Freshers’ Welcome, Students awareness programmes, organization of Blood donation camp, vigilance over implementation of students’ rights and privileges, and raising the student related demands from time to time

5.3.6 Academic and administrative bodies that have student representatives on them

From 2008 to 2010 there was provision for students’ representations in the Faculty Council, Executive Council and the Court. The student members on the above University level bodies used to raise their voices on the subjects of their concern. This provision has been discontinued now in compliance with the new amendment in the University Acts and Statutes.

CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

Vidyasagar University was conceived as a non-traditional institution of higher education in the erstwhile undivided Medinipur district of the West Bengal state in India. The university was named after the nineteenth century social reformer and educationist who was also dedicated to the cause of the upliftment of women, Pandit Iswar Chandra Vidyasagar. Continuing with the zeal of spreading education by the son of the soil, Pandit Iswar Chandra Vidyasagar, Vidyasagar University has committed itself to the goal of teaching and learning in higher education, ensuring quality education and providing research and extracurricular activities in the best possible manner in order to spread the benefit of higher education in a location which is relatively backward but which has a glorious history. In the Vidyasagar University Act of 1981, it is stated that the “University shall have the power to make such academic studies as may contribute to the improvement of economic conditions and welfare of the people in general and the tribal people in particular.”

The motto of the University is enshrined in the three Bengali words at the bottom of the emblem **“Education, Knowledge and Progress”**.

Education, is the route to advancement of knowledge and prepares the mind to entertain new thoughts and ignites the thinking process. It is the manifestation of the perfection already in man-a key resource for the advancement of qualities in the human being and the society. Developing an ideal education system befitting the need of the region is one of the mottos of the University

Knowledge, refers to the manifold path towards the discovery of truth and liberates the individual and makes him whole and complete. Truth manifests itself in a life of wholeness and integrity. Creation and dissemination of knowledge through continuous research and learning process is one of the mottos of the University.

Progress of the human being and for that matter the society is intricately connected to the spread of education and acquiring knowledge with other traits. All round progress is the key to better living standard and prosperity of the human being and the society

6.1.1 Vision and the mission of the University

The motto of the University as set out by the founding members led by Prof. A. K. Gayen and the objectives set out in the act have been the guiding principles behind the vision and the mission of the University.

Vision:

Vidyasagar University aspires to become a University par excellence and to maintain the standard comparable to the best international Universities by tapping human potential from all sections of the society and educate young students to get perfection in the traits present in them. The university strives to train its students so that they can contribute to knowledge creation, capable of being leaders in their respective fields and contribute adequately to the development of human civilization.

Mission:

- i. To undertake academic planning of the University in conformity with the Vidyasagar University act with an aim to improve the economic condition of the region and offer courses which should be nontraditional and have the potential to garner employment.
- ii. To build human resource with strong character and competence, having the strength to face the challenges of the changing realities both in global and local levels and to adapt to the fast evolving technologies.
- iii. To promote an all round development of its students with a proper blending of knowledge and wisdom acquiring adequate skill in his own subject or trade or vocation through teaching learning process and human qualities like compassion, a sense of social responsibility and commitment and ethical sense (honesty), tolerance and empathy through various social, cultural, sports and ethical value addition programs.
- iv. To strive for the creation and dissemination of knowledge through continuous research and learning process and to build a worldwide-network of knowledge sharing through exchange programmes with other Indian Universities, Foreign Universities and Research organizations
- v. To encourage teachers to adopt modern method of teaching with effective use of information technology, modern equipments and to share latest information to keep the students abreast with recent developments in the subject. In conformity with the world wide trend of shifting from teaching to learning process, faculty is encouraged to engage in innovative interactive method of learning.
- vi. To strive for academic excellence
- vii. To strengthen student support system
- viii. To make efforts for resource mobilization, increasing physical infrastructure and make available modern equipments for training and research
- ix. To provide a clean and efficient administration that evolves from the need of University. To adopt flexible rules that encourages creativity and is more responsive. To maintain transparency in every sphere of administration and shift to e-governance
- x. To undertake outreach programmes in the operational locality of the University for contributing to the improvement of economic conditions and welfare of the local populace in general and the tribal people in particular and to provide academic consultancy wherever necessary.

- xi. To inculcate the qualities like truthfulness, integrity, dedication among all the stake holders and to develop an organizational culture, so that every member, students, teachers, employees, administrative officers feel proud to be associated with the University- a key component for organizational success.

6.1.2 The institution's distinctive characteristics in terms of addressing needs of the society and the students

The mission statement define the institution's distinctive characteristics in terms of addressing needs of the society, the students it seeks to serve, the institutes tradition and value orientations, its vision for the future, etc.

- (a) The two distinct characteristics of the University as stated in the act are
 - (i) to develop as a non-traditional institution of higher education
 - (ii) to make such academic studies as may contribute to the improvement of economic conditions and welfare of the people in general and the tribal people in particular

Both these characteristics were incorporated in the mission statement and is a guiding principle in planning the activities of the University.

- (b) The mission statement defines the need of the students as stated above. The University has emphasized the educational needs of the social and weaker sections of the rural society. It also imparts current scientific knowledge to the students thereby enabling them to apply their technical skills for enhancing their livelihoods and national resources. It is also aimed to prepare the students to face the challenges in the global context and to promote entrepreneurial skills among the students.

Keeping the motto in sight, a vision document Vision 2025- Vidyasagar University is under preparation for adoption by the competent authority in 2014, detailing the programs to be undertaken in the next ten years (2015-2024) with clearly set the targets to achieve the mission and the goals of the University and to participate in the global ranking system.

6.1.3 Involvement of the leadership

*** In ensuring the organizations management system development, implementation and continuous improvement**

The Vice Chancellor is the natural leader of the University in both academic and administrative arenas. In the academic field the Vice chancellor is assisted by the Deans of the two faculties and Heads of the post graduate academic departments.

The Vice-Chancellor shall be the principal executive and academic officer of the University and shall, in, the absence of the Chancellor, preside at the meetings of the Court. He shall, by virtue of his office, be a member and the Chairman of the Executive Council and the Faculty Councils for Post graduate Studies and also the Chairman of any other authority or body of the University of which he may be a member. He shall also be entitled to be present at and to address any meeting of any other authority or body of the University of which he may not be a member, but shall not be entitled to vote threat.

The Vice-Chancellor shall have the power to convene meetings of the Court, the Executive Council, the Faculty Councils for Post-graduate Studies, the Councils for Under-graduate Studies and of any other authority or body of the University.

It shall be the duty of the Vice-Chancellor to ensure that the provisions of this Act and the Statutes, the

Ordinances and the Regulations are faithfully observed, and to take such action as may be necessary for this purpose.

The Vice-Chancellor shall have the power to exercise general control and supervision over all other officers of the University and over all teachers and employees of the University and generally over all the affairs of the University.

The Vice-Chancellor shall exercise such other powers and discharge such other duties as may be delegated to him by any authority or body of the University or as may be prescribed by the Statutes, Ordinances or Regulations.

The Vice-Chancellor may take on behalf of the University such action as he may deem expedient in any matter which, in his opinion, is either urgent or of an emergent nature and shall report the same for confirmation at the next meeting of the authority or body, which in the ordinary course, would have dealt with the matter; provided that if the action taken by the Vice-Chancellor is not approved by the authority or body concerned, or if there is no such authority or body constituted under this Act, the matter shall immediately be referred to the Chancellor whose decision thereon shall be final.

The Vice-Chancellor may, with the approval of the Executive Council, at any time delegate any of his powers other than the powers referred to in sub-section (6) to any other officer subordinate to him.

For administration he is being assisted by the Registrar for General Administration, Finance Officer for financial management, Dean (student affairs) for student support system, The Controller of Examinations for examination and evaluation, Secretary of Post Graduate Council for academic administration of post graduate courses, Inspector of Colleges and Secretary of Under Graduate Council for academic administration of affiliated colleges, Development Officer for liaison with different funding agencies, University engineer for construction and maintenance, medical officer for health, , hygiene and sanitation.

There are several statutory committees for assisting and recommending actions. The Vice Chancellor is guided by these committees. He supervises the working of these committees and the decisions taken by these committees are implemented only after getting his concurrence. Some of the resolutions of these committees are implemented only after adoption by the executive council.

In academic unit the decisions are initiated at the board of studies in undergraduate/post graduate courses. The recommendation of the board of studies either gets concurrence from the Vice chancellor and is being implemented or being referred to the undergraduate council / post graduate council for ratification and implementation.

In administration unit, the committees which recommend actions are the Finance committee, Purchase Committee, Works and Tender Committee, Establishment Committee etc.

All major decisions are placed for consideration to the executive council which acts under the policy guidelines adopted by the court, the highest policy making body of the University.

The Vice Chancellor has the authority to take decisions and implement in the interest of the University and under exigencies, but placed before the executive council at a later meeting for ratification. In some cases the decision is referred to the Chancellor. The Chancellor of the university is His Excellency The Governor of West Bengal.

The Vice Chancellor supervises the implementation of the decisions taken by various committees through review meetings and take steps for improvement in the decision making and implementation mechanisms

- **In interacting with its stake holders**

- i. To review the implementation of resolutions adopted in different forums and discussing the problems, the Vice chancellor holds interactive sessions separately with the stakeholders, students/ teachers/ supporting staff and officers. The face to face interactive sessions of the Vice chancellor helps in identifying the problems, discussing steps for the solution of the problems, mutual appreciation of the positions and provides a better understanding between the administration, and the stake holders.
- ii. The Vice-Chancellor pays visit to the academic departments periodically to assess the performance of the department, encourage the faculty and staff for performance enhancement and gets a firsthand impression of the problems faced by the department for their speedy solution.
- iii. The Vice-Chancellor also meets different sections in the capacity of chairperson in various committees like court, executive council, PG Council, Departmental Ph.D. Committee, etc.
- iv. There is an elected Student Union, which brings about suggestions /grievances to the Vice-Chancellor. The Vice-Chancellor gives a patient and kind hearing to all their suggestion /demands / grievances and takes necessary action for the implementation of genuine and just suggestion /demands / grievances on priority basis.
- v. The Vice- Chancellor also periodically meets the Employees Union, Teachers Association and Officers Association and considers the suggestion /demands / grievances put forward by these Union/ Association
- vi. The Vice-Chancellor encourages the stake holders to communicate with him through internet and promises return mail with his observations and the actions initiated on the suggestions/complaints at the earliest. The internet based mechanism being verifiable promotes transparency and really work wonders

- **In reinforcing a culture of excellence**

- i. The administration is being sensitized to the need of the University with flexible rules with a focus on encouraging creativity.
- ii. The successive Vice-Chancellors have contributed their might in reinforcing a culture of academic excellence and to provide the students the best possible instructions and training in the University.
- iii. The University is in the forefront in introducing nontraditional subjects blended into the traditional course curriculum for obtaining maximum mileage in acquiring of knowledge and also garnering gainful employment.
- iv. An investigative project is made a part of both Post graduate and undergraduate course curriculum which gives the student a preliminary training on literature survey, research and project writing. The student seminar is included in the course curriculum of Post graduate courses with an aim to improve the communication and presentation skill using ICT.

- v. In each interaction with the faculty members the leadership makes it a point to impress on the importance of innovative teaching-learning methods with the use of ICT and a shift from teaching to learning process
- vi. The Vice-Chancellor with the able assistance from the stake holders continuously improve upon the examination and evaluation process. The evaluation process is made more sensitive and transparent so that an examinee can verify his/her answer script by making an application under RTI.
- vii. The University organizes both inter-college and intra-college sports and cultural activities annually. The student achievers in both curricular and co-curricular activities are amply rewarded. The periodical sports, social and cultural gathering organized by the University with participation from all sections, creates positive energy. The lectures on ethics are a regular feature in the campus.
- viii. The faculty members are encouraged for carrying out basic research and participate actively in knowledge creation and the achievements are always lauded. The administration strives to provide as much infrastructure as possible.
- ix. With active support from the University, the faculty members are encouraged to attend seminars/ workshops in advanced institutes and also regularly organize seminars and workshops by inviting experts in the field. The faculty members are encouraged to take up research projects in collaboration with experts from other institutes.
- x. The Vice-Chancellor shares a vision of worldwide-network of knowledge sharing through exchange programme and signing of MoU with other Indian Universities, Foreign Universities and Research organizations.
- xi. The role of officers and the supporting staff are reviewed periodically and the efficiency in work is recognized and appreciated
- xii. The impact of all these actions manifests through a sense of belonging among the members towards the University and everyone feels proud to be associated with the University,
- xiii. The university is proud of the highly qualified and dedicated faculty members motivated students and research scholars and adequately equipped, supporting and administrative staff in order to absorb the forces of modernization and globalization in the field of higher education.

- **In identifying organizational needs and striving to fulfill them**

The organizational needs of a relatively young state University is vast and may be grouped as follows. Proactive intervention and effort in all these areas are a necessity to achieve the objective of upgrading the status of the University to that of a University of excellence comparable to the best international Universities

(a) Enhancing academic excellence

- i. Introduction of nontraditional courses as envisaged by the founding members
- ii. Designing need-based curriculum
- iii. Introduction of innovative teaching-learning methods with use of ICT and providing adequate tutorials in class routine
- iv. Reforming evaluation mechanism
- v. Starting of add-on courses for development of proficiency and skill
- vi. Organizing seminars by students and academic experts
- vii. Facilitating the execution of research projects

- viii. Encouraging the consultancy services and to organize a cell for intellectual property right
- ix. Signing of MoUs with International Universities for collaboration in research and teaching

(b) Strengthening physical infrastructure

- i. Providing sufficient built up area so that classrooms, teaching labs, faculty rooms, research labs, research scholar rooms, departmental library and reading room , departmental museum, seminar room, boys and girls common room with toilets and proper sanitation to each academic department
- ii. Building of state of the art class rooms
- iii. Modernization of teaching and research laboratories
- iv. Providing round the clock internet services with remote access facility so that the stake holders can access e-books and journals from their home. Extending adequate computation facility to all stake holders
- v. Strengthening library resources
- vi. Establishment of central facility like instrumentation centre with state-of- the- art equipment
- vii. Strengthening health center with indoor treatment facility
- viii. construction of swimming pool, gymnasium
- ix. Construction of sports stadium
- x. Construction of indoor stadium
- xi. Providing good hostels including working women's hostel
- xii. Construction of an auditorium with state-of-the-art technology
- xiii. construction of more staff quarters, shops either at private level or cooperative society level
- xiv. establishment of Canteens
- xv. Ensuring round the clock water and electricity, security
- xvi. Provision of good ambience with heritage trees and well maintained garden
- xvii. Support facility by engineering and electrical divisions

(c) Augmenting fiscal resources

- i. Through rationalization of fees for different services and also tuition and admission fees.
- ii. With a drive to approach prospective donors for setting up Chairs. Presently there are some Endowments in the University as medals and awards for meritorious students.
- iii. Organizing yearly Alumni meet and impressing upon them for generous donations
- iv. Strive to get corporate donations
- v. Through an effort to raise the committed and development grants from West Bengal Government / Government of India
- vi. Through grants from different central funding agencies like DST, DBT, UGC, CSIR, AICTE, DRDO, Ministry of Environment and Forests, Ministry of Mines, DAE, ICAR, and ISRO.

