

गोरबंद' कार्यक्रम में स्टुडेंट्स ने दी प्रस्तुति



एसडीआरएफ ने दिया लाइव डेमो णनवं जनित आपदाओं से नियटने के गुर सिखाए

रिषा जैन को 'उदीयमान जनसंपर्क प्रतिभा' सम्मान



लोकतंत्र के लिए सिवासी एकजुटता जरूरी



पंजाब केसरी Map + Hame + 21 of, 2022

सूचना प्रौद्योगिकी के साथ-साथ नैतिक शिक्षा एवं संस्कार जरूरी : बोहरा

केवीय रखा व पर्वटर प्राथमंत्री प्रकार मूर्ट ने उन्हार में वितार वार्वकर्ष में प्रियाल के मानकों में बदलाव नहीं, तय हो एनसीसी केंड्रेट्स को स्टेट की भर्तियों में घुट का प्रायधान किंड्रेट्स को स्टेट की भर्तियों में घुट का प्रायधान

गोरबन्द कार्यक्रम में छात्र-छात्राओं ने दिखाई अपनी प्रतिब

सांस्कृतिक कार्यक्रम विद्यार्थियों की छिपी प्रतिभाओं को उजागर करने का सशक्त माध्यम

MoS Bhatt terms Opp 'sans policy'



सिटी बुक 🕟 व्यवस्थित

विकास की दिशा को प्रकृति से जोड़ने की जरूरतः गोविंदाचार्य

अर्विनपथ योजना में नहीं होगा संशोधनः रक्षा राज्य मंत्री

दैनिक नवज्योति पक्ष और विपक्ष का एक गोल होना चाहिए : गोविन्दाचार्य

एसडीआरएफ ने

मानव जनित आपदाओं से निपटने के गुर सिखाए

नगर्द 22 मार्च (ज्यूर)) एमटीजारएक राजस्था ने बूधकार को एमएम जैन सुबोध पीजी करोड़िज में आप्तर राहत कन जारककता कार्यक्रम का लाइव बेजी दिया। इस दौरात मानव जॉनव जीया प्रकृतिक अस्त्राओं से नियटने के मुट मिस्बाए गए। एडोजी एसडीकआएएकआलोक

गिशह के अनुसार एसडीआरएफ को एएच कम्पनी जवपुर की ओर

सिटी बुक 👩 राजस्थान पत्रिका

एसडीआरएक ने विया लाइव डेमो पु के राज्य स्तरीय पुरस्कार

द्र सिंह यादव ने प्राचार्य, कार्यक्रम अधिकारी एवं स्वयं सेवक-से

08 राजस्थान पत्रिका patrika.co जवपुर, गुरुवार, १५ विशवर, 2022

'रक्तदान से बड़ा कोई धर्म और दान नहीं'

जयपुर © पत्रिका रामवान सर्वत स्थित सुबोध वीजी कॉलेज में कुप्लार को रक्तायन जितिह रामवा गया। कॉलेज की राष्ट्रीय

रैंकिंग में सबोध कॉलेज शामिल

काराज शामिल जयप छ प्राक्त प्रस्म पार्व स्तक्त के शिक्षा मेनालय की आर व नेनाला स्ट्रीट्यूशन में का ग्रेम्स्व में पारतीय शिक्षा संस्थानों के लिए जारे मेंकरा में प्रसास केन सुबोध पीजी कालेज ने ट्रांप 150 में अपनी उपार बनाई हैं। क्रांतिज प्राचार्य केवी शामी ने बताया कि यह राजस्थान से कालेज इस श्रेणी में आने जाला एकमात्र कालिज हैं। यह रिकंग टीनिंग लानिंग रिसोसेंज, रिसर्च एड प्रोफेशनल प्रेविटस, ग्रेजुएशन आउट कम, आउटरिच एड इन्क्लियन, पीसर एस्सेश्यन सहित कई परामीटर्स के विस्तृत आधार पर तैयार की के विस्तृत आधार पर तैयार की जाती है।

पत्रिका 🔾

वैज्ञानिक सोच से ही विकास संभव: प्रो. त्रिवेदी

जयपुर, बुधवार १४ सितम्बर २०२२

अञ्निपथ योजना में किसी तरह का संशोधन नहीं किया जाएगा : रक्षा राज्य मंत्री



पाद्रवृत जावपुर, १४ जितम्बर, २०२२

एनसीसी ट्रेनिंग गतिविधियों का अवलोकन किया अजय भट्ट ने



के हीय रक्षा राज्य मंत्री अजय भट्ट ने मंगलबार को मुखांध महाबिद्य के द्रागण में ग्लमीमी केडेंट्स को प्रेरित किया।

सिदी बुक 🕠 राजस्थान पत्रिका

विकास की दिशा को प्रकृति से जोड़ने की जरूरतः गोविंदाचार्य

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समाचार जगत

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प्राची शर्मा का फ्लाइंग ऑफिसर के लिए चयन

www.subodhpgcollege.com 23

की गर्ल्स बटालियन का नेतृत्व

जयपुर की फाल्गुनी करेंगी एनसीसी

सु-स्पर्धा में 6 प्रतियोगिताओं का आयोजन

विकास संगम की ओर से आयोजित व्याख्यानमाल

विकास की दिशा को प्रकृति से जोड़ने की जरूरतः गोविंदाचार्य



सिटी रिपोर्टर । रामबाग सर्किल स्थित एस.एस.जैन सुबोध कॉमर्स एण्ड आर्टस महाविद्यालय में सु स्पर्धा प्रतियोगिता का आयोजन हुआ।



Teaching might even be the greatest of the arts since the medium is the human mind and spirit.

