

**GOVT. GIRLS' COLLEGE, AJMER**  
**(NAAC ACCREDITED GRADE 'B')**  
**Affiliated with M.D.S. University, Ajmer**



**Under Graduate Department of SCIENCE**  
**Departmental Profile**  
**2017-2022**

## 1. Scope and importance of the departments:

### Department of Botany

#### Programme Outcome

- To inculcate in students the scientific study of plants which in learn is used in many aspects of human life. Plants are necessary for supporting all life forms on earth, either directly or indirectly. Its study helps in better understanding of ourselves at the cellular and genetic level.

#### Course Outcomes

- Students will be able to define and explain major concepts in the biological sciences.
- It will help the student to use biological instruments in the proper and correct way.
- It will enable the students to explain and apply the scientific method including designing and conducting experiments and testing hypotheses.
- Students will be able to communicate biological knowledge in oral and written form.

### Department of Zoology

#### Programme Outcome

- To understand the nature and basic concepts of Zoology. To understand the analysis of relationships among animals, plants, microbes and the environment.
- It provides insight into how “Life” works and consequently, how we work. The concept of students is cleared in the laboratory of Bio-Science.

#### Course Outcomes

- Students will be able to demonstrate the ability to read, understand and critically review scientific information
- Students will be able to demonstrate ethical conduct in scientific activity.
- Students will be able to recognize the relationship between structure and function at all levels: molecular, cellular and organism.

### Department of Chemistry

#### Programme Outcome

- Students will demonstrate an understanding of major concepts in all disciplines of chemistry

- Students will employ critical thinking and the scientific method to design, carry out, record and analyze the results of chemical experiments and get an awareness of the impact of chemistry on the environment, society and cultures outside the specific community.

#### Programme Specific Outcome

- The ability to explain chemical nomenclature, structure, reactivity and function in their specific field of chemistry.
- The design and execution of the experiment should demonstrate an understanding of good laboratories and the proper handling of chemical waste streams and also explain how the applications of Chemistry relate to the real world.

#### Course Outcomes

- Students will gain an understanding of methods of analysis related to chemical analysis goals such as detection of elements.
- Enable the students to get understand the laws of thermodynamics and the Computer C Programming.
- After completing this course, students must have a basic knowledge of textile chemistry for an understanding of the chemical structure and properties of textile fibers and the properties of textile percipients and dyes.
- To understand the principles of radioactivity.
- To study the magnetic properties of molecules, chemical kinetics and photochemistry.
- To enable the students to learn about classification of polymers-methods of preparation of polymers, different types of polymerization, molecular weight of polymers.
- Students learn about electrochemistry.

#### Department of Mathematics

##### Course Outcomes:

- Demonstrate basic manipulative skills in algebra, geometry, trigonometry and beginning calculus.
- Apply the underlying unifying structures of mathematics and the relationships among them.
- Demonstrate proficiency in writing proofs.
- Investigate and apply mathematics problems and solutions in a variety of contexts related to science, technology, business and industry and illustrate these solutions using symbolic, numeric or graphical methods.
- Students can understand the foundation of Mathematics.
- They are able to perform basic computation in higher Mathematics.
- Students are able to develop problem solving skills
- They are able to communicate Mathematical ideas with others.

- They can enhance the quality of analysis and research in different mathematical fields. Operations research can develop the management quality in different industries and factories.

## Department of Physics

### Programme Outcome

- Physics is a branch of science that studies matter and its motion through space and time, along with related concepts such as energy and force. Physics is one of the fundamental sciences because the other natural sciences deal with systems that seem to obey the law of Physics. According to Physics, the physical laws of matter, energy and the fundamental forces of nature govern the interactions between particles and physical entities (such as plants, molecules, atoms or the subatomic particles).
- Physics deals with a wide variety of systems, certain theories are used by all physicists. Each of these theories were experimentally tested numerous times and found to be an adequate approximation of nature.
- Physics uses mathematics to organize and formulate experimental results and from which new predictions can be made.
- The results from physics experiments are numerical measurements. Technologies based on mathematics, made computational physics an active area of research.