Presently the Liaison with the Funding agencies is being looked after by the Development Officer under the guidance of the Vice Chancellor.

(d) Strengthening student support services by

- i. Establishment of Students Guidance and Counseling Center looking after professional skill and interpersonal communication skill development, arranging lectures on ethics and development in the human qualities, Special training for deficient students , special training for competitive exams and Placement liaison

- ii. Establishment of Student Welfare office under the supervision of Dean Students Welfare handling welfare schemes like Fee concession, award of financial assistant to students under exigencies and SC/ST welfare fellowships
- iii. Organizing Sports Authority to manage the play ground, indoor sports stadium and swimming pool, arranging practice sessions, training of athletes and games team members and assuming all responsibility of sports administration with organizing the inter college sports events and ensuring team participation in inter University events.
- iv. Setting a mechanism, under the supervision of the Dean Students' Welfare, for conducting cultural events both at inter college and interuniversity level, and organizing different clubs like Literary, Arts and Science Clubs
- v. Organising periodic health checkup of stake holders by the health centre.
- vi. Starting earn-while-you-learn scheme for needy students

e) e-Governance

- i. University Library is fully automated and strengthening it with more e-books and journals is getting priority. Theses and dissertations are uploaded in the website repository.
- ii. Administration is partially computerized with a commitment to go for complete e-governance at the earliest. Proceedings of the Executive council and court meetings are uploaded immediately after the meeting proceedings are confirmed in the next meeting. Admissions, results and activities of the University are also uploaded on the University website.
- vii. Organizing a grievance redressal cell with facilities for registering complaints/ grievances/suggestions through internet with assured return mail in a definite time frame with the decisions on these complaints/ grievances/suggestions. Presently all such mails are sent to the Vice-Chancellor
- viii. Purchase and construction rules are followed as per state government norms. For any expenditure under these heads involving more than Rs 10000, quotations are invited in the University website.

University website is updated regularly by the information scientist

(f) Organising outreach programs

- i. Outreach programs in the University are supported by the students, teaching and supporting staff. The outreach programs are also organized under the banner of NCC and NSS units of the University.
- ii. The University will strive to use its expertise in the educational, social and economic development of the populace in the vicinity of the University.

6.1.4 Vacancy in the top leadership positions of the university

No top leadership position of the University remained vacant for more than a year except the post of the Inspector of Colleges during the period from 01.02.2012 to 02.07.2013. The Development Officer was in charge of the post.

6.1.5 Filling in all positions in the various statutory bodies

Yes

The statutory bodies of the university are filled regularly as per university regulation and their meetings are conducted in regular intervals.

The Court - Once in a couple of Months

The Executive council - once in a month (on an average)

The Faculty Council – once in a couple of months (on an average)

The Board of Studies - Meets compulsorily twice in an academic year (may be more than two, if required)

6.1.6 Promotion of a culture of participative management

The university does promote a culture of participative management.

The management and decision making process in the University is quite decentralized and democratic with participation of stake holders.

In academics, decisions are initiated at the Board of Studies for undergraduate courses at under graduate level and Board of Studies for postgraduate courses at postgraduate level.

The board of studies is the authority to frame the course curriculum, suggest the panel of question setters, board of moderators, evaluators of answer scripts and analyses on the effectiveness of course curriculum, teaching and evaluation process in the undergraduate courses.

- I. The Board of Studies for undergraduate courses for each subject comprises of
 - (i) Head of the Post graduate department of the University in concerned subject (chair person)
 - (ii) Two faculty members from PG faculty in the concerned subject
 - (iii) Five UG teaching faculty members in the concerned subject from affiliated/constituent colleges
 - (iv) Two experts in the concerned subject from other Universities

- II. The Board of Studies for post graduate courses for each subject comprises of:
 - (i) The head of the Postgraduate Department in the Subject concerned shall be the ex-officio Chairperson of the Board and that the Secretary of the Council for P.G. Studies shall act as the non-member Secretary of the Board in such cases.
 - (ii) All permanent teachers of the post-graduate department are ex-officio members of the post-graduate board of studies of the concerned department.
 - (iii) Two experts in that subject to be nominated by the Vice- Chancellor. Other experts are invited whenever necessary.

The recommendations of the boards on question setters, board of moderators and evaluators of answer scripts are placed before the Vice Chancellor for approval and then further action. Recommendations on course curriculum and other observations are placed to the Undergraduate council / postgraduate Council for ratification and final decision.

- III. The Council for Under-graduate Studies in Arts, Science and Commerce shall consist of the following members:
 - (i) The Vice-Chancellor (Chairman) ;

- (ii) The Deans of the Faculty Councils for Post graduate Studies in Arts and Commerce and Science ;
- (iii) Ten teachers of affiliated colleges imparting teaching in Arts, Science and Commerce 'of whom one shall belong to a teacher's training college or other professional college, if any, elected by the teacher's of such colleges ;
- (iv) Two teachers participating in post graduate: teaching in the subject or subject concerned elected by the members a Faculty Councils for Post-graduate Studies from amongst themselves ;
- (v) Four Principals-three from the under graduate Colleges of Arts and Commerce and Science and one from a teachers' training college- elected jointly jointly by the Principals of such colleges;
- (vi) Two persons having special knowledge in the subject or subjects concerned nominated by the Vice-Chancellor.

IV. The Council for Undergraduate Studies in Law shall consist of the following members:

- (i) The Vice-Chancellor (Chairman) ;
- (ii) The Principal or Principals of Law College/s;
- (iii) Heads of Departments;
- (iv) Not more than six teachers participating in teaching in the subject concerned elected by such teachers from amongst themselves
- (v) Two persons having special knowledge in the subject concerned nominated by the Vice-Chancellor.

V. Each Council for Under-graduate Studies has a Secretary.

- a. All elections to the Councils for Under-graduate Studies are held in the manner prescribed in the Statutes.
- b. One-third of the total number of members Council for Under-graduate Studies constitutes the quorum for a meeting of the Council.

VI. The constitution of the Council for Post-Graduate Studies in Arts and Commerce:

- (i) Vice-Chancellor: Chairman
- (ii) Dean Faculty of Arts and Commerce
- (iii) All fulltime Professors of the post graduate departments in arts and commerce
- (iv) Heads of all the Post-Graduate Departments under the Faculty of Arts and Commerce
- (v) Four Teachers other than Professors
- (vi) One external expert of the rank of Professor nominated by the Vice Chancellor.
- (vii) Three Teachers participating in undergraduate teaching in the subjects concerned elected by the teacher members of the Council for Undergraduate Studies:

VII. Council for Post-Graduate Studies in Science:

- (i) Vice-Chancellor: Chairman
- (ii) Dean Faculty of Science
- (iii) All fulltime Professors of the post graduate departments in Science
- (iv) Heads of all the Post-Graduate Departments under the Faculty of Science
- (v) Four Teachers other than Professors

- (vi) One external expert of the rank of Professor nominated by the Vice Chancellor.
- (vii) Three Teachers participating in undergraduate teaching in the subjects concerned elected by the teacher members of the Council for Undergraduate Studies:

Major decisions of the PG council are finally placed before the executive council for ratification.

VIII. In administration wing the decisions on different areas are initiated at the level of the statutory committee. The resource mobilization, budgeting and allocation of funds for various operations by the finance committee. All decisions of finance committee need the approval of the Executive council for being operational. Finance committee of the University is constituted as mentioned in the Statute 32 as per section 28 of Vidyasagar University Act. The composition of Finance committee is as follows:

- (i) Vice Chancellor (the Chairman).
- (ii) Dean, Faculty of Science.
- (iii) Dean, Faculty of Arts & Commerce.
- (iv) Accounts officer and Ex-officio Joint Secretary, Govt. of WB, State Govt. nominee.
- (v) Nominee of the Court of Vidyasagar University.
- (vi) Nominee of the Executive council of Vidyasagar University.
- (vii) Finance officer and the Member Secretary of the committee.

Number of Meeting held from 01.04.2008 to 31.03.2013 = **29**

IX. The Purchase of any instrument/equipment/stationary involving more than Rs 500 is looked after by the Purchase Committee. The recommendation of purchase committee is placed to the Vice chancellor for approval. The major decisions are reported to the Executive council. The Purchase committee is formed by the Executive Council in accordance of the finance rule under clause 15.2, which consists of

- (i) The Dean, Faculty of Science- Chairman
- (ii) The Dean, Faculty of Arts & Commerce
- (iii) The Registrar
- (iv) The Development Officer
- (v) One Professor of the University
- (vi) Head of the relevant Department or his nominee
- (vii) The Finance Officer (convener).

No. of Meeting held from 01.04.2008 to 31.03.2013 = **33**

X. The Works and Tender Committee draws the all construction related works and basic furnishing of the building. The resolutions are referred to Executive council for approval. The committee comprises:

- (i) Dean, Faculty of Arts & Commerce – Chairperson
- (ii) Dean, faculty of Science – Member
- (iii) The Registrar – Member
- (iv) The University Engineer – Member
- (v) One Principal of an affiliated College, who is also a member of EC- Member.
- (vi) The Finance Officer – Invitee Member
- (vii) The Development Officer – Convener.

No. of meetings = **26**

XI. The Establishment Committee looks after the interest of the employees and frame necessary rules for enforcing work culture, promotion, discipline, etc. The routine resolutions of the establishment committee are placed before the Vice-Chancellor for approval and implementation. The major decisions are referred to Executive council for approval. The Establishment Committee consists of:

Ex-Officio Members

- (i) Vice-Chancellor – Chairperson
- (ii) Registrar – Convener
- (iii) Finance Officer – Member
- (iv) Controller of Examinations - Member

Nominated Members

- (i) One of the Deans of Faculty
- (ii) Two members of the Executive Council.
- (iii) One Government nominee.

Number of Meetings = 13

XII. All appointments to the University are made through a selection process as laid down in the act. The resolutions of the selection committees are placed before the executive council for approval. The composition of selection committee is in consonance with that suggested by UGC on sec 5.1.1 to 5.1.3 in the notification UGC No F-3-1/2009 published in Gazette of India on September 18, 2010.

XIII. All the major decisions of statutory committees /sub committees are placed before the Executive Council for approval. The Executive Council has representation from faculty members of PG departments of the University, Principals and faculty representative of affiliated colleges, officers of the University, representatives of sister universities of State, education boards of the State, Government nominee from the Higher education department and the finance department

Table 6.1: Constitution of the Executive Council

(i)	The Vice-Chancellor	1
(ii)	The Principal Secretary, Higher Education Department, Govt. of West-Bengal	2
(iii)	The Principal Secretary , Finance Department, Government of West Bengal or his nominee not below the rank of Joint Secretary	3
(iv)	The Chairman , West Bengal State Council of Higher Education or his Nominee	4
(v)	The Director of Public Instruction, West Bengal or his nominee not below the rank of Additional Director of Public Instruction	5
(vi)	The Deans of the Faculty Councils for Postgraduate Studies	6,7
	(a) The Dean , Faculty Council for Post Graduate Studies in Arts & Commerce	
	(b) The Dean , Faculty Council for Post Graduate Studies in Science	

(vii)	Principal of Affiliated Colleges, not more than seven, to be nominated by Vice-Chancellor	8-14
(viii)	Three Heads of Departments of the University, by rotation for one year in alphabetical order of the Department, to be selected by the Vice-Chancellor	15-17
(ix)	Seven Teachers from the faculty Council for post-graduate Studies, of whom four shall be Professors and two shall be Associate Professor and one shall be Assistant Professor and they shall be elected by the members of the faculty council from amongst themselves	18-24
(x)	Five Teachers of whom at least two shall belong to the rank of the Associate Professor and Others shall be not below the rank of Assistant Professor from Council for under-graduate studies to be elected by the members of the Council from amongst themselves in the manner as may be prescribed by Statutes	25-29
(xi)	Two persons nominated by the Chancellor	30,31

XIV. Finally the Court of Vidyasagar University is the apex body in the University and is responsible for framing the broad policy guidelines for the university.

Table 6.2: Composition of the Court

(i)	The Chancellor	1
(ii)	The Vice-Chancellor	2
(iii)	The Deans of the Faculty Councils for Post Graduate Studies(arts and commerce, science)	3,4
(iv)	The Principle Secretary, Higher Education Department, Government of West Bengal or his nominee not below the rank of Joint Secretary to the Government of West Bengal:	5
(v)	The Principle Secretary, Finance Department, Government of West Bengal or his nominee not below the rank of Joint Secretary to the Government of West Bengal:	6
(vi)	The Chairman, West Bengal State Council of Higher Education or his nominee:	7
(vii)	The President, West Bengal Council of Higher Secondary Education.	8
(viii)	The President, West Bengal Madrasa Education Board:	9
(ix)	The President, West Bengal Board of Secondary Education.	10
(x)	The Director of Public Instruction, West Bengal or his nominee not below the rank of Additional Director of Public Instruction:	11
(xi)	A nominee of the Chairman of University Grants Commission:	12
(xii)	A nominee of the Chairman of National Council for Teacher's Education.	13
(xiii)	The Chairman of the College Service Commission or a member of the Commission as his nominee:	14
(b)	REPRESENTATIVES OF DEPARTMENTS AND COLLEGES	

(xiv)	All heads of departments of the University-	15-41
(xv)	Five senior most Professor of Departments of the University selected by the Vice-Chancellor in alphabetical order of the Department	42-46
(xvi)	Principals of affiliated Colleges, not more than ten, nominated by the Vice-Chancellor:	47-56
(xvii)	Five Teachers from the Council for Undergraduate Studies, of whom at least two shall belong to the rank of Associate Professor and others shall be not below the rank of Assistant Professor, to be elected by the members of the council	57-61
(xviii)	One Representative of Officers of the University, to be elected from amongst themselves in the manner as may be prescribed by the Statutes.	62
(xix)	Two representatives of non-teaching employees-	
	(i) One from Non-teaching employees of the University	63
	(ii) One from non-teaching employees of the affiliated colleges of the University	64
	NOMINATED MEMBERS	
(xx)	Five persons to nominated by the Chancellor from amongst the persons interested in University education	65-69
	SPECIAL INVITEE	
(xxi)	Any official expert in any field or eminent educationist	

6.1.7 Academic and administrative leadership provided by the University to its affiliated colleges

- (i) A team comprising senior faculty members drawn from University PG centre and constituent /affiliated colleges accompanied by the Inspector of colleges visits the affiliated colleges annually. Also during examinations and in case of other exigencies the University team visits the concerned college.
There is also a mechanism to inspect and evaluate the compliance of rules and standards of teaching, class rooms, laboratory, other infrastructure and financial transactions. The team submits a report to the University highlighting the **areas of deficiencies and strengths** of the affiliated colleges
- (ii) The committee report is analyzed and placed before the executive council. Directions are given and **actions are taken** on the basis of executive council recommendations on the report.
- (iii) The Vice Chancellor also holds meeting with the council of Principals of affiliated colleges periodically to have a firsthand impression on the problems faced by affiliated colleges, discuss their possible solution. The meetings are also used to convey to the principals the relevant policy decisions of the University towards the colleges and the expectation of the University from the colleges.
A number of Principals of colleges are members of the Executive Council.
- (iv) For support and encouragement to the colleges a few from among a host of actions taken by the University are listed below:
 - a) Identifying the strengths and deficiencies of the college annually through yearly inspection by a team of experts and communicating to the college the appreciation / encouragement and necessary steps for improvement.
 - b) Facilitating improvement of the standard of education and guiding them and getting them into the process of accreditation by the NAAC.