- John Steinbeck



Sculptors Future

ACADEMIC CALENDAR

Session 2023-24

N (1	D (/D	A 1 1 A 11 10		11.61
Month	Date /Day	Academic Activities	Extra-Curricular Activities	Holidays
July	01/07/2023 Saturday		National Doctor's Day	
	03/07/2023 Monday	Commencement of the classes	Guru Purnima Celebration	
	11/07/2023 Tuesday		World's Population Day	
	15/07/2023 Saturday		Plantation Programme	
	17/07/2023 Monday			(
	29/07/2023 Saturday			Muharram (By Moon)
August	05/08/2023 Saturday		Humanities Club Activity	
	12/08/2023 Saturday		International Youth Day	
	15/08/2023 Tuesday		Independence Day Celebration	
	19/08/2023 Saturday		World Photography Day	
	26/08/2023 Saturday	Orientation Programme		
	29/08/2023 Tuesday		National Sports Day	
	30/08/2023 Wednesday			Rakshabandhan
September	04/09/2023 Monday	CIA I Examinations		
	05/09/2023 Tuesday		Teacher's Day	
	07/09/2023 Thursday			Janmashtami
1	08/09/2023 Friday		International Literacy Day	
	14/09/2023 Thursday		Hindi Diwas	
	19/09/2023 Tuesday			Ganesh Chaturthi
	20/09/2023 Wednesday			Samvatsari
	23/09/2023 Saturday		Yoga/Meditation Activity	
	27/09/2023 Wednesday		World Tourism Day	
	30/09/2023 Saturday		Inter college Debate Competition	
October	02/10/2023 Monday		Gandhi Jayanti Celebration	
	07/10/2023 Saturday	Last Date of Assignment Submission		
	09/10/2023 Monday	Examination Form Starts		
	11/10/2023 Wednesday		International Girl Child Day	
	14/10/2023 Saturday		Blood Donation Camp	
	15/10/2023 Sunday			NavratraSthapana
	21/10/2023 Saturday		Health Check Up Camp	
	22/10/23 Sunday – 24/10/2023 Tuesday			Dussehra Break
	28/10/2023 Saturday		Commerce Club Activity	2 document Droam
	31/10/2023 Tuesday		National Unity Day	
November	04/11/2023 Saturday		Science Club Activity	
	07/11/2023 Tuesday		National Cancer Awareness Day	
	10/11/2023 Friday – 15/11/2023 Wednesday		Trade la carico / maiorico 2ay	Diwali Break
	20/11/2023 Monday	End Semester Exams		- India Broak
	24/11/2023 Friday	End defined of Examp	Constitution Day Celebration	
	27/11/2023 Monday		Constitution Day Gelebration	Guru Nanak Jayanti
	21/11/2023 MUHUAY			Julu Nahak Jayahu

December	01/12/2023 Friday		World AIDS Day	
	10/12/2023 Sunday		Human Rights Day	
	25/12/2023 Monday			Christmas
	26/12/2023 Tuesday		Inauguration of 7 Days NSS Camp	
January	01/01/2024 Monday		Closing of 7 Days NSS Camp	
dandary	06/01/2024 Saturday		Media Fest	
	08/01/2024 Monday	Commencement of Even Semester Classes	Wodia i ost	
	12/01/2024 Friday	Commencement of Even Cemester Classes	National Youth Day	
	14/01/2024 Finday		National Touth Day	Makar Sankranti
	24/01/2024 Wednesday		National Girl Child Day	Wakai Salikialiti
	25/01/2024 Thursday		National Voter's Day	
	26/01/2024 Friday		Republic Day Celebration	
	30/01/2024 Finday		National Cleanliness Day	
F-1	,		·	
February	04/02/2024 Sunday		World Cancer Day	
	14/02/2024 Wednesday		Basant Panchami Celebration	
	24/02/2024 Saturday	00.15	Techno-Fest	
	26/02/2024 Monday	CIA I Examinations		
	28/02/2024 Wednesday		National Science Day Celebration	
March	02/03/2024 Saturday		Commerce Club Activity	
	08/03/2024 Friday			Maha Shivaratri
	09/03/2024 Saturday		Humanities Club Activity	
	16/03/2024 Saturday		Computer Science Dept. Activity	
	20/03/2024 Wednesday		International Day of Happiness	
	23/03/2024 Saturday		Martyr's Day	
	23/03/2024 Saturday	Last Date of Assignment Submission		
	24/03/2024-25/03/2024 Sunday-Monday			Holi
	30/03/2024 Saturday		Science Club Activity	
April	07/04/2024 Sunday		World Health Day	
	11/04/2024 Thursday			Eid-ul-Fitr
	13/04/2024 Saturday		College Cultural Fest	
	17/03/2024 Wednesday		-	Ram Navami
	18/04/2024 Thursday		World Heritage Day	
	21/04/2024 Sunday			Mahaveer Jayanti
	22/04/2024 Monday	End Semester Exams		,
	22/04/2024 Monday		Earth Day	
	24/04/2024 Wednesday		National Panchayati Raj Day	
May	07/05/2024 Tuesday		Ravindra Nath Tagore Jayanti	
•	08/05/2024 Wednesday		World Red Cross Day	
	09/05/2024 Thursday		,	Maharana Pratap Jayanti
	22/05/2024 Wednesday		Intl. Day for Biological Diversity	The state of the s
	31/05/2024 Friday		No Tobacco Day	
June	05/06/2024 Wednesday		World Environment Day	
		1	,	1
June	21/06/2024 Friday		International Yoga Day	

<sup>Holidays are subject to change and will be notified from time to time by the Principal.
Holidays mentioned in the calendar may be altered subject to the notification of the Government.</sup>

CHOICE BASED CREDIT SYSTEM

S. S. Jain Subodh P. G. College, Jaipur, is one of the best centres of teaching, learning and research nationally acclaimed in the field of higher education. The college received its autonomy in the year 2013 and has always been setting its own standards attaining the peaks as a prominent higher education institution. The institution has always acted as a torchbearer to all the students and contributed towards nation-building by rendering globally ready citizens. By designing its own curriculum in the undergraduate and post graduate level, it has rendered its best performance throughout the decade of autonomy witnessed by it and even during this period, the curriculum was student-centric with academic flexibility, filled with constructive ideas, innovations and employability opportunities. In the upcoming session, the college will incorporate the Choice Based Credit System (CBCS) thus improving upon the above-mentioned features of the curriculum and adding new vital features to it. It is the first step towards the implementation of National Education Policy (NEP).

The choice-based credit system (CBCS) is a flexible and learner centric approach to higher education that provides students with the ability to choose from a wide range of courses based on their interest, aptitude and career goals. The CBCS has shifted the focus from teacher- centric approach to student centric education. The students choose core courses, discipline specific elective courses, ability enhancement core courses and skill enhancement courses. The advantages of CBCS include flexibility in curriculum, skill development, academic mobility, personalized learning, inclusivity by offering a wide range of courses, catering to diverse student interest and aptitude, and Continuous Assessment and Feedback. Credits shall be given to the students on successful completion of each year of education. These credits can be saved in the Academic Bank of Credits (ABC), which the student can carry from one institution to the other, based on the student's needs. The courses will be evaluated by means of the grading system, which is far improved than the conventional marks system. This grading system will be helpful for the students to move to different institutions within India and across various countries. The uniform grading system will also enable creating a common benchmark for assessing the performance of the candidates by potential employers in their organizations. UGC had formulated guidelines in order to create a uniform evaluation system and computation of the Cumulative Grade Point Average (CGPA) based on an individual's performance in examinations which shall be applicable in the college.

