



### Evaluation Reports of the Department of Mathematics

1. **Name of the department :**            **Mathematics**
2. **Year of Establishment:-**            **15-06-1961**
3. **Names of Programs / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):-**
  1. **UG (B.Sc Ist, II<sup>nd</sup>, III<sup>rd</sup> year)**
  2. **M. Phil.**
  3. **Ph. D.**
  4. **MATLAB training course (U.G.C-COC)**
4. **Names of Interdisciplinary courses and the departments/units involved:-**
  - **Department of Microbiology and Mathematics for MATLAB-lab.**
  - **Department of Computer Science, BCS for the interdisciplinary for the courses.**
  - **Department of Physics and Mathematics for the Research.**
5. **Annual/ semester/choice based credit system (program wise):-**
  - **Semester – S.R.T.M.U. Nanded.**
  - **Internal Theory exams.**
  - **Assignments/ Internal MCQ exam.**
6. **Participation of the department in the courses offered by other departments:-**
  - **The faculty member Dr. S.S.Bellale Guides the students of Ph. D. and M.Phil. in the department of Mathematics SRTM University, Nanded**
  - **The faculty member Dr. S.S.Bellale is in the panel referee of Ph.D., M.Phil. Thesis evaluation in Karnaka University, Dharwad.**
  - **The faculty member Dr. S.S. Bellale appointed as external examiner of three student for viva-voce examination of Ph. D. Degree.**
  - **The faculty member Dr. S.S. Bellale invited for guest lectures for the syllabi of M.Sc. mathematics, Basweshwer College, Latur.**



7. Courses in collaboration with other universities, industries, foreign institutions, etc.:-

The Ph.D., M. Phil., Research work of our department faculty member is in collaboration with the following departments

- Department of Mathematics Florida institute of technology, U.S.A
- Department of Mathematics Aligrah Muslim University, Aligrah.
- Department of Mathematics Karnatak University, Dharwad.
- School of Mathematics, SRTMU Nanded.
- Department of Mathematics, Ionia University, Greece.
- Mathematics Research centre, Ahmedpur, Latur.
- Mathematics Research centre, pt. Ravishankar university, Chattishgadh.
- The department of Mathematics has linkages with the research centers SRTMUN, Banaras Hindu University, IIT Mumbai, IIT Kanpur, Bits Pillani, Florida institute of Technology etc

8. Details of courses/program discontinued (if any) with reasons :-

**Nil**

9. Number of Teaching posts

	Sanctioned	Filled
Professors		
Associate Professors	-	-
Asst. Professors	<b>02(F.T.)</b>	<b>02 (F.T.)</b>
CHB	<b>00</b>	<b>00</b>

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	o. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. S. S. Bellale	M.Sc. B.Ed. Ph.D.	H.O.D.and Asst.Prof	Differential Equations, Numerical Analysis, Real Analysis,	5 Years	04



			Mechanics, Topology		
Mr. V. D. Gaikwad	M.Sc. M. Phil.	Asst.Prof	Algebra, Differential Equations, Geometry,	08 Years	Nil
Mrs. S.B. Birajdar	M. Sc. B. Ed.	Guest Lect.	MATLAB	06	Nil

11. List of senior visiting faculty:-

**Nil**

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:-

**Nil**

13. Student -Teacher Ratio (programme wise):-

**120:1**

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:-

**Nil**

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG :-

i. **Ph.D. - 01**

ii **M. Phil.- 01**

iii **P.G. - 01**

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:-

**Nil**

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:-

- Dr. S.S. Bellale- Major Research Project- UGC Grant received- 4,65,000/-

18. Research Centre /facility recognized by the University:-

**Yes**

19. Publications:

- \* a) Publication per faculty



♦ **Dr. S.S. Bellale - 11**

♦ **Mr. V.D.Gaikwad- 02**

\*Number of papers published in peer reviewed journals (national / international) by faculty and students

♦ **National - 07**

♦ **International- 06**

\*Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

○ Monographs:-	<b>Nil</b>
○ Chapter in Books:-	<b>01</b>
○ Books Edited :-	<b>01</b>
○ Books with ISBN/ISSN numbers with details of publishers:-	<b>05</b>
○ Citation Index :-	<b>112</b>
○ SNIP:- :-	<b>Nil</b>
○ SJR:-	<b>Nil</b>
○ Impact factor :-	<b>2.6</b>
○ h-index :-	<b>1.2</b>

20. Areas of consultancy and income generated :-

**Nil**

21. Faculty as members in

a) National committees: -

1. **Dr. S. S. Bellale**

- Member of the Indian Mathematical Society.
- Member of Marathwada mathematical Society.
- President of Balaghat Mathematical Sciences Development Society
- Secretary of Godawari Mathematical Society,
- Member of Indian Science congress.
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2. **Mr. V.D. Gaikwad.**

- Member of Marathwada mathematical Society.

a) International Committees:-

1. **Dr. Bellale S. S.**



- Member of Nonlinear Analysis Mathematical.
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**b) Editorial Boards:-**

**1. Dr. Bellale S. S.**

- Member of Editorial Board of Global journal of Mathematics.
- Reviewer of International journal of Mathematics (Springer Publication USA).
- On Editorial Board of Journal
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**22. Student projects**

- a) Percentage of students who have done in-house projects including inter departmental/programme:-

**10%**

- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies:-

**05%**

**23. Awards/ Recognitions received by faculty and students:-**

**1. Dr. S. S. Bellale**

- Dr. Bellale S. S. is awarded with “**Adarsh Shikshak Purskar**”, from Marathwada Social well fear Office, Aurangabad in Marathwada region, 02 March 2009.
- Dr. Bellale S. S. is awarded with “**KAI Sadashivrav Guruday Smaruti Purskar 2010**”.
- Dr. Bellale S. S. is awarded with “**Adarsh Shikshak Purskar**”, from Ratrwadi teacher Sciety, 05 Sept 2012