- c) Encouraging the colleges to strive for autonomous status
- d) Periodic meeting of Principal's Council to address various related issues
- e) Giving representation to the teachers of affiliated colleges in various university bodies such as Board of Examiners, Board of Studies, Faculty Council, to mention a few for better exposure and experience.
- f) Extending training to the administrative staff of the colleges about academic administration and current developments in education and
- g) Promoting collaborative ventures in getting funded projects, organizing seminars / conferences/ workshops etc.
- h) Assisting in getting funded projects both for the individual teachers and College
- i) Extending access to information resources and services from the University Library to the students and teachers of the affiliated colleges.
- j) Providing best possible futuristic employment oriented new courses and Curricula.

6.1.8 Provisions been incorporated / introduced in the University Act and Statutes to provide for conferment of degrees by autonomous colleges

This year (2014) one college (Midnapore College) has got the Autonomous Status from the UGC for six years (Ref. No. F-22-1/2014 (AC) dated 20/01/2014. The statute is currently being revised and necessary provisions for conferment of degrees by Autonomous Colleges will be duly incorporated.

6.1.9 Grooming leadership at various levels

Among students

1. Through team sports and cultural activities in which captain , vice captains are chosen on the basis of performance criteria
2. Through camps and activities carried out under the NSS programmes. Small teams with specific objective are formed and a team leader is chosen from among them
3. The investigative projects in the final semester of Post-Graduate study are given in groups. It gives scope for one to be the project leader.
4. The Students Union is constituted every year through election for various posts. The Union activities provide scope for development of leadership qualities.

Among faculty

5. Dean of Science and Dean of Arts and Commerce are chosen for three years on rotational basis from among the faculty members to lead the concerned stream
6. Head of the academic departments are rotational in nature with a term of two years. So all faculty members get the opportunity to lead the department.
7. Faculty members are given representation in various university bodies such as Board of studies of Under Graduate and Post Graduate courses, UG and PG Faculty Councils, Executive Council and all other statutory committees.
8. In choosing faculty members as seminar/conference directors.
9. In executing funded personal or collaborative research projects as project leader/ principal investigator
10. An organic development of leadership quality in the faculty members with attaining expertise in his field of research and confidence building.

Among Officers

11. By virtue of leading their own section, leadership qualities develop in them naturally.
12. Representation in various statutory committees
13. In organizing different functions like Independence day, Republic day, University foundation day , annual Convocation, Sports and cultural events at inter college and inter University level

Among supporting Staff

14. Natural leadership qualities developed through appreciation and a word of encouragement on completing the assigned work
15. Rewards for good work and a word of caution for negligence
16. Through active participation by assigning specific jobs in organizing different functions like Independence day, Republic day, University foundation day , annual Convocation, Sports and cultural events at inter college and inter University level.
17. Through training of staff for skill up-gradation, computerization of administration and e-governance

6.1.10. Evolution of a knowledge management strategy

The University has a knowledge management strategy

The faculty members are engaged in quality research and the number of research papers published in international and national journals is quite appreciable. In last five years followings are the publications of faculty members:

No. of Papers in national and International Journals: **1267**;

No. of publications as book chapters: **290**

Necessary steps are being taken for archiving the papers.

- a. The Ph. D. thesis of research scholars who have been awarded Ph. D. by Vidyasagar University are archived in the University website.

6.1.11. Values reflected in the functioning of the University

*** Contributing to national development**

- i) The development of modern and need based course curriculum with blending of nontraditional subjects in traditional course curriculum and the dedicated and modern method of teaching adopted by our faculty members have resulted in placement of students in different sectors of economy.
- ii) A large number of students graduating from the University found employment in Schools, Colleges, both national and international Universities, IITs and reputed research institutes and are engaged in human resource development.

Table 6.3: number of students employed in different sectors in last five years

NET/SET/GATE	School Service	Defense/ civil service	Others
577	271	372	208

- iii) Many of the students are actively engaged in research in national and international research laboratories and contributing to the knowledge creation of human civilization,
- iv) Many students have cleared competitive examinations and are employed in Govt. organizations
- v) A large section of students have found employment in industry
- vi) The faculty is engaged in continuous research in addition to the teaching and contribute to knowledge industry through research publications and patents

- **Fostering Global competencies among students**

- (i) Through updating the course curriculum in every three years to comparable standards of international Universities and promote creativity among the students
- (ii) Introducing investigative projects and student seminar in the course curriculum
- (iii) A gradual shifting to learning from teaching process and extensive use of ICT in teaching
- (iv) Modernizing the teaching and research laboratories and providing adequate computer facilities and round the clock internet facility
- (v) Arranging training to plug skill gap
- (vi) Arranging lectures on human philosophy to increase self confidence and have pride on self and his own work
- (vii) Arranging training for proficiency in interpersonal communication and presentation technique.
- (viii) Effecting reform in evaluation system with emphasis on continuous evaluation throughout the academic year via internal assessment, imaginative question papers with stress on basics.

Students are encouraged and academically supported to appear for global competitive examinations like TOFEL, GRE, GMAT, IELT, etc.

Research students are encouraged to publish research articles in reputed journals to enable them to go for Post-doctoral Programmes in foreign universities.

- **Inculcating a sound value system among students**

Quality education is not only in terms of employability and economic progress but individual's holistic development as a human being so that he/she lives creatively and happily, and also contributes to the welfare of the society. Concerns for peace and values need to be viewed as core component of quality and not merely as value premises.

- (i) Motivate students to a larger purpose in life, maintain good character and self-respect and high regards for professional and social ethics through lectures and personal counseling by teachers;
- (ii) Students are inclined to emulate ideal teachers with whom they have positive relationships and hence the teachers are always advised to practice habits and perform in such a manner that students find role model in them.
- (iii) Dedicated faculty who make vigorous demands on students and each other;
- (iv) Committed to high standard of academic instruction and assigned students significant homework with appropriate academic rigor;
- (v) Develop pride in work and feeling of self-worth by arranging value addition lectures
- (vi) Exposure to societal values and social customs by taking them to villages for community work under NSS programme.
- (vii) Structured so that students are surrounded by a variety of opportunities through, social, cultural, music, sports, and different clubs to showcase and develop talent in extracurricular field, develop group culture, sharing and compassion in addition to leadership quality, and good conduct;
- (viii) exercise authority toward faculty and students in a firm, sensitive, and imaginative manner, and who are committed to both academics and pupil character development;
- (ix) Dedicated to maintaining student discipline, via clear, widely disseminated discipline codes that are vigorously enforced and backed up with vital consequences;

- **Promoting use of technology**

Research and enquiry, creativity and innovation, use of high technology, entrepreneurial and moral leadership are synonymous with the notion of a good educational model. Towards achieving this goal the university has given priority to equip itself with adequate computing equipment, professional software, round the clock internet facilities, modern laboratory with precision instruments, classrooms with audio visual system. Basic and specific object oriented computer trainings are organized for students and supporting staff during vacation / evening hours.

- **Quest for excellence**

The quest for excellence has to do with acquiring knowledge and skills in the most creative way possible. The goal of higher education is not merely one of helping a student to just impart some knowledge in a field to garner an employment but to identify her abilities and strive to creatively develop it further through a coordinated involvement of mind, imagination and emotions in a student. The teachers are the catalysts in this entire process of education

There is a saying “Tell me and I'll forget; show me and I may remember; involve me and I'll understand”.

To attain excellence, the University is consciously making strides so as to make the education process enjoyable and understandable through active involvement of the students. The steps taken in this regard are

- (i) A conscious and rigorous recruitment process to bring in good and dedicated teachers
- (ii) Provide adequate computer facility round the clock
- (iii) Providing computer and internet facility round the clock and encouraging students look for teaching materials of NPTEL and other advanced Universities

- (iv) Providing modern laboratories with precision instruments
- (v) Preparing need based course curriculum which promote creativity among the students
- (vi) Inclusion of tutorial for problem solving
- (vii) Inclusion of investigative projects in the curriculum
- (viii) Inclusion of student seminars on advanced topics in the curriculum
- (ix) Adopting innovative modern method of teaching using modern technology, and ICT
- (x) Arranging training to plug skill gap and proficiency
- (xi) Encouraging, providing infrastructure and facilitating an atmosphere for continuous research and knowledge generation.

6.2 Strategy, development and deployment

6.2.1 Perspective plan for development

The University has a perspective plan for its future development. The Planning cell is coordinated by the Development Officer.

The main aim of the Planning cell is to plan, monitor and evaluate the programmes of the University in line with modern trends at National and International Levels.

The cell meets at least four times a year to deliberate, discuss and decide on the planning, programmes to be undertaken and strategy to be adopted by the University to meet future challenges consistent with the goals set in our vision and mission statement.

A vision document Vision 2025- Vidyasagar University is under preparation for adoption by the competent authority in 2014, detailing the programmes to be undertaken in the next ten years (2015-2024) with clearly set the targets.

In the vision statement we set a trend to pursue our mission with targeted strategies to become a model and innovative University and raise the standards comparable to good international Universities.

The future directions will be as follows:

(a) Vision and mission

1. Increasing Gross Enrollment Ratio of the people in the region at UG and PG levels.
2. Introduction of new courses in emerging areas with a blend of traditional and nontraditional subjects and specialized courses comprising cross disciplinary learning
3. Development of course curriculum which should encourage creativity and in consonance with international standards
4. Extension of credit based course curriculum with choice from a basket of courses going beyond the rigidity of science, humanities or commerce both at postgraduate and undergraduate courses
5. Transport of credits with flexibility in the place of learning
6. Raising the professional and interpersonal communication skill levels and to make value education a part of the curriculum
7. Continuous assessment system both at postgraduate and undergraduate courses
8. Strengthening of affiliated colleges with rigorous academic audit
9. Improving fiscal strength of University through rationalization of fee structure, increase in endowment and alumni donations, increase in research projects and increase in grant from state and central government
10. Strengthening student support system and taking up tasks such as talent identification and determination, extension of Fee concession / tuition fee waivers and award of

fellowships and Promotion of 'earn while you learn scheme' to encourage the students from the economically backward community specifically from the tribal community of the region.

11. Setting up a sports authority of the University and a cultural coordination committee to look to all sports and cultural related activities including of holding annual competitions, athletic meets, and confirming participation in interuniversity meets.
12. Adopting complete e-governance
13. Ensuring a clean efficient transparent administration free from all extraneous influence and pressure
14. Delegation and decentralization of powers, responsibilities, and ensuring accountability. With setting up monitoring mechanism for follow up action and also expediting the process
15. Strengthening the mechanism for academic audit of faculty members and the academic department and having some verifiable and transparent mechanism to reward the achievers and a word of caution to nonperformers.
16. Developing data base and profile of the departments and the university from the date of inception

(b) Teaching and Learning

17. Learner centric academic practices
18. Promotion of holistic learning with emphasis both on professional and value education
19. Greater emphasis on proficiency and skill development
20. Augmentation and adoption of Technology for strengthening teaching Class rooms to Web (Digital content creation)
21. Modern method of teaching with use of ICT and EDUSAT
22. Establishment and strengthening of teaching laboratories with modern equipments
23. Teleporting of best lectures from internet and NPTEL to the classroom
24. Academic continuum from degree to doctoral level through introduction of integrated courses
25. Strengthening of library including e-books and e-journals and UGC – Infonet / inflibnet programme
26. Tech-savvy and an ambient learning environment for the mind to develop to its optimum satisfaction
27. The University follows a date wise academic calendar of events prepared well in advance. The students plan for additional training/learning in the vacation period.

(c) Research and development

28. For strengthening the Research capacity of the University
29. Strengthening of the Directorate of Research
30. Facilitate faculty productivity in Research (Additional Scholarship, Fellowships, etc.)
31. Inter facing funding/sponsoring agency with faculty for research and training.(Inviting potential funding agencies)
32. Establishing Centers for Excellence – (for colleges)
33. Establishing Advanced Research Centre (ARC)
34. Collaboration with institutions of specialized studies
35. Establishment of an incubation centre to take the fruits of research for technological application and production
36. Establishing the Patent and awareness Cell to facilitate patent filing.

(d) Community engagement

37. Community participation through N.S.S. programmes
38. Extending consultancy to local projects like installation of solar heaters, solar lighting, biodiversity in crop, waste management, organic manure development, forestry, aquaculture, physiology and hygiene, rural development and panchayat management affairs etc
39. Training of teachers of the schools of the locality and arranging extension lectures in schools by University teachers –the move will result in enhancing the quality of the intake students in the university

(e) Human resource planning and development

40. Promotion of placement services
41. Special training for competitive examinations
42. Special training for academic deficient students
43. Training of teachers of local schools
44. Training of staff in computer usage for better efficiency

(f) Industry interaction

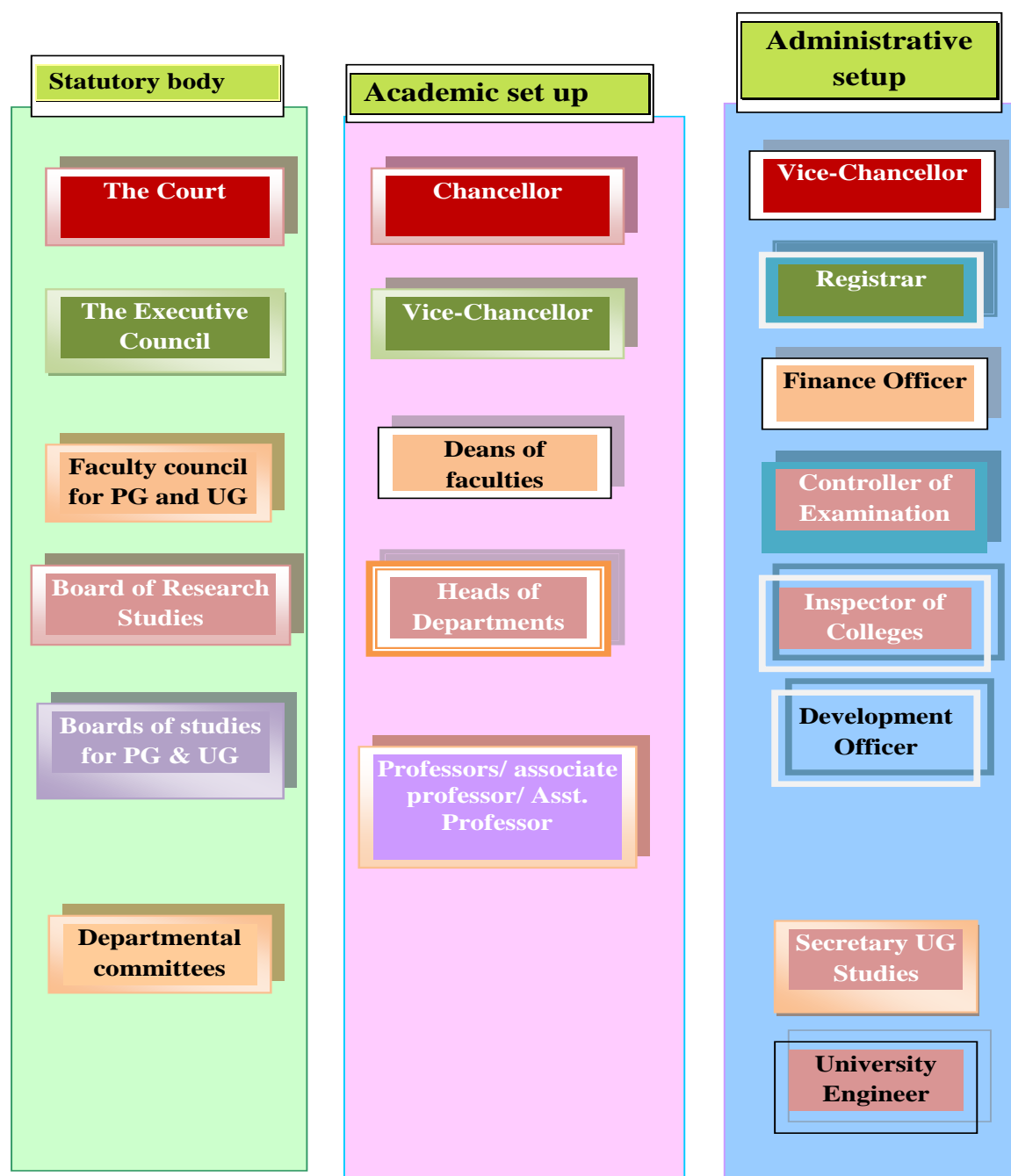
45. Strengthening University- industry collaboration to the research level through Public - Private Partnership model
46. Inviting Industry in curriculum formulation in branches, where they can identify their interest
47. Inviting top level managers for delivering talks on entrepreneurial development
48. Establishment of an incubation centre to take the fruits of research for technological application and production through interaction with relevant industry