Bachelor of Science (B.Sc. Mathematics/Physical Sciences) Bachelor of Science (B.Sc. Biology) Bachelor of Science (B.Sc. Honours: Chemistry) Bachelor of Science (B.Sc. Honours: Mathematics) Bachelor of Science (B.Sc. Honours: Zoology) Bachelor of Science (B.Sc. Honours: Botany) Bachelor of Science (B.Sc. Pass course/Subsidiary: Physics) Bachelor of Science (B.Sc. Pass course/Subsidiary: Physics) Bachelor of Science (B.Sc. Pass course/Subsidiary: Chemistry) Bachelor of Science (B.Sc. Pass course/Subsidiary: Mathematics) Bachelor of Science (B.Sc. Pass course/Subsidiary: Zoology) Bachelor of Science (B.Sc. Pass Course/Subsidiary: Microbiology) Bachelor of Science (B.Sc. Pass course/ Subsidiary: Psychology) Bachelor of Science (B.Sc. Pass course/ Subsidiary: Statistics) Bachelor of Science (B.Sc. Pass course/ Subsidiary: Computer Applications) Bachelor of Science/ Bachelor of Arts (B.Sc. / B.A. Pass course: Geography) Bachelor of Science/ Bachelor of Arts (B.Sc. / B.A. Pass course: Economics) Master of Science (M.Sc.) Chemistry Master of Science (M.Sc.) Mathematics Master of Arts (M.A.) Mathematics

P.G. Diploma in Forensic Science (PGDFS)

Master of Science (M.Sc.) Economics

Master of Arts (M.A.) Psychology

P.G. Diploma in

Master of Science (M.Sc.) Botary

Master of Science (M.Sc.) Environmental Science

Master of Science (M.Sc.) Microbiology

Master of Science (M.Sc.) Biotechnology

Master of Science (M.Sc.) Geography

P.G. Diploma in Industrial Safety, Health and Environmental Management (PGD-ISHEM)

Environmental Audit, ISO & Sustainable Development (PGD-EAISDC)

Water Harvesting and Management System (PGD-WHMS)

PROFESSIONAL COURSES

HUMANITIES

Bachelor of Arts (B. A.)
Bachelor of Arts (B. A. Honours: Geography)
Bachelor of Arts (B. A. Honours: History)
Bachelor of Arts (B. A. Honours: Political Science)
Master of Arts (M.A.) Pol. Science
Master of Arts (M.A.) History
Master of Arts (M.A.) Public Administration
Master of Arts (M. A.) Hindi
Master of Arts (M. A.) English
Master of Arts in Journalism and Mass Communica

Master of Arts (M.A.) Geography

COMMERCE

B.Com. (Honours) ABST B.Com. (Honours) EAFM

Master of Science (M.Sc.) Psychology

Bachelor of Commerce (B.Com. Pass Course) Bachelor of Commerce (B. Com. Honours)

B.Com. (Honours) Business Administration Master of Commerce (M.Com.) ABST Master of Commerce (M.Com.) EAFM

& SOCIAL SCIENCES

Master of Arts in Journalism and Mass Communication (M.A.JMC)
Master of Social Work (MSW)
Master of Arts (M.A.) Economics

Doctor of Philosophy (Ph. D.) Master of Computer Application (MCA)

Master of Science in Information Technology (M.Sc. - IT) Post Graduate Diploma in Computer Application (PGDCA)

Master of Commerce (M.Com.) Business Administration

Bachelor of Computer Application (BCA)

Bachelor of Business Administration (B.B.A.)

JOB ORIENTED COURSES

RS-CIT - Rajasthan State Certificate Course in Information Technology Personality Development with Interview Skill Programme

Basic Skills in Psychological Counseling Certified Professional Computer Accountant

Preparatory Classes for Competitive Exams

SUBODH TALENT **ENHANCEMENT** PROGRAMMES (STEPS)

P.G. Diploma with the duration of One Year Diploma Programmes with the duration of Six Months /One Year Certificate Programmes

FIST SCHEME

The Scheme "Fund for Improvement of S &T Infrastructure (FIST)" is intended to provide basic infrastructure and enabling facilities for promoting R&D activities in new and emerging areas and attracting fresh talents in institutions and millennium initiative of DST for promoting research in STEM. S.S. Jain Subodh P.G. College has been selected among the 16 colleges of India by Ministry of Science and Technology, Government of India for the grant. The current emphasis of the immensely successful FIST programme is orienting one and all towards the goal of Atmanirbhar Bharat by providing accessibility to the R&D infrastructure facilities.

DBT has selected S. S. Jain Subodh P.G College under the DBT Star Scheme to strengthen the academic and physical infrastructure for enhancing research, teaching, product-oriented projects, networking with neighboring institutes. This scheme acts as a gateway and acts as a catalyst in igniting young minds towards research.

Bachelor of Science (B.Sc. Mathematics/Physical Sciences)

"Scientists have become the bearers of the torch of discovery in our quest for knowledge." - Stephen Hawking

Optional Subjects

Physics/ Chemistry / Mathematics / Computer Applications/ Statistics/ Geography/ Economics

Compulsory Subjects

I Semester General English **II Semester** General Hindi

III Semester Elementary Computer Application

(Theory & Practical)

IV Semester Environmental Studies and Sustainable

Development

V Semester Mental Ability and Reasoning

VI Semester Anandam-Joy of Giving / NCC, NSS, Rovers and Rangers, Sports, Red Ribbon Club,

Extracurricular and co-curricular activities

Eligibility 10+2 with 48% from Rajasthan Board / CBSE from Raiasthan state and 60% for CBSE or any

other equivalent recognized Board from other

state in Science Stream

Duration Six Semesters (Three Years) **Affiliating Body:** University of Rajasthan

Combinations (Mathematics/Physical Sciences Group)

Physics	Chemistry	Mathematics
Physics	Mathematics	Economics
Physics	Mathematics	Statistics
Physics	Mathematics	Geography
Mathematics	Geography	Economics
Mathematics	Statistics	Economics
Chemistry	Mathematics	Economics
Chemistry	Statistics	Economics
Physics	Statistics	Computer Apr

Computer Applications Physics Statistics **Physics** Mathematics Computer Applications Mathematics Statistics Computer Applications *Any particular combination shall commence on a minimum

Bachelor of Science (B.Sc. Biology)

"The intelligent use of science and technology are the tools with which to achieve a new direction." - Jacque Fresco

Optional Subjects

: Chemistry/Zoology/Botany/Biotechnology/ Microbiology/Psychology

Compulsory Subjects

I Semester : General English **II Semester** : General Hindi

III Semester : Elementary Computer Application

(Theory & Practical)

IV Semester : Environmental Studies and Sustainable

Development

V Semester : Mental Ability and Reasoning

VI Semester : Anandam-Joy of Giving / NCC, NSS, Rovers

and Rangers, Sports, Red Ribbon Club, Extracurricular and co-curricular activities

Eligibility : 10+2 with 50% from Rajasthan Board / CBSE

> in Rajasthan state and 60% from CBSE or any other equivalent recognized Board from

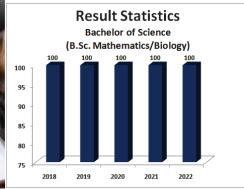
other state in Science Stream

Duration: Six Semesters (Three Years) Affiliating Body: University of Rajasthan

Combinations (Biology Group)

Chemistry	Botany	Zoology			
Chemistry	Botany	Microbiology			
Chemistry	Botany	Biotechnology			
Chemistry	Botany	Psychology			
Chemistry	Zoology	Biotechnology			
Chemistry	Zoology	Microbiology			
Chemistry	Zoology	Psychology			
Zoology	Biotechnology	Psychology			
Zoology	Microbiology	Psychology			
Zoology	Botany	Psychology			
Botany	Microbiology	Psychology			
Botany	Biotechnology	Psychology			
Botany	Zoology	Microbiology			
Botany	Zoology	Biotechnology			
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Bachelor of Science (B.Sc. Honours)

"Everything is theoretically impossible, until it is done." - Robert A. Heinlein.