### Programme Specific Outcome

- The theory of classical mechanics accurately describes the motion of objects, provided they are much larger than atoms and moving at much less than the speed of light.
- To provide the detail study of atom and the behavior of atom in various states.

### Course Outcomes

- The students will demonstrate a scientific knowledge of the core physics principles in Mechanics, Electromagnetism, Modern Physics and Optics.
- The student will determine the appropriate level of technology for use in experimental design and implementation, analysis of experimental data and numerical and mathematical methods in problem solutions.
- The students will demonstrate a purposeful knowledge of scientific literature and ethical issues related to physics.
- The students will effectively communicate their knowledge of physics from basic concepts to specific detailed presentations through a variety of oral, written and computational modalities.
- To acquire the basic knowledge of mechanics, properties of matter and Gravitation.
- Learn motion of bodies and sound waves.

- To inspire interest for the knowledge of concepts in physical and Geometrical physics.

## 2. Introduction of department:

- The Science department plays a pivotal role in shaping our understanding of the natural world and advancing human knowledge.
- It encompasses a wide range of disciplines including Chemistry, Physics, Mathematics, Botany and Zoology among others.
- The science department covers an extensive scope of knowledge and research providing a comprehensive understanding of the world around us.
- It investigates the fundamental laws of nature, explores the mysteries of the universe and delves into the intricate mechanism of life.

## 3. Year of Establishment: **1994. (UG)**

## 4. Detail of Programmes / Courses offered (UG, PG, M. Phil., Ph.D., Integrated Masters; Integrated Ph.D., Short term courses, Career oriented courses, etc. (Current academic year)

Sr. No	Programme level	Name of the programme/ Course	Duration	Entry qualification	Medium of Instruction	Sanctioned/ Approved student strength	No. of Student admitted
1	UG	B.Sc. (Bio)	3 Years	12th Pass(PCM)	Hindi/English	88	88
2	UG	B.Sc. (Maths)	3 Years	12th Pass(CBZ)	Hindi/English	88	88

## 5. Annual/ semester/choice based credit system/elective course pattern (programme wise)

Programme	Pattern	Year of Implementation
B.Sc. (PCM)	Yearly	1996-97
B.Sc. (CBZ)	Yearly	1996-97

## 6. Number of Teaching and Non-teaching positions in the department

Designation	Department	Sanctioned	Filled
Professors	Zoology	1	1
Asst. Professors	Botany	1	1



11. Research papers published in journals notified on UGC website (Last five years)

Sr. No.	Name of Faculty	Name of Journal	Title of Research Paper	ISSN/ ISBN No.	Whether peer reviewed. Impact Factor, if any
1	Dr. Kalpana Sharma	Journal Of Natural Science, referred International Journal	A herbal remedy for diabetic persons: Stevia Rebaudina.	2320-4346, 2017	
2		Journal Of Natural Science, referred International Journal	Impact of textile industry waste on environment in Pali district of Rajasthan: An overview.	2320-4346, 2017	
3		Journal Of Natural Science, referred International Journal	Influence of prenatal exposure to tritiated water on the postnatal development in Swiss albino mice. 17-23	2320-4346, 2017	
4		Journal Of Natural Science, referred International Journal	Estimation of cadmium in vegetable foodstuffs in Jaipur (India).	2320-4346, 2018	
5		Journal Of Natural Science, referred International Journal	Effect of prenatal exposure to HTO on the postnatal development of mouse offsprings.	2320-4346, 2018	
6		Journal Of Natural Science,	Mathematical computation of	2320-4346, 2018	

