

4.7

**Department of Mathematical Sciences**

1. Name of the Department :Department of Mathematical Sciences
2. Year of establishment : 2008
3. Is the Department part of a School/Faculty of the university? : Faculty of the university
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.) : PG, Ph.D.
5. Interdisciplinary programmes and departments involved : Nil
6. Courses in collaboration with other universities, industries, foreign institutions, etc. : Nil
7. Details of programmes discontinued, if any, with reasons : NA
8. Examination System: CCSS
9. Participation of the department in the courses offered by other departments : Nil
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others) : 2

	Sanctioned	Filled	Actual (Including CAS & MPS)
Professor			
Associate Professor	1	Nil	
Asst .Professor	1	Nil	
Others – Course Director	1	1	1
Assistant Professor (on contract)	3	3	3

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance.

Name	Quali- fication	Designation	Specialization	No. of Years of Experi- ence	No. of Ph.D./ M.Phil. students guided for the last 4 years
T. Thrivikraman	Ph.D.	Emeritus Professor	Topology, Fuzzy Mathematics, Graph Theory	45	2
K. Madhusoodanan	M.Phil.	Course Director	Functional analysis	34	-
V. Damodaran	M.Sc.	Assistant Professor on contract	Differential Equations	34	-
Dhanya K.	M.Sc.	Assistant Professor on contract	Analysis	1	-
Sithara Ramesan	M.Sc.	Assistant Professor on contract	Algebra	1	-

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors : 1
13. Percentage of classes taken by temporary faculty – programme-wise information : 100 %
14. Programme-wise Student Teacher Ratio : 8:5
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual : Nil , Nil , 1 Office attendant (daily wages )
16. Research thrust areas as recognized by major 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, project title and grants received project-wise. : Nil
18. Inter-institutional collaborative projects and associated grants received : Nil
  - a) National collaboration
  - b) International collaboration
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. : Nil
20. Research facility / centre with
  - State recognition : Yes
  - National recognition
  - International recognition
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) : 39.
  - \* Monographs : Nil
  - \* Chapters in Books : Nil
  - \* Edited Books : Nil
  - \* Books with ISBN with details of publishers : Nil
  - \* Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) : Nil
  - \* Citation Index – range / average :
  - \* SNIP :
  - \* SJR :
  - \* Impact Factor – range / average :
  - \* h-index :
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 / institutions / industries in India and abroad: Prof.T.Trivikraman (TIFR)
26. Faculty serving in
  - a) National committees
  - b) International committees
  - c) Editorial Boards
  - d) any other (please specify) : Prof. T.Thrivikraman - Member Indian Mathematical society, Ramanujan Mathematical society, American Mathematical society.
27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs). : Nil

28. Student projects
- percentage of students who have done in-house projects including inter-departmental projects : 100%(part of the syllabus)
  - percentage of students doing projects in collaboration with other universities / industry / institute : Nil
29. Awards / recognitions received at the national and international level by
- Faculty : T.Thrivikraman Fellowship of National Academy of Science ,India
  - Doctoral / post doctoral fellows : Nil
  - Students : Nil
30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any
- National seminar on Topology And Its Applications to Computer Science And Related Areas. Funded by CSIR , NBHM ,UGC .
  - National seminar on New Vistas In Fuzzy Mathematics and Its Applications. Funded by DST, UGC, KSCSTE.
  - National seminar on Indian Tradition In Mathematics. Funded by ICHR, ICSCR, UGC.
31. Code of ethics for research followed by the departments : Academic excellence in areas related to Mathematics.
32. Student profile programme-wise:

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Sc. Mathematics 2009	116	1	14	100%	100%
M.Sc. Mathematics 2010	161	1	14	100%	100%
M.Sc. Mathematics 2011	168	0	15	-	100%
M.Sc. Mathematics 2012	188	2	18	100%	100%
M.Sc. Mathematics 2013	206	2	18	-	-
M.Sc. Mathematics 2014	210	0	20	-	-

33. Diversity of students

Name of the Programme (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
2009	100	-	-	-
2010	100	-	-	-
2011	93	-7	-	-
2012	90	-10	-	-
2013	-	-	-	-
2014	93	7	-	-

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

NET -2, GATE -1

35. Student progression

Student progression	Percentage against enrolled
UG to PG	NA
PG to M.Phil.	Nil
PG to Ph.D.	5 %
Ph.D. to Post-Doctoral	Nil
Employed	
<input type="checkbox"/> Campus selection <input type="checkbox"/> Other than campus recruitment	30%
Entrepreneurs	-

36. Diversity of staff

Percentage of faculty who are graduates of	
the same University	40 %
Other Universities within the State	60 %
Universities from other States	
Universities outside the country	

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

38. Present details of departmental infrastructural facilities with regard to

- Library :Yes
- Internet facilities for staff and students : for staff only
- Total number of class rooms: 2
- Class rooms with ICT facility : Nil
- Students' laboratories : 1 computer lab
- Research laboratories : Nil

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

- from the host institution/university :2 (doctoral ,part time)
- from other institutions/universities : Nil

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. : NA

42. Does the department obtain feedback from

- faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? : No
- students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback? :Yes, By discussion try to rectify the defects mentioned in the feedback.
- Alumni and employers on the programmes offered and how does the department utilize the feedback? : No

43. List the distinguished alumni of the department (maximum 10) :Nil
44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts: Seminars.
45. List the teaching methods adopted by the faculty for different programmes: Lecture method
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored? : By interacting with the students
47. Highlight the participation of students and faculty in extension activities. :Nil
48. Give details of “beyond syllabus scholarly activities” of the department. : By conducting invited talks by external experts on subjects, which are not included in the syllabus.
49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details. :Yes
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied: Research activities.
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department: We have experienced teachers, and an Emeritus Professor vastly experienced in the research field Motivated students fully focused on the studies, we are able to complete the syllabus and examinations on time. Weakness: - Lack of permanent lectures, adequate library and internet facilities, a full-fledged office.
52. Future plans of the department: - We have plans to give coaching to students appearing for NET and GATE examinations. Strengthen the department by having t permanent faculty. Also proposes to start M.Sc Industrial Mathematics and MPhil course in Mathematics.