Honours Subjects offered:

Physics/Chemistry/Mathematics/Zoology/Botany

Compulsory Subjects

I Semester : General EnglishII Semester : General Hindi

III Semester : Elementary Computer Application

(Theory & Practical)

IV Semester : Environmental Studies and Sustainable

Development

V Semester: Mental Ability and Reasoning

VI Semester: Anandam-Joy of Giving / NCC, NSS, Rovers and

Rangers, Sports, Red Ribbon Club, Extracurricular

and co-curricular activities.

Eligibility : 10+2 with 50% from Rajasthan Board / CBSE in

Rajasthan state and 60% from CBSE or any other equivalent recognized Board from other state in

Science Stream

Duration : Six Semesters (Three Years) **Affiliating Body** : University of Rajasthan

Subject Combinations: Honours with Subsidiary Subjects
Honours Subjects
Subsidiary Subjects (select any one)
Physics
Mathematics / Chemistry / Statistics /
Geography / Economics / Computer

Applications

Chemistry

Zoology

Mathematics group Mathematics / Statistics / Geography /

Economics / Psychology / Physics / Computer

Applications

Biology group Zoology / Botany / Microbiology /

Biotechnology / Economics

Mathematics Physics / Chemistry / Statistics / Geography /

Economics / Computer Applications Chemistry / Botany / Microbiology /

Biotechnology

Botany Chemistry / Zoology / Microbiology /

Biotechnology

In addition, our students are encouraged to take up DBT Projects under the quidance of their teachers in any subject.

Bachelor of Science (B.Sc. Honours: Physics)

Nomenclature of the Course:

I Semester (CBCS): Mechanics (BPHYH 101), Electromagnetism (BPHYH 102), Electrical & Semiconductor Physics Digital Electronics (BPHYH 103), Physics Practical-I (BPHYH 151)

II Semester (CBCS): Oscillation and Waves (BPHYH 201), Optics (BPHYH 202), Properties of Matter (BPHYH 203), Physics Practical-II (BPHYH 251)

III Semester: Thermodynamical and Statistical and Physics I (BPHYH 301), Mathematical Physics and Special Theory of Relativity I (BPHYH 302), Electronics & Solid State Devices I (BPHYH 303), Physics of Materials I (BPHYH 304), Physics Practical-III (BPHYH 351) IV Semester: Thermodynamical and Statistical and Physics II (BPHYH 401), Mathematical Physics and Special Theory of Relativity II (BPHYH 402), Electronics & Solid State Devices II (BPHYH 403), Physics of Materials II (BPHYH 404), Physics Practical-IV (BPHYH 451)

V Semester: Mathematical Physics and Special Theory of Relativity I (BPHYH 501), Quantum Mechanics I (BPHYH 502), Solid State Physics (BPHYH 503), Atomic and Molecular Physics-I (BPHYH 504), Physics Practical-V (BPHYH 551)

VI Semester: Mathematical Physics and Special Theory of Relativity II (BPHYH 601), Quantum Mechanics II (BPHYH 602), Nuclear and Particle Physics (BPHYH 603), Atomic and Molecular Physics-II (BPHYH 604), Physics Practical-VI (BPHYH 651)

Bachelor of Science (B.Sc. Honours: Chemistry)

Nomenclature of the Course:

I Semester (CBCS): Basic Concept of Inorganic Chemistry and Analytical Chemistry – I (BCHEH101), Organic Chemistry (BCHEH102), States of Matter & Solvent Extraction (BCHEH103), Chemistry Practical (BCHEH151)

II Semester (CBCS): Inorganic Chemistry and Analytical Chemistry –II (BCHEH201), Organic Chemistry (BCHEH202), Physical Chemistry & Analytical Techniques (BCHEH203), Chemistry Practical (BCHEH251) III Semester: Inorganic Chemistry III (BCHEH 301), Organic Chemistry III (BCHEH 302), Physical Chemistry III (BCHEH 303), Analytical Chemistry III (BCHEH 304), Chemistry Practical (BCHEH 351)

IV Semester: Inorganic Chemistry IV (BCHEH 401), Organic Chemistry IV (BCHEH 402), Physical Chemistry IV (BCHEH 403), Analytical Chemistry IV (BCHEH 404), Chemistry Practical (BCHEH 451)

V Semester: Inorganic Chemistry V (BCHEH 501), Organic Chemistry V (BCHEH 502), Physical Chemistry V (BCHEH 503), Analytical Chemistry V (BCHEH 504), Chemistry Practical (BCHEH 551)

VI Semester: Inorganic Chemistry VI (BCHEH 601), Organic Chemistry VI (BCHEH 602), Physical Chemistry VI (BCHEH 603), Analytical Chemistry VI (BCHEH 604), Chemistry Practical (BCHEH 651)

Bachelor of Science (B.Sc. Honours: Mathematics)

Nomenclature of the Course:

I Semester (CBCS):Discrete Mathematics (MH 101), Differential Calculus (MH 102), Analytic Geometry (MH 103), Optimization Theory (MH 104)

II Semester (CBCS):Graph Theory (MH 201), Integral Calculus (MH 202), Number Theory (MH 203), Mathematics Practical (PRH 201)

III Semester: Real Analysis-I (MH 301), Differential Equation-I (MH 302), Numerical Analysis (MH 303), Operations Research-I (MH 304), Mathematics Practical (PR 301)

IV Semester: Advanced Analysis & Metric Space (MH 401), Differential Equation II (MH 402), Advanced Numerical Analysis (MH 403), Operations Research-II (MH 404), Mathematics Practical (PR 401)

V Semester: Abstract Algebra-I (MH 501), Complex Analysis-I (MH 502), Dynamics (MH 503), Statistics-I (MH 504), Mathematics Practical (PR 501)

VI Semester: Abstract Algebra-II (MH 601), Complex Analysis-II (MH 602), Mechanics (MH 603), Statistics-II (MH 604), Mathematics Practical (PR 601)

Bachelor of Science (B.Sc. Honours : Zoology

Nomenclature of the Course:

I Semester (CBCS): Non Chordates I: Protists to Pseudocoelomates (ZOOH 101), Cell and Molecular Biology (ZOOH 102), Principles of Genetics (ZOOH 103), Practical (ZOOH PI)

II Semester (CBCS) : Non Chordates II : Coelomates (ZOOH 201), Developmetal Biology (ZOOH 202), Fundamentals of Biochemistry (ZOOH 203), Practical (ZOOH PII)

III Semester : Diversity of Animals-I (Chordates) (ZOOH 301), Animal Physiology-I (ZOOH 302), Animal Behaviour and Chronobiology (ZOOH 303), Microbiology and Parasitology (ZOOH 304), Practical (ZOOH P III)

IV Semester : Comparative Anatomy and Biology of Vertebrates (ZOOH 401), Animal Physiology-II (ZOOH 402), Immunology (ZOOH 403), Applied Zoology (ZOOH 404), Practical (ZOOH PIV)