**24. List of eminent academicians and scientists/ visitors to the department:-**

- Vice-Chancellor Dr. S. B. Nimse, scientist in Fuzzy logic.
- The well known Mathematician Dr. B. C. Dhage.
- H.O.D. Mathematics of Karnatka University of Dharwad.
- Dr.S.N. Salunke, Director of Mathematics research centre SRTMU Nanded.
- Dr. R. M. Dhaigude, Director of Mathematics Centre, Dr. BAMU Aurangabad.
- Prof. A. K. Pani, IIT Mumbai.
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## 25. Seminars/ Conferences/Workshops organized &amp; the source of funding:-

## a)National

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- Department of Mathematics has successfully organized a national Seminar on **"Recent Advances in Mathematics"** on the date 24 and 25 February, 2012.
- Funding From UGC, Institution of college.
- Seminar competition is organized in Department by Marathwada Mathematical Society, source of funding from society.
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## b)International

Nil

## 26. Student profile programme/course wise:- ( 2012-2013)

Name of the Course/program	Applications received	Selected	Enrolled *M *F		Pass percentage
B.Sc. I <sup>st</sup> Year	182	112	52	60	82.00%
B.Sc. II <sup>nd</sup> Year	85	85	44	41	91.00%
B.Sc. III <sup>rd</sup> Year	58	58	30	28	100.00%
M. Phil.	05	02	01	01	
Ph. D.	04	03	02	01	
MATLAB Course	35	20	09	11	

\*M=Male F=Female

## Student profile programme/course wise:- ( 2013-2014)

Name of the Course/program	Applications received	Selected	Enrolled *M *F		Pass percentage
B.Sc. I <sup>st</sup> Year	213	121	58	63	
B.Sc. II <sup>nd</sup> Year	85	92	50	42	
B.Sc. III <sup>rd</sup> Year	72	72	40	32	
M. Phil.	05	02	01	01	
Ph. D.	04	03	02	01	



Name of the Course/program	Applications received	Selected	Enrolled *M *F		Pass percentage
MATLAB Course	35	20	09	11	

\*M=Male F=Female

### 27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B.Sc. I <sup>st</sup> Year	100%	00	00
B.Sc. II <sup>nd</sup> Year	100%	00	00
B.Sc. III <sup>rd</sup> Year	100%	00	00
M. Phil.	100%	00	00
Ph. D.	100%	00	00
MATLAB Course	100%	00	00

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. :- **No any information is Available**

### 29. Student progression

Student progression	Against % enrolled
UG to PG	10%
PG to M.Phil.	1%
PG to Ph.D.	15%
Ph.D. to Post-Doctoral	-
Employed <ul style="list-style-type: none"> <li>Campus selection</li> <li>Other than campus recruitment</li> </ul>	5%
Entrepreneurship/Self-employment	-

### 30. Details of Infrastructural facilities

a) Library:- **Books:- 1548/52, Journals/Periodicals:- 02**

b) Internet facilities for Staff & Students:-

**Students-12 Computers, Staff- 02 Computer**

c) Class rooms with ICT facility:- **01**



## d) Laboratories:-

01

31. Number of students receiving financial assistance from college, university, government or other agencies:- **234**

32. Details on student enrichment programs (special lectures / workshops / seminar) with external experts:-

- A seminar competition organized on the Date 24 Jan 2013 in the seminar hall nearly about 32 students participated in the competition, Net cash prize is distributed to the five students.
- "Madhawa Mathematics Competition" exam conducted by NBHM nearly about 70 student participated.
- The special lectures are arranged by the Faculty members for remedial class, and for the advance learning.
- The seminar is arranged for the students in the college for the preparation of IIT-JAM under the guidance of Dr. Bonder, Dr. D. S. Palimkar.
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33. Teaching methods adopted to improve student learning:-

The department follows interactive sessions, group discussion etc. All staff members use computer skill to manage power point presentation in teaching/learning. Apart from the normal lecture deliver method, students are asked to prepare for a lecture on a specified topic and asked to deliver the same in a couple of day.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:-

**NSS, Cultural programs**

35. SWOT analysis of the department and Future plans:-

**1. Strength:-**

- The faculty member of the department is actively engaged in the research, presented research papers in different countries in the international conferences.
- Demand ratio of students for mathematics is very high.
- Laboratory is well equipped with all types of mathematics software such as MATLAB, Latex, Math-type, Scilab,.
- The result is 100%.



- Freedom to teachers by the principal and management for the development in subject.
- Number of students in mathematics maximum as compare to other Colleges in the university.
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## 2. Weakness:-

- This area can not attract international students
- High Student ratio per Teacher.
- Students less inclination to adopt new methods of learning.
- Financial Weakness of students.
- Government not sanctioning the workload for Mat lab practical.

## 3. Opportunities:-

- Increasing the interest of students in Research.
- To develop the international research centre.
- To attract the foreign student toward this department for UG to Ph. D.
- Good opportunities in the private sector.

## 4. Challenges:-

- Increasing awareness amongst the students about computer education to solve the mathematics problems.
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## 5. Future plans:-

- To start the PG course in General Mathematics.
- To start the international Research centre in Mathematics department.
- To take the various projects in mathematics for the students and teachers.
- To publish the international journal in differential equations.
- To take the international conference on Nonlinear analysis.
- Development of Mathematical laboratories.



- Organize National /International Seminars/workshops.
- Develop a strong network with other institutions.
- Commencing Higher studies in Industrial Mathematics.
- Undertaking minor/ major research projects.
- Organize guest lectures and seminars.