		<b>referred International Journal</b>	<b>water quality index of Ummed Sagar dam</b> (A water reservoir) at Shahpura, Bhilwara of Rajasthan. 11-16		
7		<b>In The Proceedings Of 14th Indo-Japan International Conference 2019</b>	<b>Ovicidal Activity Of Some Biopesticides On Spodotalitura.</b>	<i>ISBN: 978-93-83462-95-7</i> <i>Year 2019</i>	
8		14th Biyani International Conference (BICON 19)	Ovicidal activity of some Biopesticides on spodotalitura. 2019, 86-87	ISBN 978-93-83462-95-7, 2019	
9	Dr. Anita Lubana	<b>Journal of TURKISH SCIENCE EDUCATION</b> ISSN:1304-6020	Determining Students' Intention: The Role of Students' Attitude and Science Curriculum: www.researchgate.net/publication/337211018	<b>Volume 16, Issue 3, 06.05.2019</b> DOI: <a href="https://doi.org/10.12973/tused.10284a">10.12973/tused.10284a</a> )	<b>Issue 3, 2019, 314-324</b> 1.781
10		Accent Journal of Economics Ecology & Engineering ISSN-2456-1037	Bio-Diversity	Research foundation of India-ISBN 978-93-88746-01-4	2019 1.169
11		Practitioner Research ISSN: 2710-706x E-ISSN: 2811-3454	COGNITIVE AUTONOMY DIFFERENCES AMONG ADOLESCENTS IN MALAYSIA: INSIGHTS FOR CLASSROOM PRACTICES	Vol. 1/ July, 2019	Volume-1/ 229-245



12		Research foundation of India-ISBN 978-93-89522-01-3	Eco-Innovation	RFI/ICIR/2019/135	
13		South Asian Journal of Social Science and humanities. ISSN: 2582-7065	The relationship of personality traits and Academic and Social selfefficacies of learning disabilities: www.researchgate.net/publication/344986091	Published-10.08.2020, Vol:1, Issue:1, pp.09-24	
14		Indonesian Journal of Education Methods Development 5(1)	Cognitive Autonomy Differences among Adolescents in Malaysia: www.researchgate.net/publication/337136982	Feb, 2019, Vol.-05. DOI:10.21070/ijemd.v3i2.14	Pages 01-10
15	Dr. Pawan Chanchal	International Journal of Advanced Research and Development www.advancedjournal.com	New subclass of univalent function associated with a fractional calculus operators  Pawan Chanchal, A.K. Arora and Jyoti Taneja	ISSN NO: 2455- 4030 Volume 2, Issue 4, July 2017 pp. 299- 304	Impact Factor : RJIF 5.24
16		International Journal on Future Revolution in Computer Science and Communication Engineering http://www.ijfrcsce.org	A New Subclass of Meromorphic Starlike Functions Associated with Q-Hypergeometric Functions  Dinesh Mittal, A.K. Arora, S.K.Bissu and Pawan Chanchal	ISSN NO: 2454- 4248	Volume 3, Issue 8 August 2017
17		International journal Of Trend in Research and	On A new Subclass of Multivalent Function	ISSN: 2394- 9333	Volume 4(5)

	Development www.ijtrd.com	Defined by Generalized Ruscheweyh Derivatives  Pawan Chanchal and A.K. Arora		Sep.- Oct. 2017
18	International Journal Of Research and Analytical Reviews <a href="http://ijrar.com/">http://ijrar.com/</a>	On Certain Subclasses of Univalent Functions with Negative Coefficients and (m,q)-Starlike with Respect to Certain Points  Pawan Chanchal and A.K. Arora	E ISSN: 2348- 1269 PRINT ISSN: 2349- 5138	Volume 4, Issue 3, July- Sep. 2017
19	International journal Of Mathematics Trends and Technology <a href="http://www.ijmtjournal.org">http://www.ijmtjournal.org</a>	Duality of “Some Famous Integral Transforms” from the polynomial Integral Transform.  Priti Choudhary, Pawan Chanchal, Yogesh Khandelwal and Hoshiyar Singh	ISSN NO: 2231- 5373	Volume 55, Number 5, March 2018
20	Mathematical Journal Of Interdisciplinary sciences <a href="https://mjis.chitkara.edu.in/">https://mjis.chitkara.edu.in/</a>	Mahgoub Deterioration Method and its Application in Solving Duo-combination of Nonlinear PDE's  R Khandelwal, Y Khandelwal and Pawan Chanchal	<a href="https://doi.org/10.15415/mjis.2018.71006">https://doi.org/10.15415/mjis.2018.71006</a> ISSN: 2278-9561 ( Print) ISSN: 2278-957X ( Online)	Vol. 7, No. 1, Sep. 2018, pp. 37-44
21	International Journal Of Management, Techn ology and Engineering	A Study of Homotopy Perturbation Method and Homotopy Perturbation Mahgoub Tra nsform Method Pawan Chanchal, Yogesh Khandelwal, Hoshiyar Singh and Rahul	ISSN NO.2249-7455	Volume IX, Issue IV, April / 2019
22	International Journal Of Management, Tech nology and Engineering	The Mohand Transform of Derived Function Demonstrated by Heaviside Function Yogesh Khandelwal, Pawan Chanchal, Hoshiyar Singh and A.K. Joshi		Volume IX, Issue IV, April 2019
23	International	A study of Kamal	ISSN NO.2249-7455	Volume

