Evaluative Report of the Department

1. **Name of the Department**   *Computer Science*

2. **Year of establishment**   *1987*

3. **Is the Department part of a Faculty of the university?** *Yes, Faulty of Science*

4. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**
   - (i)   *B.Sc. (Computer Science)*
   - (ii)   *M.Sc. Computer Science)*
   - (iii) *M.C.A.(Computer Applications)*
   - (iv) *Ph.D. (Computer Science)*

5. **Interdisciplinary courses and departments involved:**

   Nil

6. **Courses in collaboration with other universities, industries, foreign institutions, etc.**
   Nil

7. **Details of programmes / courses discontinued, if any, with reasons**

   No

8. **Annual/ Semester/Choice Based Credit System :**

   Semester System

9. **Participation of the department in the courses offered by other departments**

   - i.   *Teaching a few courses for M.Sc. (Bioinformatics) students*
   - ii.   *Guiding Ph.D.(Bioinformatics) research scholar*
   - iii. *Guiding M.Tech. (Biomedical Engineering) Students*
   - iv. *Participation in the DST CIMS training Programmes*

10. **Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)**

	Sanctioned	Filled
Professor	2	1
Associate Professors	2	1
Asst. Professors	8	5

11. Faculty profile with name, qualification, designation and specialisation (D.Sc./D.Litt./ Ph.D./M.Phil., etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided for the last 4 years
Swapan K. Basu	M.Tech., Ph.D	Professor	Core areas of computer systems and sciences	31	01
Pramod K Mishra	M.Sc., M.Phil., Ph.D.	Associate Professor	High Performance Computing	12	03
S.Karthikeyan	M.Tech., Ph.D.	Associate Professor	Soft Computing Bioinformatics	22	05
Vivek K. Singh	M.Sc., D.Phil.	Assistant Professor	Social Networks	08	Nil
Divya Ranjan	M.Sc., Ph.D.	Assistant Professor	Software Engineering	07	Nil
Manjari Gupta	M.Sc., Ph.D.	Assistant Professor	Software Engineering	04	04
Vandana Kushwaha	M.C.A.	Assistant Professor	Computer Networks	04	Nil

12. List of senior Visiting Fellows, faculty, adjunct faculty, emeritus professors

Nil

13. Percentage of classes taken by temporary faculty–programme-wise information
Nil

14. Programme-wise Student Teacher Ratio:

Programme	Number of Students	Teachers
B.Sc I year	*60*	
B.Sc. II Year	*60*	*One Professor*
B.Sc. III Year	*12*	*Two Associate Professor*
M.Sc. I & II year	*56*	*Four Assistant Professor*
M.C.A.	*152*	
Three Programmes	*340*	*Seven Teachers*
Student Teacher Ratio 340:7		

15. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Academic Support Staff	Sanctioned	Filled
System Programmer	*Two*	*One*
Technical Assistant	*One*	*One*
Lab Attendant	*Two*	*Two*
Administrative Support Staff	**Sanctioned**	**Filled**
Office Assistant	*One*	*One*
Senior Clerk	*One*	*One*
Peon	*One*	*Filled with Temporary staff*

16. Research thrust areas recognized by funding agencies:

Nil

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies and grants received project-wise.

Name of the Faculty	Project Title	Funding Agency	Grant Sanction
Dr.P.K.Mishra	Complexity of distinguished shortest path algorithm	DAE	Rs.5,83,200
	Complexity of VLSI algorithms for high speed computing	UGC	Rs.80,000
	Complexity of parallel and distributed shortest path algorithm	CSIR	Rs.8,83,881
Dr.Manjari Gupta	Design and development of next generation e-content for software reuse by design patterns and frameworks.	MHRD	Rs. 7,00,000
Dr.V.K.Singh	Supervised and unsupervised learning techniques for classification , clustering, and sentiment labeling of web documents	UGC	Rs.10,90,800

18. Inter-institutional collaborative projects and grants received

    a) **All India collaboration** : *Nil*

    b) **International:** *Nil*

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, etc.; total grants received.