V Semester : Biochemistry (ZOOH 501), Wild life Conservation and Management (ZOOH 502), Bio techniques, Instrumentation and Bioinformatics (ZOOH 503), Apiculture (ZOOH 504), Practical (ZOOH P V)

VI Semester: Animal Biotechnology (ZOOH 601), Environment and Public Health (ZOOH 602), Research Methodology and Biostatistics (ZOOH 603), Medical Diagnostics, Health and Hygiene (ZOOH 604), Practical (ZOOH PVI)

Bachelor of Science (B.Sc. Honours: Botany)

Nomenclature of the Course:

I Semester (CBCS): Cytology, Genetics and Plant Breeding (BOTH101), Microbiology (BOTH102), Algae and Lichen (BOTH103), Practical: Based on Theory papers (BOTH P-I)

II Semester (CBCS): Mycology and Phytopathology (BOTH 201), Bryophyta (BOTH 202), Pteridophyta, Gymnosperms and Paleobotany (BOTH 203), Practical: Based on Theory papers (BOTH P-II)

III Semester: Molecular Biology(BOTH301), Pteridophyta (BOTH302), Morphology of Angiosperms (BOTH303), Microbiology (BOTH304), Practical: Based on Theory Papers (BOTH-P-III)

IV Semester: Biotechniques and Biostatistics (BOTH401), Gymnosperms and Palaeobotany ((BOTH402), Anatomy of Angiosperms (BOTH403), Plant Pathology (BOTH404), Practical: Based on Theory Papers (BOTH-P-IV)

V Semester: Plant Biotechnology (BOTH501), Systematics of Angiosperms 3 (BOTH502), Economic Botany (BOTH503), Embryology of Angiosperms (BOTH504), Practical: Based on Theory Papers (BOTH-P-

VI Semester: Genetic Engineering (BOTH601), Ethnobotany (BOTH602), Biodiversity Conservation & Human Welfare (BOTH603), Seed Science (BOTH604), Practical: Based on Theory Papers (BOTH-P-VI)

Bachelor of Science (B. Sc. Pass Course/Subsidiary)

"Science knows no country, because knowledge belongs to humanity, and is the torch which illuminates the world." - Louis Pasteur

Optional Subjects offered in Pass Course:

Physics/ Chemistry / Mathematics / Statistics/ Geography/ Economics / Zoology / Botany / Biotechnology / Microbiology / Psychology/Computer Applications

Bachelor of Science (B. Sc. Pass course/Subsidiary: Physics)

Nomenclature of the course:

I Semester (CBCS): Mechanics (BPHY 101), Electromagnetism (BPHY 102), Physics Practical-I (BPHY 151)

II Semester (CBCS): Oscillations & Waves (BPHY 201), Optics (BPHY 202), Physics Practical-II (BPHY 251)

III Semester: Thermodynamical and Statistical and Physics I (BPHY 301), Mathematical Physics and Special Theory of Relativity I (BPHY 302), Electronics & Solid State Devices I (BPHY 303), Physics Practical-III (BPHY 351)

IV Semester: Thermodynamical and Statistical and Physics II (BPHY 401), Mathematical Physics and Special Theory of Relativity II (BPHY 402), Electronics & Solid State Devices II (BPHY 403), Physics Practical-IV (BPHY 451)

V Semester: Mathematical Physics and Special Theory of Relativity I (BPHY 501), Quantum Mechanics I (BPHY 502), Solid State Physics (BPHY 503), Physics Practical-V (BPHY 551)

VI Semester: Mathematical Physics and Special Theory of Relativity II (BPHY 601), Quantum Mechanics II (BPHY 602), Nuclear Physics (BPHY 603), Physics Practical-VI (BPHY 651)

Bachelor of Science (B. Sc. Pass course/Subsidiary : Chemistry)

Nomenclature of the course:

I Semester (CBCS): Basics of Inorganic and Organic Chemistry (BCHE101), Chemistry of Hydrocarbons and States of Matter (BCHE102), Chemistry Practical (BCHE151)

II Semester (CBCS): Essence of Inorganic and Physical Chemistry (BCHE201), istry of Arenes and Thermodynamics (BCHE202), Chemistry Practical (BCHE251)

III Semester: Inorganic Chemistry III (BCHE 301), Organic Chemistry III (BCHE 302), Physical Chemistry III (BCHE 303), Chemistry Practical (BCHE 351)

IV Semester: Inorganic Chemistry IV (BCHE 401), Organic Chemistry IV (BCHE 402), Physical Chemistry IV (BCHE 403), Chemistry Practical (BCHE 451)

V Semester: Inorganic Chemistry V (BCHE 501), Organic Chemistry V (BCHE 502), Physical Chemistry V (BCHE 503), Chemistry Practical (BCHE 551)

VI Semester: Inorganic Chemistry VI (BCHE 601), Organic Chemistry VI (BCHE 602), Physical Chemistry VI (BCHE 603), Chemistry Practical (BCHE 651)



Bachelor of Science (B.Sc. Pass course/Subsidiary: Psychology)

Nomenclature of the course:

I Semester (CBCS): Basic Psychological Processes I (PSY 101), Social Psychology I (PSY 102), Practical (PSY 103)

II Semester (CBCS): Basic Psychological Processes II (PSY 201), Social Psychology II (PSY 202), Practical (PSY 203)

III Semester: Psychopathology I (PSY 301), Psychological Statistics I (PSY 302), Practical (PSY 303)

IV Semester: Psychopathology II (PSY 401), Psychological Statistics II (PSY 402), Practical (PSY 403)

V Semester: Positive Psychology I (PSY 501), Psychometrics I (PSY 502), Practical (PSY 503)

VI Semester: Positive Psychology II (PSY 601), Psychometrics II (PSY 602), Practical (PSY 603)

Bachelor of Science (B.Sc. Pass course/Subsidiary : Biotechnology)

Nomenclature of the course:

I Semester (CBCS): Cell and Molecular Biology (BT101), Biotechniques (BT 102), Lab (PR-1)

II Semester (CBCS): Genetics (BT-201), Introduction to Microbial World (BT 203), Lab (PR-2)

III Semester: Molecular Biology (33325), General Microbiology (33326), Cellular Biophysics and Biochemistry (33327), Lab (33328)

IV Semester: Recombinant DNA Technology (33425), Immunology (33426) Environmental and Agri Biotechnology (33427), Lab (33428).

V Semester: Animal Biotechnology (33525), Plant Biotechnology (33526), Biostatistics and Computer Application (33527), Lab (33528).