	Journal Of Management, Technology and Engineering	Homotopy Perturbation Method for Advection Problems Yogesh Khandelwal, Pawan Chanchal, Hoshiyar Singh and Vaishali Meena		e IX, Issue IV, April 2019
24	International Journal Of Research in Electronics and Computer Engineering	Chain of Kamal Transform and Homotop Perturbation Method for Solving Burger's Equation Yogesh Khandelwal, Pawan Chanchal, Hoshiyar Singh and Rishabh Chandak	ISSN: 2393-9028 ( Print) ISSN: 2348-2281 ( Online)	VOL. 7 ISSUE 2 (APRIL - JUNE 2019)
25	International Journal Of Research in Electronics and Computer Engineering	The Mahgoub Transform of Derived Function Demonstrated by Heaviside Function Yogesh Khandelwal, Pawan Chanchal, Hoshiyar Singh and Akanksha Dhillon	ISSN: 2393-9028 ( Print) ISSN: 2348-2281 ( Online)	VOL. 7 ISSUE 2 (APRIL - JUNE 2019)
26	Advances in Mathematics: Scientific Journal (International Journal)	Solution of kdv and coupled burger's equation via mahgoub homotopy perturbation transform scheme Yogesh Khandelwal, Pawan Chanchal and Rachana Khandelwal	<a href="https://doi.org/10.37418/amsj.9.4.57">https://doi.org/10.37418/amsj.9.4.57</a> ISSN: 1857-8365 (printed); 1857-8438 (electronic)	9 (2020), no.4, 1983– 1995

## 12. Research papers published in National/International Conference-proceedings

Sr. No.	Name of faculty	Name of the Conference Seminar	Title of Research Paper	ISSN/ ISBN	Place & Date
1	Dr.	International Conference	Evaluation of anti-cancer activity of		5-7 Oct. 2017

	Kalpana Sharma	<b>On Fight Against Cancer</b>	<b>delonix regia extract against chemical induced skin carcinogenesis in mammal</b>		
2		<b>International Conference On Gandhi: The Eternal Truth, ICOG 2019</b>	<b>Gandhian Values In The Context Of Value Education.</b>		<b>18-19 Sept. 2019</b>
3		<b>In The Proceedings Of 14<sup>th</sup> Indo-Japan International Conference 2019</b>	<b>Ovicidal Activity Of Some Biopesticides On Spodotalitura.</b>		<b>25th Sept. 2019</b>
4		<b>International Conference on Multidisciplinary approaches to environmental research for human health.</b>	<b>Health effects of indoor air pollution in rural areas</b>		2021
5		<b>International Conference On Radiation Biology</b>	<b>Skeletal Malformations in fetuses after in utero exposure to tritiated water in Swiss Albino mice</b>		2022
6		<b>International Conference On Environment, Sustainable Development and Human Health</b>	<b>A birds eye view on Bioremediation</b>		2022
7		<b>National Conference on Environment: issues, challenges and strategies.</b>	<b>Environmental challenges: An Overview</b>		<b>1-2 Oct. 2018</b>
8		<b>National Conference on “Water quality, biodiversity, global environmental issues and solutions</b>	<b>Ecotourism and its impact on socio-economic development with special reference to India</b>		2022

