

Shri Shivaji Education Society Amravati's
SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR
DEPARTMENT OF MATHEMATICS
INTERNAL ACADEMIC AUDIT
2020-2021

1. Vision and Mission of the Department.

Vision:

To motivate and simulate the students to develop their knowledge, basic concept in subject mathematics that ignites them for excellence and skills, which contributes to society.

Mission:

- To provide excellent knowledge of Mathematics for suitable career and groom them for National recognition
- To offer the courses that ensures to develop critical thinking, reasoning, problem solving and formulating the skills among the students
- To train the students for interdisciplinary application and research
- To build life skill through value –based education and service oriented programs

2. A. Faculty Strength:

Faculty	Recruited	Vacant	Remarks
Regular (UG)	03	01	
CHB(UG)	02	-	
Adhoc (PG)	01+ 02 CHB		
Non-teaching	01		

B. Faculty profile

Name	Highest Qualification	Designation	Specialization	Teaching Experience
1 Dr. G. R. Avachar	M. Sc. Ph. D	Professor	Theory of Relativity	33 Years
2. Dr. A. M. Pund	M.Sc., M. Phil, Ph.D	Assistant Professor	Relativity and Cosmology	9 Years
3. Dr. V.D. Chavan	M.Sc., M. Phil, Ph.D.	Assistant Professor	Relativity and Cosmology	5 Years

3. Students strength

A. (Summer 2021)

Year	Group	Number of Students Admitted
B.Sc. Semester II	PCM	57
	PCSM	56
	SCSM	46
	ECSM	33
	PEM	32
	CGM	17
	Total-	241
B.Sc. Semester IV	PCM	50
	PCSM.	53
	SCSM	32
	ECSM	30
	PEM	22
	CGM	15
	Total-	202
B.Sc. Semester VI	PCM	54
	PCSM	57
	SCSM	42
	ECSM	30
	PEM	29
	CGM	28
	Total-	240
M.Sc. I		26

M.Sc. II		23
Ph. D		04
Value Added Program		-

B. (Winter 2020)

Year	Group	Number of Students Admitted
B.Sc. Semester I	PCM	59
	PCSM	56
	SCSM	46
	ECSM	33
	PEM	32
	CGM	17
	Total-	243
B.Sc. Semester III	PCM	50
	PCSM.	53
	SCSM	32
	ECSM	30
	PEM	22
	CGM	15
	Total-	202
B.Sc. Semester V	PCM	54
	PCSM	57
	SCSM	42
	ECSM	30
	PEM	30
	CGM	28
	Total-	241
M.Sc. I		26
M.Sc. II		23
Ph.D		04
Value Added Program		-

4.Students Performance

A.Result Analysis (Winter 2020) UG & PG

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
	B.Sc.	Mathematics	241	240	99.58
	M.Sc.	Mathematics	23	23	100

B.Result Analysis (Summer 2021) UG & PG

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
	B.Sc.	Mathematics	240	237	98.75
	M.Sc.	Mathematics	23	23	100

C.Achievements

A. (Medals/Awards/Prizes at University level)

Sr. No	Name of the Students	Class	Title
	Nil	--	--

B. Merit Position of PG students in RTMNU (for PG Dept. only)

5. Students Progression:

Year	Name of Students enrolling into higher Education	Program graduated from
	UG to PG	M.Sc.
2020-21	1.Ku. Sujata S. Dhote 2. Ku.Vaishnavi A. Bhoyar	

	3.Ku. Rameshwari K. Parate 4.Ku. Anushree P. Barahate 5. Ku. Shital Thakare	
	PG to Research	-
	Placement	-
	On Campus	-
	Off Campus	-

(i) Students' publication in Extracurricular activity

Sr. No	Title of the paper	Name of Author	Title of Journal	Year of Publication
1.	Anisotropic Bianchi Type-III Cosmological Model in Scale Covariant Theory of Gravitation.	P. M. Lambat	International Journal of Mathematical Archive-12(2), 2021, 63-68	Feb. 2021
2	Drawing of a graph on a surface	R M Patne	International Journal of Mathematics and computer Science	2021

(ii) Students' Extension Activity

Sr. No.	Name of the Student	Participation
1.	Aachal Dhabarde	Online Mathematics Quiz --
2.	Mrunali Thawakar	Online Poster Competition
3	Rinky Gupta	Jingle Competition on Social distancing norms to be followed to stop Corona Virus
4	Rajesh Singh	National Level e-Quiz on Mathematics
5	Pallavi khotele	Training in an introductory workshop on GeoGebra

(iii) No. of Students pursuing higher course:

(iv) Students' participation in seminar:

Sr. No.	Name of the Student	Conference Type	Participation as
1.	Nil	--	
2.			