Nil

20. Research facility / centre with

- state recognition : *Nil*
- national recognition : *Nil*
- international recognition : *Nil*

21. Special research laboratories sponsored by / created by industry or corporate bodies :

Nil

22. Publications:

Number of papers published in peer reviewed journals (national / international)	*20*
Monographs	*Nil*
Chapters in Books	*Nil*
Edited Books	*Nil*
Books with ISBN with details of publishers	*One*
Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.):	*20*
Citation Index – range / average	*1*
SNIP	
SJR	
Impact Factor – range / average	*0-1*
h-index	*1*

23. **Details of patents and income generated**
    Nil

24. **Areas of consultancy and income generated**
    Nil

25. **Faculty selected nationally/ internationally to visit other laboratories in India and abroad :**
    Nil

26. **Faculty serving in**

a.	National committees	02
b.	International committees	01
c.	Editorial Boards	01
d.	UGC Project Assessment Expert	01

27. **Faculty recharging strategies: -**
    Regularly attending the Orientation Courses, Refresher Courses and Other lectures delivered by experts from outside/inside Universities

28. **Student projects**

Percentage of students who have done in-house projects including inter-departmental projects	100%
Percentage of students doing projects in collaboration with other universities / industry / institute	0%

29. **Awards / recognitions received at the national and international level by**
    - **Faculty:** *1*
    - **Doctoral / post doctoral fellows :** *1*
    - **Students :** *Nil*

30. **Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.**

Seminars/ Conferences/Workshops organized		
Name	**Funding Agency**	**Funding amount**
International Conference on modeling and simulation of Diffusive processes and Applications	DST CSIR NBHM BHU DST-PURSE ICMR	Rs.75,000/- Rs.1,00,000/- Rs.1,00,000/- Rs.43,500/- Rs.64,000/- Rs.25,000/-
HPCA-2012 (Conference)	BHU	Rs.29,500/-
HPCA-2010 (Conference)	BHU CSIR DAE	Rs30,000/- Rs.75,000/- Rs.50,000
HPCA-2009 (Conference)	CSIR DAE	Rs.70,000/- Rs. 40,000/-
IGAA-2010 (Workshop)	DST	Rs.3,50,000
IGAA-2011(Workshop)	DST	Rs.4,00,000

31. Code of ethics for research followed by the departments :

As per University guidelines

32. Student profile course-wise:

Name of the Course (refer to question no. 4)	Applications received	Selected Male Female	Pass percentage Male Female
M.Sc.	216M+130F	16M+12F	
M.C.A	6445M+1606F	50M+8F	
Ph.D.	+	6M+1F	

33. Diversity of students

Name of the Course (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Sc I year M.Sc II year	35.71%(10/28) 53.57%(15/28)	10.71% (3/28) 14.29%(4/28)	53.574 %(15/28) 28.57% (8/28)	0% 0.04%(1/28)
M.C.A I year MCA II year MCA III year	15.51(9/58) 16.67%(8/48) .07%(3/46)	60.35%(35/58) 41.67%(20/48) 71.74% 33/46	24.14%(14/58) 31.25%(15/48) 17.39%(8/46)	0.02%(1/58) 10.42%(5/48) .04%(2/46)
Ph.D	31.58%(6/19)	36.84%(7/19)	21.05%(4/19)	10.53%(2/19)

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Exam	Number of Qualified Students
NET	10 (as per info available with dept)
GATE	15 (as per info available with dept)
Civil Service	Nil (as per info available with dept)

35. Student progression

Student progression	Percentage against enrolled
UG to PG	40 %
PG to M.Phil.	N.A
PG to Ph.D.	Less than 1%
Ph.D. to Post-Doctoral	Less than 1%
Employed	
• Campus selection	60%
• Other than campus recruitment	39%
Entrepreneurs	Less than 1%

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	Nil
From other universities within the State	4
From universities from other States	3
From universities outside the country	Nil

37. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period

Three faculty members got their doctoral degree

38. Present details of infrastructural facilities with regard to

a)	Library	*Yes,* *Departmental library with books*
b)	Internet facilities for staff and students	*Provide to all students*
c)	Total number of class rooms	*Two classrooms and one Lecture Theater*
d)	Class rooms with ICT facility	*All*
e)	Students' laboratories	*Two*
f)	Research laboratories	*One*