(g) Internationalization

49. To sign MoU with international Universities for research collaboration

6.2.2 The university's internal organizational structure and decision making processes and their effectiveness

The following figure shows the internal organizational structure of the university



ACADEMIC

The Vice-Chancellor is the Academic and Administrative head. He is assisted by the Registrar, Controller of Examinations and Deans of two faculties in all academic and administrative matters. The Court, the Executive Council and the Faculty Council are the three supreme bodies. The Chancellor heads the Court. The Vice-Chancellor is the chairman of the Executive Council and the Faculty Council. The members of these councils express their views and suggestions for the smooth functioning of the university in the periodic meetings. The Board of Studies also tender academic suggestions which fall under their purview. After a thorough review, they get the approval in the Faculty Council and the final approval is accorded at the Executive Council. This process ensures democratic academic decisions at all levels, as per the statutory provisions of the University.

The administrative machinery is well synchronized though decentralized at various levels with the Deputy Registrar, Assistant Registrar, Superintendents, etc. The various administrative wings look after different aspects of the administration. All the administrative functions come under the overall control of the Registrar. All the academic and administrative activities are under the overall supervision of the Vice-Chancellor, who provides necessary leadership and guidance.

6.2.3. Formal policy to ensure quality

The University has a Quality assurance cell (IQAC) and necessary mechanism to ensure and maintain improvement in quality of academic standard and administrative functioning.

Quality of Education may be achieved by ensuring two important strategies viz., (i) good quality teachers for the students who would serve as model mentors. (ii) Providing a good academic environment congenial to the quest for learning as well as knowledge gaining attitude among students.

Internal Quality Assurance Cell of the University serves an important role in this regard. In addition, the University offers the following policies for enhancing quality education: offering merit scholarships, fee concession and awards for meritorious performances, hosting of seminars / conferences / workshops / trainings and endowment lectures, collaboration with other institutions etc. IQAC plays a very active role in reviewing the whole design.

It motivates the Faculty to achieve internal quality. Periodic interaction among the Heads of the Departments and the Faculties is encouraged by the IQAC and thus it paves way for internal quality analysis and suitable ameliorative measures it needed.

6.2.4 Encouragement provided to the academic departments to function independently and autonomously

The academic departments have complete academic and partial financial autonomy. In the sphere of academic matters the departmental committee, the board of studies, the doctoral committee associated with the department is empowered to take all decisions like revision of course curriculum, courses to be offered in the year, preparation of panel of examiners and evaluators, deciding the number of Ph.D. scholar intake, allotment of supervisor, recommendation of registration for Ph.D. on the basis of presentation of plan of work, assessing the progress of Ph.D. work of scholars, recommendation of submission of Ph.D. thesis on the basis of presentation of his work, preparation of the list of adjudicators etc

As regards the financial autonomy, once the resources under various heads like equipment, library, development, fee waiver scheme etc, is distributed among all the academic departments, the departments are empowered to prepare the requirements of the department and begin the procurement process in conformity with the purchase rules of university/state government, prepare the comparative statement and select the manufacturer/supplier for

supplying the items, the final decision is placed in central purchase committee for ratification.

The department has the full authority on the expenditure of different infrastructural/research grants extended to the department.

6.2.5. Court cases filed against the institute

Table 6.4: Court cases against the university and their verdicts in last four years

<i>Year</i>	<i>No. of Cases</i>	<i>Cases related with</i>	<i>Verdict of the Courts</i>
2010-2011	a. In High Court – 126 b. In the District Court – 28	a. 70%-80% cases are related with results of the students of Under Graduate level b. Some cases are related with recruitments both in Colleges and also in the University itself. c. Some are related with student Union elections in the affiliated colleges. d. A good number of cases are filed by the affiliated B.Ed Colleges regarding fees structure, central admission process maintained by the University etc, e. A few cases are on various other topics.	In most of the cases the court verdict are in favour of the University. In a very few cases the verdicts go against the University
2011-2012	a. In High Court – 121 b. In the District Court – 32		
2012-2013	a. In High Court – 135 b. In the District Court – 29		
2013-2014 (upto January, 2014)	a. In Supreme Court - One b. In High Court – 75 c. In the District Court – 18		

6.2.6 Attending to grievances / complaints

The university officials resolve the problems and grievances of the stakeholders as and when required. The Vice-Chancellor forms a committee, when required, to analyze the nature of grievances for promoting better stakeholder relationship. There are anti-ragging cell and women harassment cell in the university which look after the grievances / complaints of the students and women community of the university.

6.2.7 Student feedback on institutional performance

The student feedback exists only for academic evaluation of the course curriculum and teacher evaluation. The evaluation report is first analyzed at individual teacher level. The departmental committee then analyses all the evaluation report and take corrective measures. If the department feels the necessity of administration intervention then the department forwards the observations and recommended actions to the competent authority.

The Student's Union, the representative student body, through periodical meetings with the vice chancellor discusses the institutional performance and the expectations of the student community. The administration takes considerate action on the observations and expectations of the students union.

The students have been provided the option to communicate with the Vice chancellor through internet with promise of return mail specifying the stand of the administration and the actions initiated on the subject matter of mail

6.2.8 Performance audit of the various departments

The University conducts performance audit of the various departments.

The Department submits annually the entire academic programme, meetings held, student achievements, faculty achievement, publications etc to the University.

The Executive Council deliberates on the submission and includes the relevant portion in the annual report. The annual report is placed in the court, the highest policy making body of the University.

Based on the report, actions are suggested and provisions are made in the budget for the next financial year.

Further the university has introduced Self Appraisal Report (SAR) of the teachers which is required to be submitted at the end of each academic year.

6.2.9 Identification of the developmental needs of affiliated institutes

A team comprising of senior faculty members drawn from University PG centre and constituent /affiliated colleges accompanied by the Inspector of colleges visits the affiliated colleges annually and in case of exigencies where some disturbance is reported. The team inspects, evaluate, the accomplishments of rules and standards of teaching rooms , laboratory and other infrastructure, financial transactions and submit the report to the University highlighting the **areas of deficiencies and strengths** of the affiliated colleges

The committee report is analyzed and placed to the executive council. **Advices made /Actions are taken** on the basis of executive council directive on the report.

The Vice Chancellor also holds meeting with the council of Principals of affiliated colleges periodically to have a firsthand impression on the problems faced by constituent colleges, discuss their possible solution. The meetings are also used to convey to the principals the relevant policy decisions of the University towards the colleges and the expectation of the University from the colleges.

6.2.10 College Development Council (CDC)/ Board of College and University Development (BCUD)

The affairs of the colleges are coordinated by the office of the Inspector of Colleges. The function of the CDC is performed by the said office.

6.3 Faculty empowerment strategies

The University over the years has created teaching and non-teaching positions. The teaching posts created over the decades are either sanctioned by the State Government or sanctioned by UGC under various plans with concurrence of the state government. The nonteaching posts were created with the sanction of the state government. The state government is committed to grant the expenditure towards salary and pension of the persons appointed in all the sanctioned post.

Except during the initial period of the establishment of the university, UGC is approached in every plan period for sanction of some teaching posts based on our assessment of the faculty requirement.

In the XIth plan 35 (thirty five) teaching posts were sanctioned by UGC and got concurrence from the State Government. The State Government on its own sanctioned another 5 (five) teaching posts.

The present faculty background reveals that about 73% of the faculty is from other institutions and about 9% are from other states.

For creation of nonteaching staff, the State Government is approached with our assessment based on the formula set by the state government for staff pattern in universities

In the last two years the 38 teachers and 5 nonteaching staffs have been appointed.

The university has created some posts (both teaching and nonteaching) from its own resources

The ratio of teaching staff to non-teaching staff is about 1.1: 1.00 approximately.

6.3.1 Enhancement of the professional development of teaching and non-teaching staff

For teaching staff

- (i) To enhance the professional development of teaching staff, the university encourages the staff to attend Orientation programmes, Refresher courses, summer and winter schools, in-service training programmes, seminar, conferences, symposia etc.
- (ii) The university is constantly motivating the teaching staff to get research projects from various funding agencies.
- (iii) The teachers are provided an academic atmosphere with adequate space for setting up of research laboratory
- (iv) a good library with e-books and e-journals with remote access facility at their desk
- (v) Personal laptop and adequate computer facility
- (vi) round the clock internet service **and uninterrupted power supply**
- (vii) funds for research under minor research project
- (viii) Funds for arranging / attending seminars, etc.
- (ix) Training on usage of different computer software
- (x) University has streamlined the Career Advancement Scheme (CAS) based on the performance reflected in API with the modifications notified by the state government from time to time. The entire eligible faculty has been extended the benefits without any delay.

For non-teaching staff

- (i) in-service training for efficiency enhancement and motivation
- (ii) training on usage of computer
- (iii) Periodic meetings for non-teaching staff to understand the procedures
- (iv) Physically challenged and disadvantaged groups are given special attention
- (v) e-governance initiatives
- (vi) On time implementation of time bound personal promotion policy as approved by the state government for state aided university staff.

6.3.2 Review of various appraisal methods used by the university

The student evaluation system adopted by the University has resulted in the analysis of the strengths and the weaknesses in the teacher and the course curriculum. The evaluation system has resulted in significant improvement in the teaching /learning process

The University encourages a self appraisal method to evaluate the performance of the faculty in teaching, research and extension programmes. The self appraisal method presents the academic / professional standing of the individual faculty. The self appraisal system is based on the API as advised by the UGC. The UGC approved APS based appraisal has been useful in setting a minimum standard and motivate them to perform better. Consequently, there has been an increase in the quality and quantity of the research output, curricular and co-curricular activities, to write major projects, innovative programmes, participation in the extension activities, and also to publish in high impact factor journals.

Also the faculty members are requested to maintain an everyday time account they utilize in teaching and learning process. A yearly average of (minimum) 8 hours per day for the teaching learning process is advised for the faculty.

6.3.3 Welfare schemes available for teaching and nonteaching staff

The following welfare schemes are available for teaching and nonteaching staff:

- a) Co-operative Society
- b) Medical Unit
- c) Ambulance Facility (24 hrs.)
- d) Transportation Facility from Campus to Midnapore Town
- e) Group insurance scheme

All categories of employee benefit from the schemes.

6.3.4 Measures taken by the University for attracting and retaining eminent faculty

The university has created conducive environment for eminent faculty by providing academic freedom, good infrastructure, lab, recognition etc.

Advertisements for faculty positions are widely publicized so as to invite the best talent available. Teaching staff is recruited by advertising the posts in the national dailies, quoting UGC guidelines for various posts and all applications are scrutinized. The selection committee constituted according to UGC guidelines consists of experts drawn from within and outside the state to conduct the interviews for the selection. Special increments are offered to attract some of the best talent available in the country.

UGC guidelines and the reservations system adopted by the State is strictly followed in the appointment of teaching staff

UGC scale of pay with all other admissible allowances as per State Government norms is extended to the faculty members. For meritorious candidates advance increments are offered on the recommendation of the selection committee.

University has streamlined the Career Advancement Scheme (CAS) based on the performance reflected in API with the modifications notified by the state government from time to time. The entire eligible faculty has been extended the benefits without any delay.

The teachers are given an academic atmosphere with personal chamber, research laboratory, a good library with e-books and e-journals at their desk, personal laptop and adequate computer facility, round the clock internet service, funds for research under minor research project, funds for arranging / attending seminars, etc.

The university is proud of the highly qualified and dedicated teaching staff as existing presently. The average retention period of the faculty is very high.

To overcome the shortage of teaching faculty, teachers are invited as Guest Faculty and on contract basis. Faculty from various organizations/institutions in the country is drawn to utilize their expertise under the Visiting Professor scheme of the University. The University provides comfortable facilities for stay and workspace for the visiting faculty.

6.3.5. Gender audit

Steps have been initiated for evolving a formal mechanism for conducting a gender audit under the supervision of the Women's Studies Centre of Vidyasagar University. The female student enrollment in the four years is as follows:

Table 6.5: Enrollment of female students in last four years

Year	Science faculty	Arts and Commerce faculty
2009-10	446	733
2010-11	517	775
2011-12	587	842
2012-13	579	881

The enrollment of female students in Arts and Commerce faculty was larger than that of Science faculty. In both the faculties the enrollment of female students has gradually been increased.

6.3.6. Gender sensitization programmes for the faculty

Vidyasagar University organized the SAM (Sensitivity, Awareness and Motivation) workshop under the UGC sponsored women's movement, "Capacity Building of women Manager's in Higher Education" from March 23, 2009 to March 27, 2009 in collaboration with Narajole Raj College. This was the first workshop of its kind in Midnapore (West) and its immediate neighborhood (excepting Kolkata). The University took all the major responsibility of organizing the workshop, providing necessary logistic and infrastructural support.

Besides this, most of our female faculty members have been sensitized by SAM (Sensitivity, Awareness and Motivation) workshop and other gender sensitization workshop (TOT etc.) at different universities and colleges. Our University has taken proper initiatives from time to time in this regard. A large number of seminars, workshops have been organized on women related issues to sensitize the faculties, staffs and students by the Women's Studies Centre of this university.

6.4 Financial Management and Resource Mobilization

6.4.1 Institutional mechanism available to monitor the effective and efficient use of financial resources

The University follows the following basic mechanisms to monitor the effective and efficient use of financial resources.