VI Semester: Medical Biotechnology (33625), Industrial Biotechnology (33626), Biosafety, Bioethics and IPR in Biotechnology (33627), Lab (33628)

Bachelor of Science (B.Sc. Pass course/Subsidiary: Statistics)

Nomenclature of the course:

I Semester (CBCS): Probability Theory (STAT 101), Descriptive Statistics (STAT 102), Practical (STAT 103)

II Semester (CBCS): Statistical Analysis of Bivariate Data and Finite Difference (STAT 201), Univariate Distribution (STAT 202), Practical (STAT

III Semester: Applied Statistics I (STAT 301), Applied Statistics II (STAT 302), Practical (STAT 303)

IV Semester: Statistical Inference (STAT 401), Sampling Distribution and Stochastic Convergence (STAT 402), Practical (STAT 403)

V Semester: Sample Survey I (STAT 501), Design of Experiment (STAT 502), Practical (STAT 503)

VI Semester: Sample Survey II (STAT 601), Design of Experiment and Computational Techniques (STAT 602), Practical (STAT 603)





DEPARTMENTS OFFERING UNDER GRADUATE & POST GRADUATE COURSES



DEPARTMENT OF PHYSICS

"The whole edifice of the modern Physics is built upon the fundamental hypothesis of the atomic or molecular contribution of matter" - Sir C.V. Raman

To raise new questions, new possibilities and resolve the old theories or problems from the early one and generate the new one, Physics is the new most basic and fundamental science. Department of Physics is thriving center for research and education. Department closely aligns the teaching and learning experience for its students with the research-intensive values and practices. It offers the undergraduate (pass course as well as Honours), postgraduate and Ph.D. programs in Physics. Departmental research center is approved by University of Rajasthan (UOR). It has eleven well equipped experimental laboratories, departmental library, computer lab and other resources. Regular seminars, educational trips & tours and conferences are the proactive sources for the growth of the students and faculty members. Remedial classes and development programs of the department catch the fancy of many distinguished visiting physicists to the campus, which stimulate an active research environment. The research activities of the department encompass practically all major sub-disciplines of Physics. The research laboratory of the department has synthesis and characterization facilities like XRD, FTIR spectrophotometer, Spin Coater, UV-vis Spectrometer, Battery Tester, Muffle Furnace (1000°C), Ultra Sonic Bath, Magnetic Stirrer, Magnetic Assembly, Vacuum Oven, Mercury Bath, Electronic Balance, Impedance Analyzer, Vector Network Analyzer (VNA), Sievert Spectrometer for Hydrogen Adsorption, Hydraulic Press Unit, Kiethley Electrometer for I-V Measurement, Roll Mill, Thermal Evaporator, Probe Sonicatoretc. The department supported by FIST program in years 2002, 2013 and 2022. An annual competitive exam 'National Graduate Physics Examination' is conducted by Indian Association of Physics Teachers (IAPT) for undergraduate students every year in the month of January within the college premises. Every year selected students on the basis of their academic records are sent to reputed institute for projects and internships.

Course offered: Master of Science (M.Sc.) Physics

Eligibility : 10+2+3 with 55% from any recognized

University in Science Stream (Physics and

Mathematics)

Duration : Four Semesters (Two Years) **Affiliating Body**: University of Rajasthan

Nomenclature of the Course:

I Semester (CBCS): Classical Mechanics (MPHY 101), Quantum Mechanics (MPHY 102), Classical Electrodynamics I (MPHY 103), Mathematical Methods in Physics (MPHY 104), Electronics Lab/ General Lab/Spectroscopy Lab (MPHY 111), Seminar I (MPHY 131)

II Semester (CBCS): Electronics (MPHY 201), Atomic and Molecular

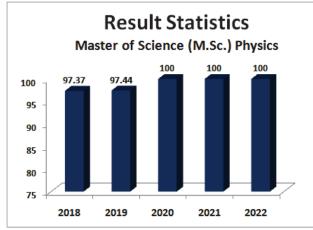
Physics

(MPHY 202), Classical Electrodynamics II (MPHY 203), Numerical Methods (MPHY 204), Electronics Lab/ General Lab/ Spectroscopy Lab (MPHY 211), Project Work/Summer Training Programme/ Dissertation (MPHY 231)

III Semester: Advance Quantum Mechanics (MPHY301), Statistical and SolidState Physics (MPHY302), Nuclear Physics I (MPHY303), Core Elective - I (Microwave Electronics - I (MPHY304(i)), Condensed Matter Physics I (MPHY304(ii)), Nanotechnology- I (MPHY304(iii)), Basics of Astrophysics & Astronomy I (MPHY304(iv)), Elective/Advance Laboratory Work (MPHY311), Seminar II (MPHY331)

IV Semester: Introductory to Ouantum Field Theory (MPHY401), Solid State Physics (MPHY402), Nuclear Physics II (MPHY403), Core Elective-II (Microwave Electronics-II (MPHY404(i)), Condensed Matter Physics II (MPHY404(ii)), Nanotechnology- II (MPHY404(iii)), Basics of Astrophysics & Astronomy II (MPHY404(iv)), Elective/Advance Laboratory Work (MPHY411), Project Work/ Summer Training Programme/Dissertation (MPHY431)





Department of Chemistry: DBT STAR DEPARTMENT

"Chemistry must become the astronomy of the molecular world." - Alfred Werner

One of the oldest Departments of this college, Department of Chemistry established in 1954 has a long tradition of pursuing excellence in teaching and research. Over the years the department has emerged as an excellent center for teaching and learning. The teaching programs in the department are focused on proper blending of quality and relevance. Right from the inception, the department has been fortunate enough to have got zealous and ebullient staff to shape its destiny. The academic excellence of the faculty is reflected in the publication of research articles in the journals of national and international repute and several books on varied aspects of chemistry. Various conferences, workshops, seminars and talks have been organized by this department regularly. By virtue of its commitment to preeminence, this department offers core courses in chemistry for undergraduate and post graduate students. Post graduate course was offered in the year 2009 and the honors course for undergraduate classes in 2016. The unrestrained vibes of this department work as a great driving force for students to come forward for resolving their queries in science. To blaze the scientific temper of the students and researchers, we have well-equipped laboratories and research laboratories with the latest instrument like Atomic Absorption Spectrophotometer, FTIR Spectrometer, Gaussian software and Flame Photometer, UV Spectrophotometer, Digital Spectrophotometer, Digital pH meter, Colorimeter, Conductometer, Potentiometer, Fuming Chamber, Balance (Electronic and Digital), Mechanical Shaker, Double Distillation Assembly, Centrifuge Machine and Heating Mantle. For the enhancement of conceptual understanding in Chemistry, ACT-CONTECH, a concept-based test in chemistry at national level is conducted regularly since 2010. Deserving students are selected for Summer Fellowships like POCE, JNCASR Bangalore etc. Every year many students qualify competitive exams like NET, GATE, RAS and JAM etc.