9		<b>National E-conference on “Gandhi chintan: vecharic swatantray”</b>	<b>Environmental thoughts of Gandhi</b>		2022
10	Dr. Anita Lubana	National	<b>Beneficial impactsof Eco-Tourism</b>		30.11.2017 to 01.12.2017
11		International	<b>Bio-Diversity</b>		23.02.2019 to 24.02.2019
12			<b>Gandhi- The environmentalist</b>		18.09.2019 to 19.09.2019
13		International- Innovative Research on engg., Science, Phar., Humanities and management	<b>Eco-Innovation</b>		27.09.2019 to 28.09.2019
14		International- Emerging challenges, their solution and recent advances in Science	<b>Nano- Biotechnology</b>		04.10.2019 to 05.10.2019
15		E-SEMINAR-GGC., Ajmer	<b>Effect of new education policy in higher education</b>		08.01.2021 to 09.01.2021
16		E-SEMINAR- Dept. of Botany and Zoology- Dominant college of Education, Dausa	<b>Eco-system</b>		05.06.2021
17		Multidisciplinary approach towards sustainable development	<b>Bioremediation of Environmental pollutant</b>		12.08.2022 to 14.08.2022

		and climate change for viable future			
18		Issues challenges and oppurtunities- Rashtriya Shilksha Niti	<b>Rashtriya Shiksha Niti-2020: Challenges in implimentation</b>		01.11.2022
19		Recent trends in plant sciences	<b>Plant Biotechnology and nanotechnology</b>		09.11.2022 to 10.11.2022
20		Research education and sustainable development, oppurtunities and challenges	<b>Cimate change and disaster management</b>		19.11.2022
21	Dr. Pawan Chanchal	National Symposium On Global Environmental Challenges: Present Scenario	A Review Of Research Into The Economic Value Of a Public Bird-Watching and Sustainable Its Management		21 January, 2017
22		National <i>Seminar On</i> "Excellence in Higher Education" The Road Ahead	Research in Higher Education		26-27 September, 2017
23		International <i>Conference on</i> Special Functions And Applications(Under TEQIP-III)	Subclass Of Univalent Functions Associated With Fractional Operator		November 02-04, 2017
24		Annual International <i>Conference on</i> Coping Change Through Innovation and Value Creation For society	On A new Subclass of Multivalent Functions Defined by Generalized Ruscheweyh Derivatives		22-23 December, 2017
25		National <i>Conference on</i> Recent Trends in Science and Social Science in Sustainable Development	Nanotechnology : An Introduction And Its Application		22-23 January, 2018
26		7 <sup>th</sup> National <i>Conference on</i> Computational and	Mathematical Modelling		30-31 March, 2018

	Mathematical Sciences COMPUTATIA-VII			
27	International <i>Conference on</i> Mankind at Crossroads: Challenges and Solutions	Waders Diversity Of An Urban Wetland In Ajmer District, Rajasthan		17-18 January, 2019
28	National <i>Conference on</i> Changes in Lifestyle Influencing Adolescent Health	Awareness and preventing adolescent health problems		28-29 September, 2019
29	XXVI International <i>Conference Of Rajasthan Sociological Association On</i> Socio – Cultural and Technological Transformation: Global and Indian	Socio- Cultural Impact Of Globalization in India		11-12 October, 2019
30	International Conference On Multidisciplinary Approaches to Environmental Research for Human Health	<i>The Impacts Of Anthropogenic Light Pollution On Avian Community In Fresh Water Lakes of Ajmer</i>		December 22-24, 2021

### 13. Number of books and chapter in edited volumes/Books published

Name of Faculty	Title of the book/chapter published	National/ International	Year of publication	ISBN/ISSN No.	Name of the publisher
Dr. Anita Lubana	1-HERBAL HEALERS: HOME REMEDY.		2018	Environment & Engineering, ISBN- 978-93-87739-34-5	JRF INTERNATIONAL BOOK PUBLICATION
	2- Environmental Crisis: Challenges and opportunity: Environmental		2018	Environment & Engineering, ISBN- 978-93-87739-34-5	JRF INTERNATIONAL BOOK PUBLICATION
	3- BIOTECHNOLOGY GENERALLY: Benefits and		2018	Environment & Engineering, ISBN- 978-93-87739-34-5	JRF INTERNATIONAL BOOK PUBLICATION