39. List of doctoral, post-doctoral students and Research Associates

a) From the host university

Research Scholar	Post-doctoral	Research Associate
1. *Pankaj Singh (Sep'12)*		
2. *Sudhakar singh (Sep'12)*		
3. *Atul Srivastav (Sep'12)*	*Abhisek*	*Nil*
4. *Prashant Singh (Sep'12)*	*Mishra*	
5. *Manish Kumar Pandey (Sep'11)*		
6. *Richa Singh (Sep'11)*		

b) From other universities

Research Scholar	Post-doctoral	Research Associate
1. *Rajwant Rao (Sep'09)*		
2. *R.S.Yadav(Sep'09) Submitted*		
3. *Moktar(Sep'09) submitted*		
4. *Vijentra Pratap Singh(Sep'09) Applied for Temp Withdrawal*		
5. *Sayed Mojtaba hosseinirad (Mar'10)*		
6. *Sunil Kumar (Mar'11)*		
7. *Pawan Kumar (Mar'11)*	*Nil*	*Nil*
8. *Tapan Kant (Mar'11)*		
9. *Noopur Goel (Mar'11)*		
10.*Vandana Kushwaha (Mar'11)*		
11.*Radha Raman Chandra (Sep'12)*		
12.*Taha Ghassemi Sahebi (Sep'12)*		
13.*Panda*		

40. Number of post graduate students getting financial assistance from the university.

Nil

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

Not Applicable

42. **Does the department obtain feedback from**

    a. **Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?**

    Yes and All the faculty members were involved in the syllabus revision undertaken in May 2012 after thorough discussion among them

    b. **Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?**

    Present evaluation process is completely transparent. Any genuine problems, suggestion and difficulties from the students are taken care off immediately with in the departmental constraints

    c. **Alumni and employers on the programmes offered and how does the department utilize the feedback?**

    Frequent interactions with employers are regularly taking place during their campus placement visits and also through mails. Their feedbacks are very well taken care in order to further enhance the student's employability skills

43. **List the distinguished alumni of the department (maximum 10)** *Since the department is not very old Most of the students are well place in IT industries and their details are not available with the department*

44. **Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.**

    Lectures delivered by Subject experts

    a Prof. J.N. Singh, USA

    b Prof. A M Mathai, Canada

    c Prof. S. Krishna Murthy, Canada

    d Prof. Subir Ghosh, TIFR

    e Prof. Shyamsundar, TIFR

45. **List the teaching methods adopted by the faculty for different programmes.**

    a Multimedia demonstration

    b Conducting Tutorials

    c Encouraging meaningful classroom interaction by students

d *Providing supplementary learning materials for better understanding*

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
Encouraging the students to participate in the national level competitive Examinations and taking up remedial measures to enhance the student's skills and knowledge.

47. Highlight the participation of students and faculty in extension activities.
Participated in departmental workshops, conference and popular Lectures

48. Give details of "beyond syllabus scholarly activities" of the department.
Participating in conferences and few graduate students paper are accepted in the international conferences

49. State whether the programme / department is accredited/ graded by other agencies? If yes, give details.
No

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
Involved in the emerging and multidisciplinary research areas like Bioinformatics, Biomedical engineering, Data-mining and Network Engineering

51. Future plans of the department.
  a *Forming core research groups in the area of emerging and establish the state of art research laboratories in the following research areas:*
  (i) Network engineering
  (ii) Bioinformatics,
  (iii) Computational intelligence
  (iv) High performance computing and
  (v) Software engineering
  b *Strictly following the ISO norms for higher education in teaching-learning*
  c *Enforcing the high standard for effective academic Administration*
  d *Initiate the IT industry Consultancy projects*
  e *Initiate the strong industry-academic collaborative research*

52. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.
  a *Potential in producing very high skilled employable software professionals and competent research scientists*
  b *Lacks of research infrastructure as the department is not having any space for research activities at present.*
  c *Department has recently become eligible to apply for external departmental research funding and have potential to excel in research works. The research scholar strength has recently increased by many folds.*
  d *Still lacks state of art lab facilities MCA students and B.Sc. students*
  e *Teaching load is very high and hampering the research activities*

Post-accreditation Initiatives

If the university has already undergone the accreditation process by NAAC, please highlight the significant quality sustenance and enhancement measures undertaken during the last four years. The narrative may not exceed ten pages.