Course offered **Specialization** Eligibility

Master of Science (M.Sc.) Chemistry

Organic Chemistry/Physical Chemistry

10+2+3 with 55% from any recognized University in Science Stream (Physics,

Four Semesters (Two Years) Duration Affiliating Body University of Rajasthan

Nomenclature of the Course:

I Semester (CBCS): Inorganic Chemistry (MCHE 101), Organic Chemistry (MCHE 102), Physical Chemistry (MCHE 103), Spectroscopy I (MCHE 104), Bioinorganic Chemistry (MCHE 105), Introduction to Analytical Techniques and Nanochemistry (MCHE 106), Practical: (i) Inorganic Chemistry (MCHE 151) (ii) Physical chemistry (MCHE 152)

II Semester (CBCS): Inorganic Chemistry (MCHE 201), Organic Chemistry (MCHE 202), Physical Chemistry (MCHE 203), Spectroscopy II (MCHE 204), Biophysical Chemistry (MCHE 205), Environmental Chemistry I (MCHE 206), Practical: (i) Organic Chemistry (MCHE 251) (ii) Physical Chemistry (MCHE 252)

III Semester: (Organic Specialization): Photochemistry (MCHE 301), Bioorganic Chemistry (MCHE 302), Environmental Chemistry II (MCHE 303), Elective I Organic synthesis I (MCHE 304), Elective II Natural products I (MCHE 305) Elective III Heterocyclic Chemistry I (MCHE 306), Inorganic Chemistry Practical (MCHE 351), Organic Chemistry Practical (MCHE 352)

III Semester: (Physical Specialization): Photochemistry (MCHE301), Bioorganic chemistry (MCHE302), Environmental chemistry-II (MCHE 303), Elective-I -Advanced Electrochemistry-I (MCHE314), Elective-II- Phase Rule and Surface Phenomenon (MCHE315), Elective III - Advanced Chemical Kinetics-I (MCHE316), Inorganic Chemistry Practical (MCHE361), Physical Chemistry Practical (MCHE362)

IV Semester: (Organic Specialization): Green Chemistry (MCHE 401), Elective I Organic synthesis II (MCHE 402), Elective II Medicinal Chemistry and Natural Products II (MCHE 403), Elective III Heterocyclic Chemistry II (MCHE 404), Inorganic Chemistry Practical (MCHE 451), Organic Chemistry Practical (MCHE 452), Seminar/Project (MCHE 453)

IV Semester: (Physical Specialization): Nanochemistry and Nano Catalysis (MCHE 411), Elective-I Polymer Chemistry (MCHE 412), Elective-II, Chemistry of Materials (MCHE413) Elective-III, Advanced Electrochemistry - II (MCHE414), Organic Practical (MCHE461),



Department of Mathematics

Mathematics is the queen of science, and arithmetic the queen of mathematics. -Carl Friedrich Gauss

The Department of Mathematics was established in the year 1954 and upgraded as a postgraduate department in 1993. Adding feathers to its crown of academic and research excellence, the department was recognized as a research centre by University of Rajasthan. The department is equipped with the state of art infrastructure like rich collection of books and well-equipped computer laboratory with 100 mbps network connectivity. The Department has highly qualified and dedicated faculty members specialized in diverse areas such as Fractional Calculus, Analysis, Operation Research, Special Function, Differential Equations and Fluid Dynamics. Apart from putting in constant sincere efforts to help the students, teachers are constantly engaged in research activities and updating themselves on recent developments. The department also aims to train students who are oriented towards research and teaching in advanced areas of pure and applied Mathematics. The department also guides postgraduate students for JAM/NET/GATE examinations. The department also offers remedial classes for the slow learners. The department is associated with department of Physics, Botany, Zoology and Chemistry for interdisciplinary research.

Course offered Master of Science (M.Sc.) Mathematics Master of Arts (M.A.) Mathematics

Eligibility 10+2+3 with 55% from any recognized

University in Science Stream (Physics and Mathematics) and for Arts Stream, Mathematics at graduation level.

Duration Four Semesters (Two Years) Affiliating Body University of Rajasthan

Nomenclature of the Course:

I Semester (CBCS): Algebra-I (MAT 101), Real Analysis (MAT 102), Differential Equations - I (MAT 103), Differential Geometry (MAT 104), Dynamics of Rigid Bodies (MAT 105), Calculus of Variation and Special Function-I (MAT 106)

II Semester (CBCS): Algebra -II (MAT 201), Topology (MAT 202), Differential Equations - II (MAT 203), Riemannian Geometry and Tensor Analysis (MAT 204), Hydrodynamics (MAT 205), Special Function-II (MAT 206)

III Semester: Functional Analysis- I (MAT 301), Viscous Fluid Dynamics- I (MAT 302), Mathematical Programming -I (MAT C01), Integral Transforms (MAT E01), Relativistic Mechanics (MAT F01), Numerical Analysis - I (MAT G01)

IV Semester: Functional Analysis-II and Advanced Calculus (MAT 401), Viscous Fluid Dynamics-II (MAT 402), Mathematical Programming-II (MAT CO2), Integral Equations (MAT EO2), General Relativity and Cosmology (MAT F02), Numerical Analysis-II (MAT G02)

Result Statistics Master of Science (M.Sc.) Mathematics 100 100 100 95 90 85 80 **75** 2018 2019 2020 2021 2022

Department of Zoology: DBT STAR DEPARTMENT

"Science is a way of thinking much more than it is a body of knowledge." -Carl Sagan

With its origin in 2014, the Department of Zoology grows every year, with the aim to impart knowledge to the students and to help them to better understand various concepts of zoology. Since its inception, the department has been known for its progressive syllabus structure and research approaches. It is a dynamic department that plays a significant transformative role to enable, empower and inspire students to fulfill their aspirations. The Department offers various under-graduate courses (B.Sc. Pass Course & Honours), postgraduate courses, PG Diploma in Forensic Science and research programmes with emphasis on fundamental as well as emerging areas of modern biology. The department provides specialization in Cell and Molecular Biology, Entomology, Radiation Biology and Environmental Toxicology. Well-equipped research laboratories with various instruments like RT- PCR, ultracentrifuge, Fluorescence Microscope, FTIR, Hematology analyzer, Biochemical Analyzer, Tissue processor etc. and enriched Zoological Museum as well as Departmental library is available for the students which will help them to enhance their knowledge to greater perspectives. Department has qualified and dedicated faculty specialized in various disciplines of animal science. Departmental thrust areas for research in which, various faculty members are involved includes Neurobiology, Molecular Radiation Biology, Oncology, Reproductive Physiology, Evolutionary Biology, Toxicology, EIA, Avian Biodiversity Research, Nano based antifertility drug research, Nematology, Molecular Genetics, and Population Dynamics etc. Students are also engaged with different projects in form of dissertation at post graduate level and student project at under graduate level. Emphasis is given on imparting knowledge and practical skills to enable the students to become a part of innovative, competent and global world, along with providing right guidance for higher studies.