Table 6.6: Mechanism adopted to monitor the effective use of financial resources

Financial Planning
➤ Budgeting
➤ Setting targets for monitoring.
➤ Evaluation
Resource Allocation
In-Year Management
➤ Financial Record Management
➤ Operating
➤ Monitoring
➤ Safeguarding

Evaluation

- Reviewing
- Reporting

Details of the above mentioned basic mechanisms available to monitor the effective and efficient use of financial resources are given below.

Table 6.7: Details of the basic mechanisms available to monitor the use of financial resources

Process	Description
Financial Planning <ul style="list-style-type: none"> • Budgeting • Setting targets for monitoring and evaluation 	Assessing the current resource position, linking resources to operational plans and determining a budget- <ul style="list-style-type: none"> • Drawing up a budget which will guide how money is spent in order to achieve the goals set. • Setting targets for revenue and expenditure. • Setting targets for efficiency and equity.
Resource allocation	Allocating resources across sections or department within the University.
In-year management Operating, monitoring, and safeguarding	<ul style="list-style-type: none"> • Ensuring that funds are spent according to the financial plan and according to the norms and standards set by University, Higher Education Department, Government of West Bengal and UGC Regulations and Prescripts. • Making sure that there are good internal measures and monitoring that these are applied.
Evaluation: Reviewing and reporting	<ul style="list-style-type: none"> • Linking expenditure to service outputs and analyzing with respect to equity, efficiency and sustainability. • Drawing up an annual report. • Identifying key strategic issues for next annual Strategic/Business Plan.

6.4.2 Internal and external audit

There is a separate internal audit section in the University which is headed by an Audit Officer duly supported with staff. CAG regularly conducts audit looking into the Procedural and performance aspects. Transaction Audit and Accounts Audit of the University are completed by the Government Audit up to the year 2011-12. Both transaction and accounts are audited by the Examiner of Local Audit under the CAG.

6.4.3 Regular audit of the institution's accounts

The accounts are audited regularly both by the University's own internal audit section and by the government agencies. There has not been any major audit objection in the last four years.

6.4.4 Audited income and expenditure statement of academic and administrative activities of the last four years

Audited Income and Expenditure Statement of Academic and Administrative activities for the last four financial years are enclosed herewith.

Table 6.8: Audited Income and Expenditure Statement**a) Year -2010**

Table 6.8:Receipts & Payments Account for the Year Ended 31st March 2010

	RECEIPTS	AMOUNT		PAYMENTS	AMOUNT
1	Opening balance		1	Establishments	
	Cash	0.00		Salary VC	1093725.00
	Petty Cash	1.50		Salary Officers	12144787.00
	CI/6	30580.21		Salary Teachers	60977278.00
	CI/62: SBI	158446.79		Salary Non -Teaching	26711506.00
	UCO SB -273	7410905.30		Bonus	16000.00
	UCO FD Interest A/C(1346)	374163.51		Provident Fund- Univ. Share	1528979.00
	SB-3198	9119617.09		Pension & Gratuity	2979001.00
	SB- 2824	1784691.35		Commutation Pension	500298.00
	UCO - 3251	2619697.00		Leave Encashment	531500.00
	UCO - 3252	26232.51		Arraer DA	357403.00
	UCO-SB-CAL8062871	(41,876.00)			
	UTI Bank	1964973.00			
	NSS				
	Cash	208.56	2	Hostel Salary Exp.	
	UCO-1502	6312786.49		Salary Hostel Employees	236092.00
				Bonus Hostel Employees	
2	FEES FROM STUDENTS				
	Tuition Fees	14297950.00	3	ADMINISTRATIVE EXPENSES	
	Admission Fees	107080.00		Security Agency	755119.00
	Laboratory Fees	139300.00		Advertisement Expenses	540425.00
	Sports Fees	524570.00		Legal Expenses	403650.00
	Computer Fees	325250.00		Meeting Expenses	327536.00
	Library Fees	147400.00		Travelling Expenses	172034.00
	Session Fees	4600.00		Convocation Expenses	448882.00
3	OTHER FEES FROM STUDENTS			College Inspection Expenses	0.00
	Health Check up Fees	32020.00		Salary Contract & Casual Staff	6332181.00
	Student Union Fees	226000.00		NAAC Expenses	268419.00
	Student Aid Fund	16015.00			
	Student Health Home	22968.00	4	COMMUNICATION EXPENSES	
	Student Identity Card	24750.00		Postage & Telegram	236940.00

	Student Welfare	43065.00		Telephone	232907.00
	Electricity Fees	45765.00			
	Utsav Fees	16010.00			
	Misc/ Other Fees	16010.00			
			5	EDUCATIONAL EXPENSES	
4	FEES FOR EXAMINATION			Laboratory Materials	495895.00
	Examination Fees	16671050.00		Study Tour / Feld Work	187011.00
	Examination Centre Fees	2103414.00		Guest Teachers Remuneration	446342.00
	Fines Late Payment	178807.00		Extension/ Special Lecturers	25288.00
				Personal Research Grant	189754.00
				Training/ Workshop/ seminar	2000.00
5	UNIVERSITY AFFILIATION FEES	2558712.00		Project training expenses	500.00
6	PRE & POST EXAMINATION FEES		6	EXAMINATION EXPENSES	
	Registration Fees	1265930.00		Remuneration to Teachers	2339282.00
	Migration Fees	270025.00		Refreshments	189440.00
	NC & SP Fees	39735.00		General Printing	1626357.00
	Duplicate & Prov Cert.	113205.00		Centre Expenses	1903135.00
	PHD Registration	58000.00		Confidential Printing	2711192.00
	Ph D Thesis Submission	162040.00		Car Hire Charges	289165.00
	Convocation Registration Fees	5820.00		T A Exam.	872891.00
	PG Diploma Certificate	2550.00		Paper Setting	104150.00
	Fees Reexamination, Scrutiny	320550.00		Exam Misc.	342783.00
	Misc. Receipt from exam	9060.00		Generator Expenses for Exam	4420.00
7	STUDENT SERVICES		7	OTHERS EXPENSES	
	Hostel Fee	747180.00		Subscription fee AIU	100000.00
	Bus Coupon	36305.00		Contingency	607561.00
	Sports Entry Fees	198120.00		VC 'S Discretion Fund	1818.00
	Library Membership Fees	8000.00		Car Hire Charge (General)	288221.00
	Training & Placement fees	74000.00		Endowment/Scholarship Exp	4800.00
	Project Training	118165.00		Bank Charges	42741.29

	Fees				
	Counselling fees	42300.00		UGC- Visiting team Expenses	
	Duplicate library card	570.00		Misc Expenses	3376788.05
				Consultancy Expenses	280439.00
8	SALE PROCEEDS			Campus Beautification	121741.00
	Sale of Firewood& Cashew	71000.00	8	REPAIR & MAINTENANCE	
	Sale of Ph. D Forms	9020.00		Building Maintenance	1895054.00
	Sale of Fees Book	156.00		Lab. Equipment Maintenance	3750.00
	Sale of Admission Forms	458380.00		Computer Maintenance	1078219.00
	Sale of Syllabus & Publication	53152.00		EPBX Maintenance	41956.00
	Sale of Registration Forms	977625.00		Electrical Sub Station Maintenance	152175.00
	Sale of Other Misc. Forms	10350.00		Office Equipment Maintenance	86537.00
	Sale of Empl. Application Forms	57150.00		Water Pump Maintenance	20070.00
	Sale of Review Forms	132260.00			
	Sale of Migration Forms	81440.00	9	NSS	
	Sale of Duplicate Form	62960.00		Grant disbursed	2540500.00
	Sale of Waste Answer scripts	200600.00		Establishment Exp.	126596.00
	Sale of Tender Form	67000.00			
9	OTHER RECEIPTS		10	STUDENTS SERVICE	
	Rent Charges	1144765.00		Student health home	
	Fines	19960.00		Sports Activity	276148.00
	Bank Interest SB	616515.00		Cultural Activities	153441.00
	Electricity Charges	159144.00		Student union Activities	256176.00
	Fixed Deposit Interest	12906213.98		Student Hostel Subsidy	396489.00
	Misc Receipt	22898920.00		Medical Unit	27760.00
	Project Overhead Reciept	15000.00		Newspaper	24550.00
	Employment Application Fees	176755.00		Student Welfare	83800.00
	Employees Identity Card	405.00		Utsav Fund	16000.00
	Educational Qualification Verification	39750.00		Training & Placement Exps	191752.00
	BED selection committee	2033657.53			

	Multi-gym Subscription	3720.00	11	SUPPLLES & SERVICES	
	Consultancy Income	180000.00		Printing & Stationary	505115.00
	Water charges	30322.00		Generator Hire Charges	218921.00
10	STATE GOVT. GRANTS			Electrical Fittings	286586.00
	Addl. Maintenance grant	7699500.00		Electricity Charges	3609752.00
	Maintenance Grant	121896000.00		Computer Stationery	61318.00
	Grant for Hostel Salary	255020.00		Liveries For Employees	0.00
	Provident fund interest(by transfer)	6097854.00		Bus Hire Charges	193149.00
				Book Binding	3365.00
			12	UNIVERSITY PUBLICATIONS	
11	Development Grant (UGC)			Journal, Books & Publication	280656.00
	UGC Grant - XIth Plan	13365000.00			
	UGC Grant - Xth Plan	2970000.00	13	DEVELOPMENT GRANT (STATE)	
	Special grant for Chemistry	500000.00		Library books grant	3192845.00
	Infrastructure development for Women	500000.00		Furniture	1058660.00
				Construction grant (Road)	10953565.00
				PG girls hostel construction	7025147.00
				Lab Equipment	3423013.00
				Administration computerisation	299158.00
			14	DEVELOPMENT GRANT (VU Fund)	
				Furniture	54400.00
				Equipment	183785.00
				Construction Expenses	46249.00
				Auditorium	585929.00
				Gymnasium hall & Multi-gym	
			15	UGC GRANT EXPENSES	
				Construction Grant- Xth Plan	261706.00
				Books & Journal	1457358.00
13	Development Grant (State)			Block Grants	402480.00
	Administrative Computerisation	2053530.00		Development Grant (Infrastructure)	4674190.00

	Grant for Santali Dept	175000.00		Unassigned Grant Exp.	857213.00
	Construction grant	10000000.00		XI Th Plan	7094222.00
	Furniture grant	2611905.00		Silver Jubilee Bhawan Constn	3021823.00
	Equipment grants	8500000.00		Equipment	845225.00
				UGC- RFSMS Fellow	1599658.00
14	Other Grants				
	Project & Fellowship Grant	25505369.00	16	OTHER GRANT EXPENSES	
	DST Grants	3322000.00		Project & Fellowship	20981215.00
	Scholarship/ Stipend	460825.00		Fist Prog. Dept.	765661.00
	BIF- Microbiology	776000.00		Scholarship/ Stipend	540425.00
				EIA Project	114552.00
				BIF Expenses(Microbiology)	470715.00
15	RECEIPTS FROM CENTRES		17	OTHERS PAYMENTS	
	CMC Computer Centre	421800.00		P FUND(CPF+VPF+GPF)	7416710.00
	Computer centre	376350.00		Prof. Tax	541935.00
16	NSS			Group Insurance	260800.00
	Grant received from Govt.	5812500.00		Consumer Loan	5562.00
	Interest on SB A/C	200293.00		Itax	8316955.00
				I Tax Contractor	889341.00
				Cooperative Loan & Thrift Fund	4330255.00
				House Building Loan	573920.00
				Sales Tax	267875.00
				SSLIP	1944480.00
				House Building Loan (coop)	848150.00
				PF DDE	379700.00
				Deduction Misc.	102410.00
				Pension Fund	3400000.00
				Contractor & Supplier	24085529.00
17	OTHER COLLECTIONS				
	P FUND(CPF+VPF+GPF+PF LOAN)	7416710.00	18	FIXED DEPOSIT INVESTMENT	70525000.00
	Prof. Tax	541935.00			
	Group Insurance	260800.00	19	REFUND OF DEPOSIT	
	Consumer Loan	5562.00		Security Deposit Refund	3555987.00
	I Tax	8316955.00		CESS	45577.00
	I Tax Contractor	889341.00		Refund of Caution	153100.00

				Money	
	Cooperative Loan & Thrift Fund	4330255.00			
	House Building Loan(Bank)	573920.00	20	EMPLOEES' G.I. PAYMENT	
	House Building Loan (coop)	848150.00		G I CLAIM PAYAMENT	177169.00
	Sales Tax	267875.00			
	SSLIP	1944480.00	21	CENTRE EXPENSES	
	PF DDE	379700.00		Computer Center	6729.00
	Misc. Deduction	102410.00		CMC Computer centre	30410.00
	Contractor & supplier	29223271.00			
			22	ADVANCE PAYMENT	
				F A	1880000.00
				Advance	2734087.00
18	Fixed Deposit Encashment	41000000.00	23	SELF FINANCED COURSE	
				Electronics Dept. Exp.	35115.00
19	DEPOSIT RECEIVED			Micro Bio. Dept. Exp.	51125.00
	Caution Deposit - Hostel	227150.00		BMLT	38450.00
	Security Deposit	42416.00		Aquaculture Dept. Exp.	94398.00
	Earnest Money	386936.00		MCA	89810.00
				Remote Sensing & Gs	97885.00
				COMP. SC	64725.00
				SANSKRIT	92475.00
20	ADVANCE RECOVERY			MBA	498560.00
	F.A	1443536.00		Mass Communication	320760.00
	Advance	2391913.00		SOCIOLOGY	6450.00
21	EMPLOEES' G.I. CLAIM RECEIPTS		24	CLOSING BALANCE	
	G I CLAIM RECEIPTS	148194.00		Cash	0.00
				Petty Cash	1.50
				CI/6	30580.21
22	General Fund			SBI-11161738850	1710989.79
	Endowment Fund	0.00		UCO SB -273	18648598.25
				UCO FD Interest A/C(1346)	2697843.49
				SB-3198	33085978.80
				SB- 2824	2498298.88
				UCO - 3251	1980949.00
				UCO - 3252	24180.51