	Concerns				
	4- BIODIVERSITY, SUSTAINABILITY AND CONSERVATION		2022	Global Environmental Science: Issues and solutions ISBN:978-93-91267-54-4	Raj Publishing House, Jaipur
	5. Water conservation: A solution of water crisis.		2022	Global Environmental Science: Issues and solutions ISBN:978-93-91267-54-4	Raj Publishing House, Jaipur
<b>Dr. Pawan Chanchal</b>	Abstract Algebra		2019	ISBN 978-93-88031-33-2	Baba Publication, choura Rasta , Jaipur
	<b>Importance of Environment Education</b>		March 2021	Educational Studies ISBN: 978-93-90937-02-8(paperback)	Redshine publication, swedan, India.
	Advances in Communication and Computational Technology		2021	ISBN 978-981-15-5341-7	Springer, Singapore
<b>Ms. Kavita Singh Chaudhary</b>	<b>Global Environmental Science: Challenges And Solutions (Water pollution &amp; its Solutions)</b>		2022	ISBN: 978-93-95237-70-3	Sahityagar Jaipur

#### 14. Name of research guides

Sr. No.	Name of research guide	Ph. D/ M. Phil
1.	Prof. Kalpana Sharma	Ph. D

#### 15. Detail Of Research Scholars and Area of their work-



Name	Date of Allotment	Topic	Date of Thesis Submission
1.	<b>Nikita Kundu</b>	<b>Ethenomedicinal and Antimicrobial screening of selected plant species of Ajmer District.</b>	
2.	Rama Didwaniya	Doing work Course	
3.	Ishan Verma	Doing work Course	

#### 16.Number of Ph. D/ M. Phil awarded by faculty

Sr. No.	Name of M. Phil scholar	Name of the Guide/s	Title of the thesis	Year of registration of scholar	Year of awards of Ph. D/ M. Phil.
1	<b>Shyam Bihari</b>	<b>Prof. Kalpana Sharma</b>	<b>Effects of Annona Squamosa seeds extracts on the histology of fat bodies &amp; morphology of D. Koenigii</b>		<b>15-04-2006</b>
2	<b>Raj Kumar Meena</b>	<b>Prof. Kalpana Sharma</b>	<b>Study of lakes and ponds of Ajmer District with their Fish Fauna.</b>		<b>09-03-2007</b>
3	<b>Garima Chaumal</b>	<b>Prof. Kalpana Sharma</b>	<b>Study of Animal Cell and Tissue Culture</b>		<b>09-03-2007</b>
4	<b>Nitesh Kumar</b>	<b>Prof. Kalpana Sharma</b>	<b>Chemical Characteristics of ground water in rural region of Ajmer</b>		<b>15-09-2008</b>

5	Subhi Bishnoi	Prof. Kalpana Sharma	Biodiversity of Insect fauna of Govt. College Campus and Anasagar Lake of Ajmer	09-09-2009
6	Chandan Kalawatia	Prof. Kalpana Sharma	Study of the vegetable Pests of winter season in Shekhawati region of Rajasthan	09-09-2009
7	Garima Mishra	Prof. Kalpana Sharma	Rain water Harvesting Scheme of Different Block of Govt. Polytechnic College, ITI, Ajmer	09-09-2009
8	Kavita Saini	Prof. Kalpana Sharma	Role of Honey Bee in Production of Honey: A study of Apis indica	09-09-2009
9	Simple Sharma	Prof. Kalpana Sharma	Bioluminescence Among different orders of Insects	16-06-2010
10	Satish Yadav	Prof. Kalpana Sharma	Study of Fauna of Nahar Wild Sanc	16-06-2010

17. Faculty as chairman/members in National committees/International Committees/ Editorial/Boards/BOS/University committees etc.

Sr. No.	Name of faculty	Name of the body in which full time teacher participated	Member of editorial board	Reviewer
1.	Prof. Kalpana Sharma	COC Microbiology MDSU Ajmer		
2.	Prof. Kalpana Sharma	Life Membership of Indian Science Congress		

3.	Prof. Kalpana Sharma	Life Membership of Indian Council of Radiation Biology		
4.	Prof. Kalpana Sharma	Life Membership of ISLS		
5.	Prof. Kalpana Sharma	Life Membership of I.G.R.H.S.		

