Shri Shivaji Education Society Amravati's

SCIENCE COLLEGE, Congress Nagar,

Nagpur

DEPARTMENT OF MATHEMATICS

INTERNAL ACADEMIC AUDIT

2021-2022

1. A. Faculty Strength:

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

B. Faculty profile

Name	Highest Qualification	Designation	Specialization	Teaching Experience
1. Dr. G. R. Avachar	M.Sc., M. Phil, Ph.D.	Professor	Relativity and Cosmology	34 Years
2. Dr. A. M. Pund	M.Sc., M. Phil, Ph.D.	Assistant Professor	Relativity and Cosmology	10 Years
3. Dr. V.D. Chavan	M.Sc., M. Phil, Ph.D.	Assistant Professor	Relativity and Cosmology	6 Years

2. Students strength

Year	Group	Number of Students Admitted
	PCM	54
	PCSM	55
	SCSM	41
B.Sc. Semester I	ECSM	33
	PEM	27
	CGM	17
	Total-	227
	PCM	54
	PCSM.	55
	SCSM	45
B.Sc. Semester III	ECSM	33
	PEM	28
	CGM	17
	Total-	232
	PCM	51
	PCSM	51
	SCSM	34
B.Sc. Semester V	ECSM	33
	PEM	21
	CGM	17
	Total-	207
M.Sc. I		25
M.Sc. II		29
Ph.D		04
Value Added Program		-

3. Students Performance

A.Result Analysis (Winter 2021) UG & PG

Programme	Programme	Number of students	Number of	Pass
Name	Specialization	appeared in the final year examination	students passed in final year examination	Percentage
B.Sc.	Mathematics	207	207	100
M.Sc.	Mathematics	29	29	100

B.Result Analysis (Summer 2022) UG & PG

Programme	Programme	Programme	Number of	Number of	Pass
Code	Name	Specialization	students appeared in	students passed in final	Percentage
			the final year examination	year examination	
			examination	examination	
	B.Sc.	Mathematics	207	206	99.51
	M.Sc.	Mathematics	29	29	100

C.Achievements

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

Sr.	Name of the Students	Class	Title
No			
	Nil		

B. Merit Position of UG students in RTMNU

Sr. No	Name of the Students	Merit Position

C. Merit Position of PG students in RTMNU

Sr.	Name of the Students	Merit Position
No		
1.	Ku. Priyanka Arun Bhasarkar	3 rd

4. Students Progression:

Name of Students enrolling into higher Education	Name of institution joined	Name of Program admitted to
UG to PG 1.Ku. Priya Maity 2.Abhishek Yadav 3.Ku. Trupti Akhare 4.Ku. Prachi Meharkule 5. Lalit Rajgrie	Shivaji Science College, Nagpur	M.Sc.
6. Ku. Vishnuprya Singh 7.Ku. Shruti V. Ugemuge	RTMNU, Nagpur	M.Sc.
PG to Research	-	-
Placement		
On Campus 1. Ms. Payal Hemraj Bopche	TCSL, Pune	-
Off Campus		-
1. Vrushali Lokhande	eClerx, Pune	
2. Amisha Waghade	FDCM office Kuhi	
3. Ambika Pardhi	Constable(GD), in CRPF, Nagpur	
4. Krutik Bhongade	Assimilate solutions India Pvt. Limited	

(i) Students' publication in Conferences/Journals

Sr.	Title of the paper	Name of	Title of Journal	Year of
No		Author		Publication
1.	1. Massive Scalar	P. M. Lambat	Journal of	August 2021
	Field Kaluza-Klein		Scientific	
	Cosmological		Research.	
	Model in Lyra's		Volume 65,	
	Manifold		Issue 6.	
			P.N.106-110.	
2	Bianchi Type-VI0	P. M. Lambat	Journal of	2021
	Inflationary Model		Scientific	
	in Lyra Geometry		Research, 14 (2),	
			435-442 (2022	
3	Axially Symmetric	D.R.Golechha	Journal of	June 2021
	Bulk Viscous		Dynamical and	
	Cosmological		Geometric	
	Model in $F(R,T)$		Theories. Vol.	
	theory of Gavity.		19(1)pp.35-49	

(ii) Students' participation in Seminar/Conferences

Sr.	Name of the Student	Conference type	Participation as
No.			
	Ms. P. M. Lambat	National	Paper presentation.
		International	Paper Presentation
2.	Ms. Samikha S.	National Seminar	Participation
	Ganvir		
3.	Ms. Deepika Goechha		
		National e-	Paper presentation
		Conference	
		International Webinar	Paper presentation