				UCO-SB-CAL8062871	(41,876.00)
				UTI Bank	984243.00
				UCO-8638 (DRS-ENGLISH)	856218.00
				UCO-8645 (DRS-CHEMISTRY)	1991899.00
				UCO-8652 (DRS-PHYSICS)	3603958.00
				NSS	
				Cash	208.56
				UCO-1502	9658483.49
	TOTAL	427379393.82		TOTAL	427379393.82

b) Year -2011

<u>consolidated income & expenditure account for the year ended 31.03.2011</u>							
	<u>expenditure</u>	<u>sch.</u>	<u>amount (rs.)</u>		<u>income</u>	<u>sch.</u>	<u>amount (rs.)</u>
to,	administrative expenses	19	1,833,280.00	by,	fees from student	8	5,336,402.00
to,	convocation expenses	20	773,854.00	by,	misc. fees from student	9	281,435.00
to,	communication expenses	21	337,364.00	by,	student hostel fees	10	876,055.00
to,	educational expenses	22	1,103,550.00	by,	other receipts	11	33,915,756.00
to,	examination expenses	23	13,549,704.00	by,	pre & post exam. fees	12	3,960,678.00
to,	students services	24	1,234,899.00	by,	fees for examination	13	20,979,902.00
to,	contingency expenses	25	796,227.00	by,	sale proceeds	14	2,133,026.00
to,	university publication	26	42,030.00	by,	university affiliation fees	15	4,461,350.00
to,	supplies and services	27	6,681,320.00	by,	student service	16	820,802.00
to,	repair and maintenance	28	3,285,119.00	by,	others course fees	17	15,621,434.00
to,	other expenses	29	2,117,588.10	by,	state govt. grant	18	171,001,695.00
to,	training course expenses	30	25,292.00	by,	others receipts	35	2,291,668.00
to,	cmc computer centre expenses	31	15,490.00				
to,	establishments expenses	32	149,706,518.00				
to,	pension & retirement benefit	33	20,500,980.00				
to,	self financed course expenses	34	1,027,720.00				
to,	others payments	35	4,873,182.00				
to,	depreciation on assets	1	23,136,327.00				
to,	income over expenditure		30,639,758.90				
	<< total>>		261,680,203.00		<< total>>		261,680,203.00

c) Year -2012

consolidated income & expenditure account for the year ended 31.03.2012								
	expenditure	sch.	amount (rs.)			income	sch.	amount (rs.)
to,	administrative expenses	19	9,070,058.00		by,	fees from student	8	4,471,835.00
to,	convocation expenses	20	49,700.00		by,	misc. fees from student	9	277,787.00
to,	communication expenses	21	419,318.00		by,	student hostel fees	10	880,525.00
to,	educational expenses	22	1,825,208.00		by,	other receipts	11	16,384,020.75
to,	examination expenses	23	13,706,135.00		by,	pre & post exam. fees	12	2,849,969.00
to,	students services	24	2,768,419.00		by,	fees for examination	13	23,300,815.00
to,	contingency expenses	25	1,143,169.00		by,	sale proceeds	14	2,213,327.00
to,	university publication	26	74,746.00		by,	university affiliation fees	15	6,148,400.00
to,	supplies and services	27	6,745,351.00		by,	student service	16	1,043,912.00
to,	repair and maintenance	28	3,472,129.00		by,	courses with enhanced fees	17	15,099,435.00
to,	other expenses	29	1,767,111.10		by,	state govt. grant	18	170,157,006.00
to,	training course expenses	30	53,135.00		by,	others receipts	35	2,995,793.00
to,	cmc computer centre expenses	31	12,625.00					
to,	establishments expenses	32	137,261,623.00					
to,	pension & retirement benefit	33	18,716,633.00					
to,	courses with enhanced fees expenses	34	1,234,306.00					
to,	others payments	35	3,733,240.00					
to,	income over expenditure		43,769,918.65					
	<< total>>		245,822,824.75			<< total>>		245,822,824.75

d) Year : 2013

Income & expenditure Accounts for the period 01.04.2012 to 31.03.2013							
Expenditure	Ann exure	Amount	Amount	Income	Anne xure	Amount	Amount
Indirect Expenses	A		264319196.48	Indirect Incomes	B		292885214.29
Administrative Expenses		13054591.00		Affiliation Fees		6412190.00	
Computer Centre		1073985.00		Fees From Examination		28800246.00	
Depreciation on Fixed Assets		23284847.00		Fees From Self Financed Courses		9050610.00	
Educational Expenses		2394737.00		Fees From Student		7548816.50	
Examination Expenses		15515766.00		Grants Received From State Govt.		194806201.00	
Other Expenses		3285478.48		Other Fees From Students		1168490.00	
Pay &		1753281		Other Income for		32905910.	

Allowances		74.00		Development Purpose	00	
Repair & Maintenance		17440662.00		Other Receipts		4576210.29
Self Financed Courses		165256.00		Pre & Post Examination Fees		2942154.50
Student Services		830407.00		Reciept From Computer Centre		7000.00
Supplier & Services		11885895.00		Sale Proceeds		3276796.00
University Publication		59398.00		Students Services Fees		1390590.00
Excess of Income over Expenditure			28566017.81			
Total			292885214.29	Total		292885214.29

6.4.5 Efforts taken by the University for Resource Mobilization

The University has made continuous efforts for mobilization of resources and increasing the University's own revenue. In fact the University has little scope to procure funds from sources other than the UGC, State Govt. or Central Govt. grants. But the University makes all efforts to mobilize resources to increase own revenue, though it is not sufficient to meet the basic needs of the University.

The following are some of the specific steps taken by the University to increase the resources:

- Endowment Fund
- Affiliation/ Registration fees
- Sports fees
- Income from Self Financing Courses
- By increasing the cost of various types of forms.
- Mobilization of resources by Plantation of trees
- Revenue from House Rent from the staff quarters.

6.4.6 Provision for the University to create a corpus fund

The University has made a modest attempt to create a corpus fund out of its own limited resources. The details are as follows:

- 1) Development Fund.....Rs. 2,84,00,000.00/-
- 2) Superannuation benefit fund.....Rs. 3,70,00,000.00/-
- 3) Endowment fund.....Rs. 9,27,100.00/-

Total → 6, 63, 27,100.00/-

6.5. Internal Quality Assurance System

6.5.1. Academic audit of the departments

The University conducts academic audit of the departments every year with some specific goals, viz., i) to motivate the teachers to aim constantly at quality sustenance activities ii) to encourage teachers to improve their professional grades iii) to review the functioning of departments and their facilities iv) to evaluate individual teacher performance in teaching-learning process and v) to enable the faculty to work with innovations in higher education.

Information is gathered on members of the faculty, their research activities and research projects (major and minor), the departments' publication in books and journals, seminar and conferences attended by the faculty members and also organized by the departments. The

important progress and achievements are included in the report of IQAC. The information from all departments is compiled in the annual Reports of the University.

6.5.2. Specific measures taken by the University to improve teaching, learning and evolution

Based on the recommendations of the academic audit the university has taken some steps to improve the teaching –learning process. The ICT facility has been extended in most of the academic departments. The use of ICT in the teaching –learning process has been envisaged to enable upgrading the teaching pedagogy. It enhances the capabilities of the teachers as facilitators of learning. The use of ICT also promotes self-learning and helps the students to gain knowledge at their own learning pace. The teachers are trained to use the slides, transparency sheets and power point presentations. The students are also trained to use power point presentations. In many of the departments, students use ICT facility to defend their dissertations.

Another important recommendation which is currently in practice is the continuous internal assessment of the students. The introduction of internal assessment system has enhanced the involvement of the students in learning process. Their presence in the class and interaction with teachers has been markedly increased.

Based on the information included in the annual report and issues discussed in the departmental committees, decisions are taken in higher committees like board of studies, Faculty council etc. and funds are allocated for research activities, organization of seminar and conference and for overall improvement of teaching and learning.

6.5.3 Continual review of the teaching-learning process

The Faculty council of postgraduate studies and Internal Quality Assurance Cell (IQAC) are the central bodies to review the teaching learning process continuously.

The following is the structure of the Faculty council:

1. The Vice chancellors - chairman
2. Dean of the faculties
3. Head of the departments
4. All professors of the Departments
5. Four teachers other than professors
6. An external member nominated by the Vice-Chancellor
7. Three teachers from affiliated colleges.

Structure of IQAC:

1. Chairman : The Vice-Chancellor:
2. Members : a) Eight Teachers from the Departments
b) One Administrative Official :
c) Three External Experts :
3. Director : Member-Secretary

The IQAC performs the following functions based on the guidelines of UGC:

- Development and application of quality benchmarks/parameters for the various academic and administrative activities of the university;
- Facilitating the creation of a learner-centric environment conducive for quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process;

- Arrangement for feedback responses from students and other stakeholders on quality-related institutional processes;
 - Dissemination of information on the various quality parameters of higher education;
 - Organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles;
 - Documentation of the various programmes/activities of the university, leading to quality improvement;
 - Development and maintenance of Institutional database for the purpose of maintaining /enhancing the institutional quality;
 - Preparation of the Annual Quality Assurance Report (AQAR) of the university
- Issues related to student admission, teaching and learning, examination, infrastructure, syllabus etc are discussed in the meetings of the departmental committees and Board of studies. The major decisions are taken in the Faculty Council meeting and they are sent to the Executive council for ratifications and implementation.

6.5.4 Contribution of the IQAC towards institutionalizing quality assurance strategies and processes

IQAC comprising external and internal members deliberates on quality related issues and forwards to statutory authorities like Faculty council, Executive council for implementation and necessary action.

The University has made sincere efforts to institutionalize the process of internal quality checks by introducing the academic audit system for university departments to have a realistic view of the present academic standards of the University. The academic audit is planned as an educational exercise to assess and improve the performance of teachers, students, administrative staff and the whole institution in a holistic manner. The internal quality checks that are adopted include proforma based information on students' feedback of teaching – learning process, self-appraisal by teachers. The IQAC also looks after the compliance of UGC norms in all academic functions of the University. Another important aspect is the administrative transparency. The system for providing information to the needy as per Right to Information Act has been adopted.

6.5.5 Decisions of the IQAC placed before the statutory authorities of the University for Implementation

All the decisions with respect to the recruitment and promotion of faculty members, student's feedback, self assessment Reports (SAR) of the teachers, infrastructure and environment for better teaching learning and faculty improvement are forwarded to the statutory authorities for implementation.

Based on the academic audit a 'Self Assessment Report (SAR)' has been recommended. In this recommendation every teachers is required to submit SAR regarding their teaching and research performance and administrative activities at the end of the academic session. It was placed in the Executive council of the university, where the proposal was approved. The registrar section of the university has issued an official notification on this matter.

The IQAC formulates the criteria on the basis of the UGC guidelines for direct recruitment of the teachers of the university. The proposed guidelines for direct recruitment has been placed in the Executive Council and approved. The required notification has been made by the Registrar section.

The recommendation of IQAC regarding the student feedback system (evaluation of teachers by the students) has been implemented by the university authority.

6.5.6 External members on the committees of the IQAC

The IQAC has external members from other universities; they share their experience and best practices in their institutions and suggest measures for improvement in quality in academic and administrative activities. They contribute by way of impartial assessment of the strength and weakness of the teaching –learning process, exchanging advancements in the design of curriculum concerned, locating assistance in terms of academic inputs, etc.

6.5.7 Study on the incremental academic growth of students from disadvantaged sections of society conducted by the IQAC

The incremental academic growth of the students from the disadvantaged sections of the society has been studied by IQAC. Special classes / tutorial classes for slow learners have helped to enhance the performance of these students in the regular curricular examination. The University has mechanism to get information on the number of SC/ST/OBC students in the department. Special classes are arranged for such student under Merged Scheme of the UGC.

6.5.8 Policies for the periodic review of administrative and academic departments, subject areas, research centers, etc.

The policies for review of administrative and academic staff mainly involve reviewing inputs from stakeholders including students, parents, alumni, employers etc. The constraints are identified based on the analysis and review of their feed-back or inputs. Accordingly, corrective measures are converged upon.

For the administrative sections priority is given for computerization and networking of different sections , e. g., Pay Section, Examination Section, Admission Section, Library etc. Computer training programme for nonteaching staff is frequently arranged. The examination section is able to speed up the examination process and publication of results using computer technology.

IQAC input has led the University to introduce some new postgraduate programmes in cutting edge areas like Biomedical Laboratory Sciences, Clinical nutrition, Quality Control and Assurance in Microbial Technology etc.

Different committees and statutory bodies of the university review their functioning and suggest policies and measures for improvement of administrative and academic activities. The achievements and activities of the departments and faculty members are recorded in the annual Report.

CRITERION VII: INNOVATIONS AND BEST PRACTICES

7.1 Environment Consciousness

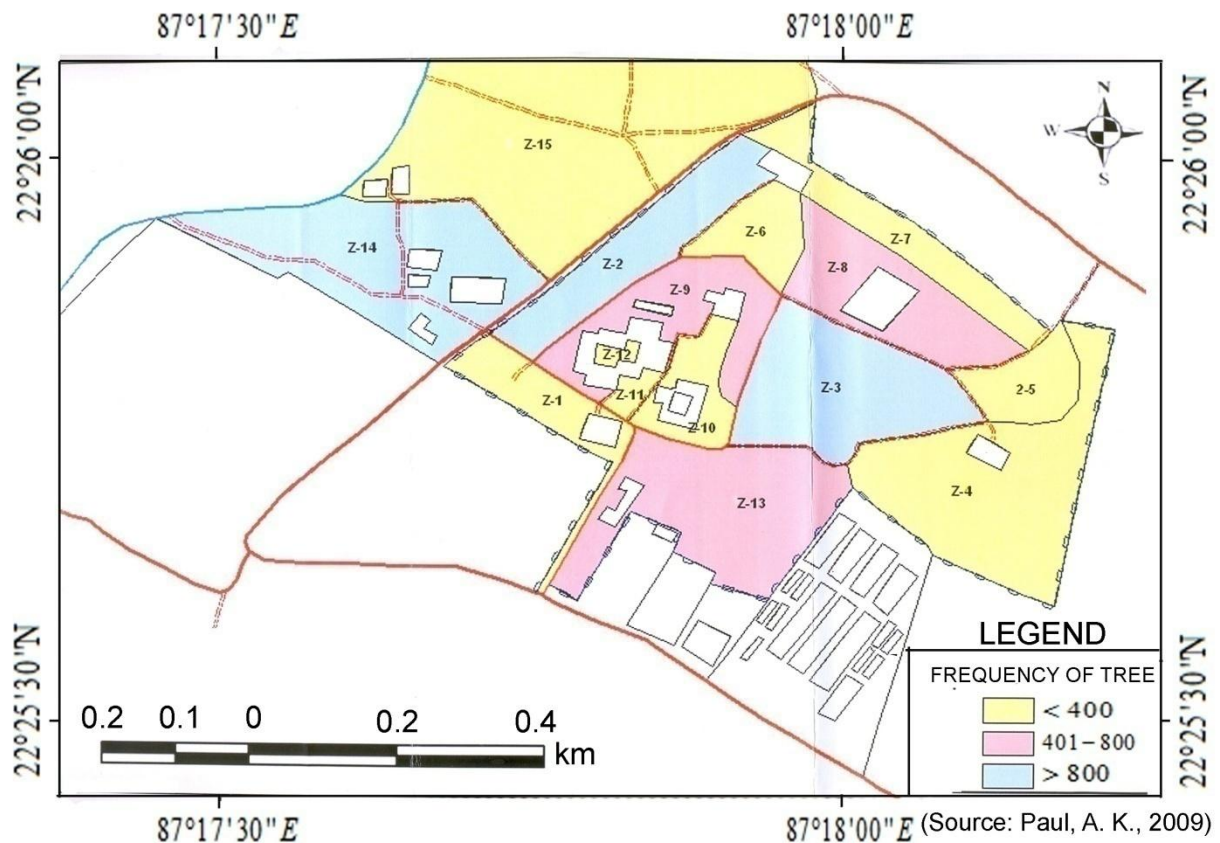
7.1.1 Green Audit of the campus

The department of Botany and Forestry and the department of geography have undertaken the green audit of the campus. The major trees in the campus are numbered and a list is provided below. A map showing the density of trees in different region is attached below the list.