### 18. Student undertaking field projects/ internships

1. a) Percentage of students who have done in-house projects including inter

departmental / Programme

Program name	Program code	Year	No. student undertaking field projects/Internships

1. b) Percentage of students placed for projects in organizations outside the institution [i.e.in](#) Research laboratories/Industry/society other agencies

Program name	Program code	Year	No. student undertaking field projects/Internships

### 19. Awards / Recognitions received by faculty

Year of awards	Name of full time teachers receiving awards from state level, National level, International level	PAN	Designation	Name of the award, fellowship, received from government or recognized bodies
Nil				

20. Numbers of awards / Medals for outstanding performance in sports/cultural activities in National/ International/ State level etc. received by students

Year	Name of the award/Medal	National/International/State etc.	Sports/Cultural	Aadhar/Student ID No.	Name of the Student
Nil					

21. Students Qualifying in State/National/International level examination (NET, SET, GATE, GMAT, GRE, TOEFL/UPSC/MPSC/State government examination, etc.)

Year	Registration No./Roll for the examination	Number of students selected									
		SET	NET	GATE	GMAT	CAT	RGE	TOEFL	Civil services	State Examinations/Others	Govt.
Many of the students from the Department of Science have qualified the REET and other competitive examinations conducted by Rajasthan State Subordinate Commission for the recruitment of First Grade/Second Grade Teachers, Assistant Professor in College/University and aptitude examinations held for other government jobs.											

22. Student progression to higher studies. UG to PG, PG to M. Phil., PG to Ph. D, M. Phil to Ph. D, Ph. D to post Doctoral, etc. (2021-22)

1. UG to PG

Sr. No.	Program Graduated From	Department Graduated from	Student Name	Name of the Institute Joined	Name of the Program admitted
Department is a UG Deptt. Hence no such data is available					

1. PG to M. Phil

Sr. No.	Program Graduated From	Department Graduated from	Student Name	Name of the Institute Joined	Name of the Program admitted
Nil					

1. PG to Ph. D or M. Phil to Ph. D.

Sr. No.	Program Graduated From	Department Graduated from	Student Name	Name of the Institute Joined	Name of the Program admitted
Nil					

23.Placement of outgoing students (Last five years, 2017-2022)

Year	Contact detail	Number of students placed	Name of the employer with contact details	Package received	Program graduated from
Nil					

24.List of alumni/contribution (Departmental)

Sr. No.	Name of Alumni	Year of Graduation/Post Graduation	Position held	Contact detail (Email, Mobile No.)	Quantum of Contribution
Nil					

25.List of eminent academicians and scientists / visitors to the department

26.Seminars/ Conferences/Workshops organized & the source of funding

Sr. No.	Level National/ International/ State	Name of the workshop/ Seminar	Funding agency	Amount sanctioned	Durations (From-To)	Number of participants
1		National Science Day-2021			28-02-2021 to 03-03-2021	

27.Student profile programme/course wise:

Year	Name of the Course/programme (refer question no. 4)	Applications received	Total number of Students
2017-18	PCM	396	87
	CBZ	465	87
2018-19	PCM	289	88
	CBZ	471	88
2019-20	PCM	192	63
	CBZ	299	72
2020-21	PCM	201	56

	CBZ	426	67
2021-22	PCM	239	70
	CBZ	567	90

## 27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students From abroad
Nil			

## 28. Special steps taken by department for Slow and Fast Learners

- List of such students

## 29. Departmental result

Year	Program Code	Program Name	Number of students appeared in the final year examination	Number of students passed in final year examination
2017	PCM	B.Sc. Part-III	62	61
2017	CBZ	B.Sc. Part-III	78	76
2018	PCM	B.Sc. Part-III	61	60
2018	CBZ	B.Sc. Part-III	64	60
2019	PCM	B.Sc. Part-III	75	74
2019	CBZ	B.Sc. Part-III	65	63
2020	PCM	B.Sc. Part-III	73	73
2020	CBZ	B.Sc. Part-III	64	64
2021	PCM	B.Sc. Part-III	92	88
2021	CBZ	B.Sc. Part-III	130	125
2022	PCM	B.Sc. Part-III	65	65
2022	CBZ	B.Sc. Part-III	65	65

## 30. Number of linkages for faculty exchange/student exchange/training/internship/field trips/job on training/research etc.