(iii)Students' Extension Activity/Extracurricular activity

Sr.	Name of the activity	Number of students Paricipated
No.	-	_
1.	Quiz Context on the occasion of National	04
	Mathematics Day-2021 RTMNU Nagpur.	
2.	One week online FDP program on	02
	Mathematical software MAPLE with	
	Simulation-2021`organized by G H Raisoni	
	College of Engineering, Nagpur	
3	Online Quiz Competition on the occasion	01
	of National Science Day 2021 organized	
	by department of computer science	
	Phulsingh Naik Mahavidyalaya, Pusad.	
4	Trends and Opportunities in cloud	01
	Technology and information security	
	organized by department of computer	
	science RTMNU, Nagpur	
5	Inter-collegiate online Quiz competition on	01`
	Information communication technology	
	Awareness Organized by department of	
	computer science, Shivaji science college,	
	Nagpur	
6	International online workshop on Research	03
	insights in Scientific writing and	
	publication organized by dept. of	
	Microbiology and Biotechnology in	
	association with IQAC of shivaji science	
	college, Nagpur.	
7	online Poster competition on the occasion	01
	of National science Day organized by	
	Shivaji science college Nagpur	

(iv) Participation of Students in online/MOOCs courses/NPTEL/SWAYAM

Sr.	Name of the Students	MOOCs /NPTEL/SWAYAM
No.		
1.	Nil	-
2.		

5. 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 Authors	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self- citation
1. Massive Scalar Field Kaluza-Klein Cosmological Model in Lyra's Manifold.	P. M. Lambat and A. M. Pund	Journal of Scientific Research. Volume 65, Issue 6. P.N.106- 110.	August 2021		Department of Mathematics, Shri Shivaji Education Society Amravati's Science College, Congress Nagar, Nagpur India	
2. Wet Dark Fluid Cosmological Model in	S. C. Wankhade , A. S. Nimkar, A. M. Pund	Journal of Scientific Research, 13 (3), 869- 878.	2021		Department of Mathematics, Shri Shivaji Education	

Barber Self-				Society
Creation				Amravati's
Theory of				Science
_				College,
Gravitation				Congress
				Nagar,
				Nagpur
3 Bianchi	P. M.	Journal of	2021	Department
Type-VI0	Lambat, A.	Scientific	2021	of
Inflationary	M. Pund*	Research,		Mathematics,
Model in Lyra	IVI. I und	14 (2), 435-		Shri Shivaji
•		442 (2022)		Education
Geometry		442 (2022)		Society
				Amravati's
				Science
				College,
				Congress
				Nagar,
				Nagpur(
4 4 11	G D	T 1 C	T 2021	India)
4. Axially	G. R.	Journal of	June2021	Department
Symmetric	Avachar,	Dynamical		of
Bulk Viscous	D.R.Golechha	and		Mathematics,
Cosmological	& S.D.Tade.	Geometric		Shri Shivaji
Model in		Theories.		Education
F(R,T) theory		Vol.		Society
of Gavity.		19(1)pp.35-		Amravati's
		49		Science
				College,
				Congress
				Nagar,
				Nagpur(
				India)

C. Faculty participation in conferences/seminar/workshop and symposia:

Name of	Title of	Period	Level	Whether	Whether abstract
the Faculty	Conference/		International	Presented	/paper published
	Seminar/		/	papers	in
	workshop		National/Sta		Souvenir/Abstract
	Attended		te		Book
			/University		
			/College		

Dr. A. M.	National e-	28	National/	Yes	yes
Pund	Conference on	September,			
	Recent Advances	2021			
	for Innovative				
	Research in				
	Mathematics				
	NCRAIRM-21				
Dr. A. M.	2 nd International	12-14 May	International	yes	yes
Pund	Conference on	2022			
	Recent				
	Advances in				
	Material Science				
	&				
	Nanotechnology(
	RAMAN)				
Dr. V T	One -week	14- 18	National	No	-
Chauhan	National Level	February			
	online workshop	2022			
Dr. V T	International	17-18	International	No	-
Chauhan	workshop	December			
	(online) on	2021			
	Research Insights				
	in Scientific				
	wrting and				
	Publication				
	(RISWP-2021)				
Dr. V T	One week online	25-29	International	No	-
Chauhan	FDP programme	October			
	on Mathematical	2021			
	software MAPLE				
	with Simulation- 2021`organized				
	by G H Raisoni				
	College of				
	Engineering,				
	Nagpur				

D. Awards to Faculty members:

Name of	Title of the	Title of	National/International
Teacher	Award	Agency/Conference	
Nil	-	-	

6 .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	-	-	-

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

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

8. Books Published

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

9. Research Guidance by Faculty during the year

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

10. Alumni engagement

a. Contributes significantly to the development of the institution through financial and other supports

- 11. 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.
- 12. Best Practices of the department
 - Counseling to slow learner.
 - Provided Question Bank as per university pattern.

13. 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
- Guidance facility for the preparation of Competitive examinations
- Inter-College Quiz, Seminars, Guest lectures, Science Exhibition, Bhausaheb Jaynti Celebration.
- 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: 18/01/2023

Head Department of Mathematics