Table: List of different trees in university campus

Tree name	Number
1. Butea monosperma	15
2. Polyalthia longifolia	110
3. Anacardium occidentale	204
4. casuarina equisetifolia	52
5. Acacia auriculiformis	130
6. Caesalpinia sp.	67
7. Dalbergia sissoo	73
8. Ficus cunea	13
9. Terminalia arjuna	23
10. Alstonia scholaris	35
11. Tecoma sp.	53
12. Alamunda sp.	37
13. Mychelia champaca	3
14. Lagerstroemia flos- riginae	12
15. Thuja sp.	20
16. Phoenix sylvestris	22
17. Psidium guajava	57
18. Zizyphus sp.	123
19. Eucalyptus sp.	500
20. Mangifera indica	113
21. Duranta repens	423
22. Aegle marmelos	42
23. artocarpus heterophylla	12
24. Albezia sp.	3
25. Acacia holoceres	152
26. Casia siamiae	62
27. shorea robusta	08
28. Tectona grandis	32
29. Anthocephalus sp.	22
Garden plants	
30. Calendula sp.	42
32. Tegetes petula	38
33. salvia sp.	14
34. Ixora arborea	53
35. Artemesia sp.	12
35. Dianthus sp.	18
36. Hibiscus sp.	12
37. Thevetia sp.	11
38. Nerium indica	22
39. Clitoria sp.	15

VEGETATION ZONE MAP OF VIDYASAGAR UNIVERSITY CAMPUS



7.1.2 Initiatives taken by the university to make the campus eco-friendly

- **Energy conservation:**

The University is making conscious effort for energy and water conservation. All the stake holders are being educated to switch off electric points whenever the utility of the point is not absolutely necessary. Everyone is advised to switch off the computer when not in use. The university is switching over to low power consuming lamps like CFL lamps and LED lamps where ever possible. The University has also used renewable source of energy especially solar energy for some of its lighting and heating requirements and plans to switch to solar energy sources in a big way in near future.

- **Use of renewable energy**

Total number of 54 Solar lights have been installed at different locations on the campus of Vidyasagar University.

University authority has decided to install solar-heaters for all the student hostels serially to provide hot water in the kitchens and the toilets of the hostels as well as more Solar lights in the other areas on the campus.

An application for granting funds amounting Rs. 60, 00,000 (Rupees sixty lakhs) for this purpose have been placed before the Higher Education Department, Government of West Bengal.

- **Water harvesting**

Roof-top rain water harvesting is practiced in the university since 2012 within the campus. The project was implemented to use the rainwater after treatment for different purposes. The roof-top space is utilized for holding rainwater by large-size tanks, and in the next stage the crude rainwater is transferred through pipelines to the treatment centre (located on the ground surface) for natural filtering process through a sediment tight infiltration chamber. The filtered rainwater through the sediment layer made by different grain sizes is reserved in another tank connected with infiltration chamber for final uses.

The treated rainwater can be utilized for laboratory uses, irrigation uses into horticulture garden, and also for other purposes of selective uses within the campus.

- **Check Dam construction**

Construction of Check Dam across the channel gradient or against the slope of the land for accumulating surface runoff can produce storage of rain water. This is an essential task of the people of dry land area for different uses of storage water.

Vidyasagar University is located adjacent to dry land areas of Western Midnapore. A Check Dam is located in the university forest area close to the campus gate. Students of Geography and Environment Management used to visit the Check Dam for study and to monitor its performance in the rainy season.

Major purposes of the Check Dam are:

- i) Recharging groundwater from the reservoir created by Check Dam,
- ii) Small scale irrigation in the surrounding area for producing crops and flowers.

- **Efforts for Carbon Neutrality**

- (i) The university consciously celebrate one day in a year for plantation of trees and encourage all its stake holders to plant and nurture at least one tree during their stay in the campus.
- (ii) Inside the academic complex the vehicular traffic is restricted.
- (iii) Smoking is strictly prohibited in the academic complex
- (iv) All the stake holders are advised to switch off the powerpoints and laptops, computers when not in use
- (v) The university regularly organizes seminars on environment protection and strives to increase consciousness towards environment protection among the stake holders as well as nearby habitats.

- **Plantation**

For building the green campus and beautification of the campus, and for making vegetation cover on the bare surface, plantation activities are undertaken by the university. University authority with different administrative wings plants various sapling trees in the beginning of every rainy season along the roadsides and on the bare space of the entire campus.

The selection of sapling plants for the above purpose is decided on the basis of ecosystem service, flowering potentiality and suitability to the indigenous soil characters. Initially, cashew nut trees were planted within the campus areas for soil conservation, making semi-natural forest patches, and also for economic benefits of the university. Now, university forest is developed in different sectors over the lateritic soil for serving the above purposes.

Students of Botany, Geography, Environmental Science, and Remote Sensing & GIS departments are also studying on forests for their project works within and around the campus in which semi-natural forests are developed by plantation. Currently, plantations are also made along the roadsides, fencing areas of the campus, within the children parks of

residential campus of the university. Some of the plantation projects were sponsored by government organizations within the university in the near past.

- **Hazardous Waste management:**

For hazardous waste management the University has taken the following steps

A 18 (eighteen) ft deep well (soak pit) is being dug to dump all hazardous waste material in it with standard specification.

The outlet of the basins and waste pipes of the laboratories which use radioactive materials is directly connected to the well

- **e- Waste management:**

The e-waste is minimized through

- (i) The policy of buy-back system the University is following with the suppliers.
- (ii) If possible upgrading the system before opting for replacement or dumping for the buyback system

7.2 Innovations

7.2.1 Innovations introduced during the last four years which have created a positive impact on the functioning of the university

Academic Innovations

- i. Introduction of new courses in emerging areas with applied orientation with a blend of traditional and nontraditional subjects and specialized courses comprising cross disciplinary learning
 - ii. Introduction of autonomous P.G. centers in constituent colleges.
 - iii. Introduction of Innovative teaching-learning methods with use of ICT and providing adequate tutorials , student seminar, investigative project in class routine
 - iv. UG and PG online admission, which have brought transparency to the admission process.
 - v. On the spot evaluation which decreased substantially the period of evaluation and result declaration process
- These activities have increased the enrolment ratio in higher education and development of research culture in affiliated colleges.

Administrative Innovations

- (i) Administration automation
- (ii) E-tendering
- (iii) Uploading of decisions and resolutions of all the statutory bodies like court, executive council, faculty council, board of research studies in the official website of the university
- (iv) E-based grievance redressal system

All these policy innovations have led to transparency in the administration and sensitize the administration to the need of the stake holders of the University

7.3 Best Practices

While continuing with the old practices, the university has adopted many new practices. All the activities of the University are guided by the two distinct characteristics of the University as stated in the act viz:

- i) to develop as a non-traditional institution of higher education
- ii) to make such academic studies as may contribute to the improvement of economic conditions and welfare of the people in general and the tribal people in particular

The courses that are being offered in the University thus has non traditional components and can be visualized from the nomenclature of some of the departments

- Applied Mathematics with Oenology with Computer Programming,
- Aquaculture Management & Technology,
- Botany & Forestry,
- Bio-Medical Laboratory Science and Management
- Chemistry and Chemical Technology
- Clinical Nutrition & Dietetics,
- Geography and Environment Management,
- Human Physiology with Community Health.
- Quality Control and Assurance in Microbial Technology,
- Remote Sensing and Geographical Information System,
- PG diploma course in Applied Computer Science,
- Economics with Rural Development,
- Library and Information science,
- Commerce with farm management,
- Business administration,
- Philosophy and the life world,
- Political Science with Rural Administration,
- Mass Communication and Videography.

From among many of the activities undertaken by the university, the following two are identified as being the **two best practices**:

- (i) Academic innovations: **(a)** Introduction of new courses in emerging areas with applied orientation with a blend of traditional and nontraditional subjects and specialized courses comprising cross disciplinary learning **(b)** introduction of autonomous P.G. centers in constituent colleges.
- (ii) Backward area development program through research extension, NSS and post graduate project work (a component of course curriculum)

Best Practice No1

1. Title of the practice:

Academic Innovations:

(a)Introduction of new courses in emerging areas with applied orientation with a blend of traditional and nontraditional subjects and specialized courses comprising cross disciplinary learning

(b) Introduction of autonomous P.G. centers in affiliated colleges.

2. Objective of the practice

(a) Introduction of new courses in emerging areas

- (i) The new courses in emerging areas with applied orientation having a blend of traditional and nontraditional subjects and specialized courses comprising cross disciplinary learning have the potentiality to garner gainful employment.
- (ii) To build human resource with strong character and competence in these emerging areas and to inculcate confidence among the students to face the challenges in the changing realities both in global and local levels and to adapt to the fast evolving technologies

(b) Introduction of autonomous P.G. centers in affiliated colleges

Establishment of autonomous P.G. centers in affiliated colleges help to increase enrolment ratio in Post graduate courses and promote a culture of research in the constituent colleges. This is in conformity with the policy of Government of India on the spread of higher education especially in remote rural areas.

3. The Context

(a) Introduction of new courses in emerging areas

The challenging issues that needed to be addressed in designing and implementing the practice are as follows:

- i. Designing need based course curriculum which promote creativity among the students in these emerging areas. Involving Industry in curriculum formulation in branches, where they can identify their interest
- ii. Extension of credit based course curriculum with choice from a basket of courses going beyond the rigidity of science, humanities or commerce and arranging the class schedule to accommodate various combination of options
- iii. Transport of credits with flexibility in the place of learning
- iv. Inclusion of investigative projects in the curriculum and to spread it through three semesters so that the recess between the semesters can be utilized for the project work . The students will get a flavor of research and report writing.
- v. Inclusion of student seminars on advanced topics in the curriculum which is expected to make them learn visual and oral communication /presentation skill.
- vi. Inclusion of tutorial for problem solving, which will involve the students and help learn the subject
- vii. Creation of teaching and nonteaching posts in the new departments and recruitment of dedicated faculty to carry forward the department.
- viii. Adopting innovative teaching-learning methods using modern technology and ICT
- ix. Organizing seminars by academic and industry experts, for bringing the contemporary development on various issues to the students and learn entrepreneurial skill.
- x. Starting of add-on courses for development of proficiency and to breach the skill gap between the course curriculum and industry/job requirement
- xi. Arranging lectures on ethics and development in the human qualities to develop the students to a complete human being

- xii. Developing building space and providing furniture and equipment for the new departments
- xiii. Building state of the art class rooms
- xiv. Setting up modern teaching and research laboratories
- xv. Providing round the clock internet services with remote access facility so that the stake holders can access e-books and journals from their home. Extending adequate computation facility to all stake holders and encouraging students look for teaching materials of NPTEL and other advanced Universities
- xvi. Strengthening library resources with addition of e-books and journals in the added course and UGC – Infonet / inflibnet programme
- xvii. Special training for deficient students , Special training for competitive exams
- xviii. Establishment of Students Guidance and Counseling Center and Placement liaison

(b) Introduction of autonomous P.G. centers in affiliated colleges.

- i. Developing necessary infrastructure for conducting P.G. courses in constituent/affiliated colleges
- ii. Constitution of board of studies for the P.G. courses in the PG teaching colleges
- iii. Establishment of confidential section to handle examination and results of the autonomous P.G. Departments
- iv. To maintain the quality of the human resource graduated from constituent/affiliated PG teaching colleges

4. The Practice

(a) Introduction of new courses in emerging areas

In the last four years the new courses added are: Social Welfare (both in university and colleges)

Diploma Course in Office Automation and Internet Technologies, M.S.W, one year PG. Diploma Course in Applied Computer Science, Diploma Course in Advance Hardware and Networking Administration and Certificate Course in Basic and Advanced Java, M.A. Course in Santali and Hindi, M.Sc. in Nutrition& Dietetics, M.Sc. in Clinical Nutrition& Dietetics and PG Diploma in Quality Control and Assurance in Microbial Technology

There is lot of enthusiasm among the students of the locality in opting for these nontraditional application oriented courses, as these courses are job oriented. Some of these courses are unique and are developed only in this University

(b) Introduction of autonomous P.G. centers in affiliated colleges.

The list of Post graduate courses constituted during the last four years in the affiliated colleges are given below:

The setting up of P.G. centers in the affiliated colleges spread over the rural areas of the backward districts of Medinipur east and Medinipur west is a significant step towards the spread of higher education for the benefit of rural people.

The establishment of the P.G. centers in these colleges have significantly enhanced the academic atmosphere and developed a culture of research in the rural colleges

The limitations are twofold. First, most of the colleges, being state sponsored colleges, have problems in arranging development grants and in providing necessary infrastructure.

The second limitation is the quality control of the output. The university is in a process of consultation between the college authorities and different academic bodies of the University on putting quality checks of the products at either the entry or the exit level or somewhere in between.

Table 7.2: List of PG courses in affiliated colleges

Affiliated college s	PG courses
Midnapore College	Chemistry, Physics, Bengali, Sanskrit, Applied Mathematics , Zoology
Jhargram Raj College	Chemistry, Zoology, Bengali
Kharagpur College	Bengali
Tamralipta Mahavidyalaya	Bengali, History, Sanskrit, Zoology
Prabhat Kumar College, Contai	Physics , Bengali , English, Sanskrit, Commerce
R.N.L.Khan Women's College	Zoology
Rabindra Satabarshuki Mahavidyalaya, Ghatal	Sanskrit, Bengali
Panskura Banamali College	Computer Science , Chemistry, Bengali, History, Applied Mathematics, Geography, Physics
Mahishadal Raj College	Bengali, Chemistry
Vivekananda Mission Mahavidyalaya	Bengali, Philosophy
Belda College	Bengali, English
Egra S.S.B. College	Bengali
Bajkul Milani Mahavidyalaya	Sanskrit
Sevayatan Sikshan Mahavidyalaya	Education
Bhatter College,Dantan	Rural Management
Oriental Institute of Technology	Bio- Chemistry (Midnapore Campus) & (Burdwan Campus) , Bio-Technology (Midnapore Campus) & (Burdwan Campus)
Vidyasagar Institute of Health	Nutrition and Dietetics
AMIK, Durgapur	MSW
Vidyasagar School of Social Work	MSW , Psychological Counseling

5. Evidence of success

(a) Introduction of new courses in emerging areas

The success of a program is being judged by the interest created among the local students in opting for the courses as well as the final placement of the products graduated in these courses.

At the entry level the response is overwhelming with the number of applicants far exceeds the number of available seats. For example in Nutrition & Dietetics 191 students applied for admission against the available seats of 30.

The placement of the graduated students from these streams is satisfactory. For example, in the very first passing out batch in the Nutrition & Dietetics course out of 30 students, 10 students secured jobs in government and private sectors and others are self employed.

Many students have cleared competitive examinations like NET, SET, SSC, etc. The total number for the last five years is 1460.

(b) Introduction of autonomous P.G. centers in affiliated colleges.

The number of students who qualify with Honours in concerned subject from the University is quite large (For example In Physics the number of students qualified in the university in

2013 is 355) the number of applicants for admission to PG course in Physics and Technophysics is 573

The number of PG seats in the PG centre of University is 55. There is a large gap in the number of applicants and the available seats. This really is leading to a serious social problem. As such the University encouraged constituent colleges to start PG programs. For better administration and teaching based on available human resources available at different colleges, it was decided to grant autonomy to the colleges in running the P.G. courses. For example Physics P.G. courses are now conducted in three constituent colleges with each centre having 20 seats.