Sr. No.	Title of the linkage	Name of the partnering institution/ industry /research lab with	Year of commencement	Duration (From-To)	Nature of linkage
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		<b>contact details</b>			
Nil					

31.Number of functional MoU's with corporate houses/ industries/other institutes/Universities, etc.

<b>Organisation with which MoU is signed</b>	<b>Name of the institution/ industry/ corporate house</b>	<b>Year of signing MoU</b>	<b>Duration</b>	<b>List the actual activities under each MoU year wise</b>	<b>Number of students/teachers participated under MoUs</b>
Nil					

32.Details of Infrastructural facilities

1. a) Departmental Library

<b>Sr. No.</b>	<b>Name of Books</b>	<b>Publisher</b>	<b>Number of copies</b>
Nil			

1. b) Internet facilities for Staff & Students- YES, Use of computer for students

2. c) Class rooms with ICT facility : 01

1. d) Laboratories : 05

<b>Sr. No.</b>	<b>Facility</b>	<b>Detail</b>	<b>Area</b>
Nil			

1. e) List of Equipments/Instruments

33.Number of students receiving financial assistance from college, university, government or other agencies-

NA

34.Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

<b>Sr. No.</b>	<b>Enrichment programmes</b>	<b>Experts</b>

35. Teaching methods adopted to improve student learning-

- PowerPoint presentation
- Some lessons are taught outside of the classroom*
- Use of Video Clips
- Project Work
- Video Conferencing Lecture
- Organized Workshop
- Online NPTEL courses
- Online NPTEL/UGC-SWAYAM lectures
- Students seminars
- Field projects/Survey
- Review of research papers (Avishkar)
- Use of Adobe Acrobat reader

36. Faculty Participation in Gyan Sudha- Links of Lectures

37. Faculty Participation in Gyan Doot- Links of Lectures

38. E-Content on Youtube- Topic wise links of lectures:

- <https://www.youtube.com/channel/UCvlfEloJmKxRjrFpwGlcwoA>
- [https://www.youtube.com/channel/UC2gG-VmbB\\_om8pp5E7Dq8KQ](https://www.youtube.com/channel/UC2gG-VmbB_om8pp5E7Dq8KQ)
- <https://youtube.com/playlist?list=PLwgHybyiOT4VCEvY4CgklPx3ZNnZrq605>

39. Departmental Preparedness for NEP

1. Multidisciplinary/ Interdisciplinary Learning.
2. Academic Bank of Credits.
3. Skill development.
4. Integration of Indian knowledge System.
5. Focus on outcome based education.
6. Distance/ Online education.

40. Contribution in Institutional Best Practices-



#### 41. Participation in Institutional Social Responsibility (ISR) and Extension activities

1. Member of proctorial Board.
2. Games In charge.
3. NCC Officer.
4. Literary Forum Convenor and members.
5. IQAC Member.
6. Campus Supervision Committee Member.
7. College Magazine committee.
8. Web page Nodal.
9. Admission Nodal/NSS Officer/Scholarship nodular committee member/ HTE Nodal.
10. Gyan Sudha Nodal.
11. Gyan Doot .
12. Gyan Parakh.
13. Other activities.

#### 42. SWOC analysis of the department

##### Strength-

- Good Academic results of students
- Qualified and Experienced faculty
- Promoting higher education for females in the area

##### Weakness-

- No post sanctioned for non-teaching staff by government
- Inadequate posts sanctioned for teaching staff
- Inadequate post filled for teaching staff
- Poor Infrastructure facilities (drinking water, sanitation, common room etc.)
- Inappropriate size of classrooms
- Lack of campus recruitment facilities

##### Opportunities-

- Potential for starting PG course in Physics, Chemistry, Mathematics, Botany & Zoology

##### Challenges-

- Providing adequate exposure to the student regarding new developments and technological advancements in the subject.
- Curriculum and course development to make it more job oriented.
- Introducing student and faculty exchange programs.

**43. Future plans: (Five years plan of action)**

- Starting PG Course in Physics, Chemistry, Mathematics, Botany & Zoology
- Developing financial assistance from bodies like UGC, state govt etc. So as to improve infrastructural facilities in the department.

**44. Youtube Playlists links, E-Books and other sources links should be available on departmental computer**