(v) Students' Learning course through online: Nil

6. Faculty

I. Research Paper Publications:

A. Total Number of publications:

i) International __03

ii) National ____01

B. Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self-citation
1. Scalar Tensor Theories of Gravitation in Ruban's	Anil S. Nimkar , Vaishnavi M. Wankha	Science and Technology Journal Vol. 8 Issue	July 2020		Department of Mathematics, Shri Shivaji	

Space Time	de and Ashok M. Pund				Education Society Amravati's Science College, Congress Nagar, Nagpur (M.S.) Ind	
2. Anisotropic Bianchi Type-III Cosmological Model in Scale Covariant Theory of Gravitation	P. M. Lambat and A. M. Pund	International Journal of Mathematical Archive-12(2), 2021, 63-68	February 2021		Department of Mathematics, Shri Shivaji Education Society Amravati's Science College, Congress Nagar, Nagpur (India)	
3. Drawing of a graph on a surface	R M Patne & G.R. Avachar	International Journal of Mathematics and computer Science, 16(2021), n0.2, 819-830	2021		Department of Mathematics, Shri Shivaji Education Society Amravati's Science College, Congress Nagar, Nagpur(India)	
4. Note on an Adjacency Matrix of a Graph G	R M Patne & G.R. Avachar	Advances in mathematics: Scientific Journal 9(2020), no.3, 1281-1291	2020		Department of Mathematics, Shri Shivaji Education Society Amravati's Science	

					College, Congress Nagar, Nagpur(India)	
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C. Faculty participation in conferences/seminar/workshop and symposia:

Name of the Faculty	Title of Conference/ Seminar/ workshop Attended	Period	Level International/ National/State /University /College	Whether Presented papers	Whether abstract /paper published in Souvenir/Abstract Book
Dr. A. M. Pund	86 Annual Conference of the Indian Mathematical Society. University ,Nagpur	17 December, 2020	National/	Yes	Abstract Book
Dr. A. M. Pund	National e-Conference on Recent Mathematical Innovation & Skills .	27 March 2021	National	yes	-

D. Awards to Faculty members: Nil

7.MoUs signed with institutions of national, international importance, other universities, industries, corporatehouses etc. during the year

Date of MOU	Organization	Purpose/Activity	Student Participate under MOU

Nil			

8. Research funds sanctioned and received from various agencies, industry and other organizations

Nature of the Project	Duration	Name of funding Agency	Amount Sanctioned	Amount Received
Nil				

9. Books Published

Name of the Author	Book		Book Edited
	Title	ISBN and Date	Chapter
Nil			

10. Research Guidance by Faculty during the year

Name of the guide	Ph. D		
	Awarded	Submitted	Registered
Dr G. R. Avachar	--	--	03
Dr. A. M. Pund	--	--	01

11. alumni contribution during the year

12. Action Plan of the Department

- To Celebrate National Mathematical day
- To Organize student's seminar on curriculum
- To Organize Inter Collegiate Quiz Competition in Collaboration with NUMTA
- To Organize Guest Lecture by external experts
- To Organize Poster Competition for UG and PG students.

13. Best Practices of the department

- Counseling to slow learner.
- Provided Question Bank as per university pattern.

14. SWOT Analysis

Strength

- Qualified & Competent Staff
- Enthusiastic and Encouraging Principal & Management
- No. of options are available with mathematics as one of the subjects
- Good results
- Recognized Research Centre

Weakness

- Lac of Interest of the students towards graduation in pure science and particularly in Mathematics
- Average students seek admission in B.Sc. Courses
- Limited job opportunities

Opportunities

- Remedial teaching is provided to desirous students
- Student faculty exchange program
- Guidance facility for the preparation of Competitive examinations
- Inter-College Quiz, Seminars, Guest lectures, Science Exhibition, Yuva Mahotsav every year.
- Research guidance facility available for students.

Challenges

- Declining interest in pure science subjects
- Negative aspect of modern culture abetting students presence in classes
- Declining interest in pure science subjects particularly in Mathematics



Date: 04/12/2021



Head
Department of Mathematics