In all these colleges the demand for admission is on the rise. The qualities of the graduated students are satisfactory as their placement and their performance in competitive examinations especially NET/SET is impressive.

For example in 2013 out of 55 students qualified in Physics M.Sc. Examination 12 Numbers have qualified in NET/SET examination

Further the research culture in these colleges has developed impressively. In last five years the number of research projects they have bagged is....and the numbers of research papers the faculty members of the colleges have published are around . The relevant data acquired from these colleges, indicate that this practice of the University of starting autonomous P.G. centers in affiliated colleges is a success.

6. Problems Encountered and Resources Required

(a) Introduction of new courses in emerging areas

The most important problem encountered in starting of new problems being the resource mobilization. For starting a new department the minimum requirement being 6-8 Teaching posts , few nonteaching posts including laboratory instructors in science and application oriented courses, Building space, furniture, equipment, laboratory instruments etc. Each department need an initial setup fund to the tune of around 50 lakh and a yearly recurring grant of 120 lakh.

(b) Introduction of autonomous P.G. centers in affiliated colleges

Resource is again a major problem as the state sponsored colleges receive limited and very little development grant from the state government. The autonomous PG centres require strengthening of faculty strength, additional laboratories and classrooms, equipment for teaching and research laboratories.

The second problem being quality control, which the university is determined to ensure through periodic reviews, nominating experts in the board of studies for the P.G. courses in the college, check on their examination system etc. The

The university is also in a process of consultation between the college authorities and different academic bodies of the University on putting quality checks of the products at either entry or exit level or somewhere in-between.

Best Practice No2

1. Title of the practice:

Backward area development program through research extension, NSS and post graduate project work (a component of course curriculum)

2. Objective of the practice

To undertake outreach programs in the operational locality of the University for contributing to the improvement of economic and social conditions and welfare of the local populace in general and the tribal people in particular and to provide community service and academic consultancy wherever necessary.

Outreach programs in the University are supported by the students, teaching and supporting staff. The outreach programs are organized under the research extension schemes, P.G. curriculum based project work and under the banner of NSS units of the University.

- i. Extending consultancy to local projects like installation of solar heaters, solar lighting, biodiversity in crop, waste management, organic manure development, forestry, aquaculture, physiology and hygiene, rural development and panchayat management affairs etc
- ii. Training of teachers of the schools of the locality and arranging extension lectures in schools by University teachers –the move will result in enhancing the quality of the intake students in the university
- iii. Educating the tribal people on health, hygiene, their rights and many other issues through meetings, exhibitions and community participation through NSS programs

3. The Context

Widespread poverty, illiteracy, malnutrition, absence of safe drinking water and sanitary and living condition, poor maternal and child health services have been traced out in several studies as possible contributing factors for miserable health conditions prevailing among the tribal populace of the region in general and the women and child population in particular. Women are vulnerable to malnutrition, for social and biological reasons, throughout their life-cycle. One of the mottos set by the founding members of the University is the social and economic development of the tribal population of the region. The University from the date of inception has always kept this motto in the forefront of its decision making process and has conducted continuously outreach programs for achieving the goal. Some of the out reach programs are listed below.

- (i) 'Social Protection and Poverty Reduction: A Study with Special Reference to the Backward Region of West Bengal' (*A Major Research Project funded by ICSSR, Department of Economics with Rural Development since March 2012*).
To educate the rural tribal people on various social protection benefit schemes of the state and central government and examine the role of social protection on poverty reduction.
- (ii) Vulnerability of Home Garden Eco-Systems to Climate Change and its Impacts on Food Security in South Asia", a collaborative three country research project sponsored by Asia-Pacific Network (APN) for Global Change Research, conducted at Global Change Programme,
The objective is to emphasize the importance of home garden in the **food security** of the households in the context of climate change.
- (iii) documentation and translation of Dalit and Adivasi oral and folk literatures of West Bengal under the UGC SAP **for preserving and enriching the Tribal culture** of the region
- (iv) To compile the rich history of the region . It is worth pointing that many leaders of the cultural renaissance and social revolution in the mughal and british period belong to

this region. The two main tribal leaders of the tribal uprising Siddhu Kanu hails from this region.

- (v) To estimate water resources of the backward areas in the form of water assessment, availability and quality including the water use pattern through the river basin analysis. We advise the local people on the water quality and probable remedies for contamination
- (vi) Workshop & training arranged for the Women's Self-Help Groups of Different Districts of West Bengal through women study centre of Vidyasagar University. Along with various awareness points during workshops demonstration is arranged highlighting
 - a) Ergonomic aspects of material storage and handling
 - b) Workstation design and work tools
 - c) Machine safety
 - d) Work environment and control of hazardous materials
 - e) Welfare facilities
 - f) Work organization
 - g) Hygienic conditions at work place and better work posture
- (vii) Awareness and Training programme on 'Mother and Child Health and Nutrition' in this high infant mortality tribal belt by women study centre of Vidyasagar University
- (viii) Awareness and Training programme on 'Disease Prevention and Health Promotion of Women and Adolescent girls' by women study centre of Vidyasagar University
- (ix) **Awareness programme on 'Early marriage of Adolescent girls'** by women study centre of Vidyasagar University

The Challenging issue for designing these programs is to motivate the illiterate, generally reclusive tribal people, especially the female section to come and participate in the programs. The Panchayat system in West Bengal which is active for the last four decades is really helpful in motivating the people to participate. However lot has to be done to make them overcome their suspicion in the people out side their clan who organize these programs. The best possible solution is to identify progressive elements among the tribal people and take their full cooperation in making the programs success. The university can play a longer role in identifying government schemes for the development of the region and help the panchayat apply for funds and advising the implementation of these schemes.

4. The Practice

Outreach program through Research extension

Generally a field survey is being conducted before initiating any such outreach program. In case of Social Protection and Poverty Reduction program a field survey of 600 poor households spread on three backward districts of West Bengal namely, Purulia, Bankura and PaschimMidnapore is conducted. The survey resulted oin finding 21 social protection programmes. These programmes are classified as a) *Basic Securities* like, Public Distribution System, Antyodaya Anna Yojana, Annapurna Yojana, National Rural Health Mission, JananiSurakshaYojona, Total Sanitation Campaign ICDS, SishuSikshaKarmasuchi,

Madhyamik Siksha Karmasuchi, National Programme for Mid Day Meal, Books & Book Grants, Other Grants and Education for Minority Children and Indira Awas Yojana etc.; b) *Economic Securities* like, Mahatma Gandhi National Rural Employment Guarantee Programme, Swarn Jayanti Gram Swarajgar Yojana (Self-Help Group) and Procurement of Non-timber Forest Produces ; c) *Social Securities* like, Indira Gandhi National Old Age Pension, National Family Benefit Scheme, National Widow Pension Scheme, Indira Gandhi Matri Sahayog Yojana and Bi-Cycle for Tribal Girls etc. In each category of social protection coverage is assessed with at three elements: *Scope*, this is measured here by the range (number) and type of social protection branches to which the household or the members of the households are eligible; *Extent*, this usually refers to the percentage of persons covered within the whole population or the target group, by social protection measures in each specific branch; and *Level*, this refers to the adequacy of coverage by a specific branch of social security: for example, it can be measured by the level of cash benefits provided. In social health protection it may measure the amount of health-care costs covered by existing financial protection mechanisms. The level of coverage can also be measured by the quality of services provided. We have also assessed the consumption level and the multidimensional poverty aspect of the poor households. The study also analyses the role and impact of social protection programmes on the food security in particular and poverty in general of the households.

The department of English has documented and translated Dalit and Adivasi oral and folk literatures of West Bengal under the UGC SAP for **preserving and enriching the Tribal culture** of the region

The history department is compiling the history of the region with modern interpretation.

The department of sociology has undertaken a study on the Groveling Muslims Problems and Prospects – A Sociological Study in the District of West Bengal

To estimate water resources of the backward areas in the form of water assessment, availability and quality including the water use pattern through the river basin analysis and e advise the local people on the water quality and probable remedies for contamination

Dept of Geography and Environment Management has been engaged in data generation and analysis as important component of environmental inventory through intensive field surveys in backward areas under Post-Graduate and Ph.D programmes.

A study was conducted to compile the Tribal Health and Traditional Wisdom: A Study on the Health Care Practices of the Lodhas and Santals which have helped in identifying many rare medicinal plants.

Training programs organized by different centres for the benefit of tribal people

Various departments and centers have conducted **training programs** for the benefit of the local people. Some of the training programs are listed below.

The department of Zoology has organized many training programmes on coastal aquaculture, vermiculture, sericulture for imparting training to the farmers representing the backward society.

The following are the training programs organized by the by women study centre of Vidyasagar University for the tribal women folk.

- Workshop & training arranged for the Women's Self-Help Groups of Different Districts of West Bengal.
- A Workshop & training was arranged for the Women's Self-Help Groups of Different Districts of West Bengal on 31st March, 2010.
- A Training & workshop programme was held on 27th December, 2010 on 'Ergonomic counseling for the women working in agriculture'

- An Awareness and Training programme was held on 27th December, 2011 at Primary School at Midnapore in Medinipur (Paschim) district, West Bengal on ‘Mother and Child Health and Nutrition’.
- An ‘Awareness and Training programme was held on 8th February, 2013 on ‘Disease Prevention and Health Promotion of Women and Adolescent girls’
- An Awareness programme on ‘Health and nutrition of Female Docra Artisan’ also organized by the Women’s Studies Centre, VU on 9th March, 2013 at Bikna, Bankura.
- An Awareness programme on ‘Early marriage of Adolescent girls’ on 30th December, 2013 at Delua Primary School, Delua, Paschim Medinipur.
- A Training programme on ‘Mother and Child Health Care’ on 30th December, 2013 at Delua Primary School, Delua, Paschim Medinipur.

Outreach program through student project work:

The Post graduate courses in our University have project as an integral part of the course curriculum. Many of the projects are conducted in the tribal belt with an aim to educate them on various issues. Some of the projects taken up by our PG . students have the following themes

- Door to door survey** for assessing different aspects of community health among the rural and backward people.
- Awareness program** are frequently arranged for the working people of different backward areas regarding occupational health.
- Training programs** are also arranged **for agricultural and other backward workers** regarding good working posture, work method, safety at work, work environment etc. A training booklet has been developed in local language for this purpose. The booklet was mainly in pictorial format to cover illiterate and semiliterate persons in backward areas.
- Some research projects** have been conducted to assess the work related health hazards among the people including backward areas
- Some surveys have been carried out **in backward areas** about **some environmental problems** like Arsenic toxicity.
- Mutation tests** have been carried out for malaria control in Tribal Community of Jangal Mahal area: Novel genetic mutations observed in malaria parasites from patients in Bengal may hamper the effort to control malaria and highlight need to revise the existing primary treatment strategy. Studies in past have shown that *P. falciparum* resistance to chloroquine. emerges from *pfcr* gene mutation; chloroquine resistance in Purulia district is associated with mutations in other gene also.
- The students collect and generate data and relevant information on tribal communities**, status, health and nutrition of women, child health, children related problems, beggary, etc which help our student to get acquainted with the social issues problems of both the districts. These data may also help district administration in formulating development projects for the region.
- Through the community service of NSS unit** of Vidyasagar University many educative and hygiene programs were conducted in the tribal belt.

5. Evidence of success

The success of the program is two fold. The local community gains from the outreach programs . At the same time the faculty members have gained significant inputs which led to some outstanding research and the students learned through community work the hard facts

of village life and a sense of helping the poor folk to improve their quality of life – a sense of compassion, empathy and desire to work for development of village life.

If participation and involvement of the target population is considered as a measure of success, then the programs can be said to be a run out success. As regards the impact of the programs in enriching the quality of life, the different units of the university who really initiate the programs are being advised to follow up after some time and review the impact through a questionnaire and other methods.

The university also gains by getting significant inputs while carrying out the programs and survey. We just site two examples below:

- (i) A field survey conducted in 2004 by a group of the chemistry and chemical technology department in a few tribal villages among the mushroom eaters and non eaters has revealed that tumor occurrence among the mushroom eating tribal people is negligibly small in comparison with national average. This finding encouraged the department to search NEW DRUGS FOR CANCER THERAPY from indigenous origin of edible mushrooms. Some of the polysaccharides isolated from several mushrooms have been found active in immunomodulation and tumor inhibition. Different types of edible mushrooms, *Astraeus hygrometricus* (Kurkuri chatu), *Termitomyces striatus* (Paban chatu), *T. eurrhizus* (Durga chatu), *T. microcarpus* (Bali chatu), *T. robustus* (Sik chatu) originated in forest were identified and available in large amount in local market of Midnapore town. The mushroom *Astraeus hygrometricus* grows in association with the roots of Chir Pine (*Pinus roxburghii*) and Sal (*Shorea robusta*) trees in the lateritic forest of South Bengal during rainy season (June-July). *Termitomyces* group of fungus grows in the termite guts of the lateritic forest soil adjacent to Midnapore city during August-October.

The department is also active in exploring the **utilization of a compound extractable from the sawdust of a lant** as renewable for a green and sustainable society.

- (ii) Human Physiology department carried out a Ethnomedicinal **survey** in different villages of Paschim Medinipur to investigate the traditional medicinal practices of the healers/ medicine men. The survey has led to **Pharmacological studies** on the local plants used by tribal people for various ailments, cancer therapy and other health problems.

A survey on high rates of malaria and the drug use pattern in Purulia for cure of malaria has brought out some resistant bacteria to antibiotics. This led to significant research on **Mutation tests for malaria control in Tribal Community of Jangal Mahal and Purulia**. A patent on effective delivery of antibiotics through nanoparticles into drug resistant bacteria (No: **IPR/FA/11029-L/2011**) has been filed based on the research in this aspect.

6. Problems encountered and resource required

In conducting outreach programs aimed at the welfare programs in the tribal belt, the main problem is to motivate the illiterate, generally reclusive tribal people, especially the female section to come and participate in the programs.

To ensure participation we take the following measures

- (i) Involve as many as possible tribal students of the region in the program. Their participation and their appeals in their own language help in convincing our good intentions and ensure their participation.

- (ii) In all the programs we make it a point to involve the Panchayat system, which is active for the last four decades in West Bengal and is really helpful in motivating the people to participate.
- (iii) Involve different government agencies and NGOs to collaborate in the programs
- (iv) Coordinate with different agencies to tap the resources through various welfare schemes of the Government of West Bengal as well as Government of India.
- (v) More resources under different research schemes, which directly relate to the welfare of the local people, is to be sought from different funding agencies
- (vi) More fund under NSS programs is to be arranged
- (vii) The University will arrange resources from its own fund for these programs which is a part of the motto of the University enshrined in the act of Vidyasagar University.

7. Notes

Every institute always strives to induct new applied oriented courses, but in our university we blend the traditional subjects with some nontraditional and application oriented courses which have a better job potentiality.

Granting full autonomy to P.G. centers in affiliated colleges with necessary but supervisory checks is a new phenomenon. The autonomy ensures full utilization of the available trained human resources and flexibility and innovations in the teaching-learning method at the college level.