Course offered : Master of Science (M.Sc.) Zoology

Electives : Cell & Molecular Biology/ Entomology/ Environmental Toxicology/Radiation Biology

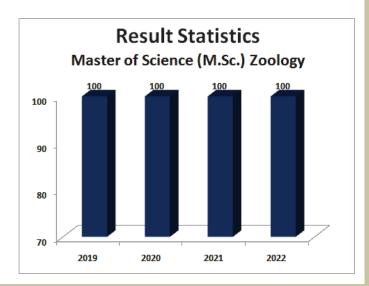
Eligibility : 10+2+3 with 55% from any recognized University in Science Stream (Zoology, Botany

and Chemistry)

Duration : Four Semesters (Two Years) Affiliating Body : University of Rajasthan

Nomenclature of the Course:

I Semester (CBCS): Principles of Biosystematics & Taxonomy (MZO 101), Structure & Function of Invertebrates (MZO 102), Biochemistry (MZO 103), Essentials of Cytology (MZO 104) Practical: Zoology Practical (MZO 151), Lab Work and Seminar (MZO 152)



II Semester (CBCS): General Physiology (MZO 201), Environmental Biology & Ethology (MZO 202), Molecular Biology, Biotechnology & Bioinformatics (MZO 203), Genetics and Molecular Evolution (MZO 204) Practical: Zoology Practical (MZO 251), Lab Work and Seminar (MZO 252)

III Semester: Biology of Chordates (MZO 301), Genes & Differentiation (MZO 302), Elective (Paper I) Basics of Toxicology (MZO 303A), Fundamentals of Radiation (MZO 303B), Systematics and Ecology of Insects (MZO 303C), Molecular Biology of the Gene (MZO 303D) Elective (Paper II) Environmental Pollution & Legal Framework (MZO 304A), Biological Effects of Ionizing Radiation (MZO 304B), Insect Morphology, Physiology, Embryology and Development (MZO 304C), Proteomics (MZO 304D), Practical: General Practical and Lab Work & Seminar (MZO 351), Elective Practical and Synopsis Preparation / Presentation (MZO 352)

IV Semester: Applied Zoology & Biostatistics (MZO 401), Tools & Techniques in Biology (MZO 402), Elective (Paper III) Applied Aspects of Toxicology (MZO 403A), Principles of Radiation Protection, Legislation & International Framework (MZO 403B), Industrial, Medical & Veterinary Entomology (MZO 403C), Cellular mechanics (MZO 403D) Elective (Paper IV) Biomonitoring & Bioremediation

(MZO 404A), Occupational Exposure and Radiation Safety (MZO 404B), Insect Toxicology and Pest Control (MZO 404C), Molecular Immunology (MZO 404D), General Practical and Lab Work & Seminar (MZO 451), Elective Practical and Dissertation Presentation (MZO 452)

Course offered : P.G. Diploma in Forensic Science (PGDFS)

Eligibility : 10+2+3 with 55% from any recognized

University in Science Stream

Duration : One Year (Annual) **Affiliating Body** : University of Rajasthan

Note: The course will commence only with minimum strength of fifteen students.

Nomenclature of the Course:

I Year Basics of Forensic Science & Crime Scene Management (PGDFS 101), Instrumental Methods- Physical, Biological & Chemical (PGDFS 102), Forensic Biology and Serology (PGDFS 103), Forensic Science and Recent Advancement (PGDFS 104) Forensic Medicine & Legal Aspects of Forensic Science (PGDFS 105), Practical/Project (Dissertation) (PGDFS 106)

Department of Botany: DBT STAR DEPARTMENT

Botany: The Key to a Sustainable Future. - Anonymous

Botany is a fascinating field of study that offers insights into the biology and ecology of plants, their importance to the environment and society, and the challenges we face in managing and conserving plant populations. Botany allows students to explore plant life on earth from the molecular to the supra organizational level, with a focus on plant systems and processes.

Three modern Botany laboratories of college are well equipped with all necessary plant material, glasswares, chemicals, minor and major instruments viz. UV-visible Spectrophotometer, Incubator Shaker, Plant growth chamber, Ultra centrifuge, Laminar Air Flow, Microtome, Optical Binocular Microscope, Monocular microscope, Dissecting microscopes, Water Bath, Weighing Balance etc. Apart from these, the department also maintains its own Botanical Garden and Herbarium. Vermicompost Beds and Hydroponics Plant are special features working under the department.

Course offered : Master of Science (M.Sc.) Botany

Eligibility : 10+2+3 with 55% from any recognized University in Science Stream (Botany, Zoology

and Chemistry)

Duration : Four Semesters (Two Years) **Affiliating Body** : University of Rajasthan

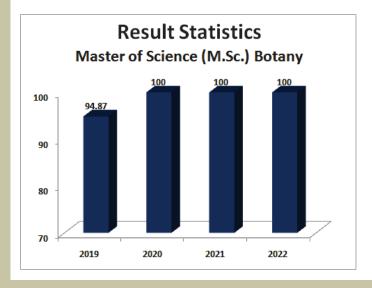
Nomenclature of the Course:

I Semester (CBCS): Cell Biology and Evolution (MBOT 101), Morphology and Diversity of Non-Vascular Plants (MBOT 102), Biology and Diversity of Microbes (MBOT 103), Plant Ecology and Environment (MBOT 104), Practical (MBOT 151), Practical & Seminar (MBOT 152)

II Semester (CBCS): Genetics and Plant Breeding (MBOT 201), Morphology and Diversity of Vascular Plants (MBOT 202), Phytopathology (MBOT 203), Plant Physiology and Metabolism (MBOT 204), Practical (MBOT 251), Practical & Seminar (MBOT 252)

III Semester: Molecular Biology (MBOT 301), Taxonomy of Angiosperms (MBOT 302), Morphology and Developmental Anatomy of Angiosperms (MBOT 303), Core Electives I Advance Plant Pathology I / Seed Science & Technology I / Advance Plant Physiology I (MBOT304), Practical & Seminar (MBOT 351), Practical and Seminar (MBOT 352)

IV Semester: Embryology of Angiosperms (MBOT 401), Plant Resource Utilization and Ethnobotany (MBOT 402), Plant Biotechnology and Genetic Engineering (MBOT 403), Core Electives II Advance Plant Pathology II /Seed Science & Technology II / Advance Plant Physiology II (MBOT404), Practical & Seminar (MBOT 451), Project Work/Training / Seminar and Practical (MBOT 452)





Department of Environmental Science: DBT STAR DEPARTMENT

"Earth provides enough to satisfy every man's needs, but not every man's greed."— Mahatma Gandhi

The Department of Environmental Science was established in 2005 with the Skill enhancement course of Environmental Studies and sustainable Development at all undergraduate levels as per the CBCS pattern given by UGC and at post-graduate level in 2009. It also offers PG Diploma in Industrial Safety, Health and Environmental Management (PGD-ISHEM), P.G. Diploma in Water Harvesting and Management System (PGD-WHMS) and P.G. Diploma in Environmental Audit, ISO & Sustainable Development (PGD-EAISDC). A well-equipped laboratory, departmental library and well qualified faculty members ensure fulfillment of all the academic and inquisitive needs of the students. Along with all the academic activities, the department also undertakes extra and co-curricular activities to create awareness and practical knowledge about our environment by organizing seminars, quest lectures, workshops, various competitions and guizzes and educational tours and visits. A career in Environmental Science promises wonderful employment opportunities, for the environmental scientists, environmental modelers, environmental biologists, environmental journalists and many more. A degree holder in Environmental Science can get a job in government and private organizations in the fields like Industries, Forest and Wildlife Management, NGOs, Pollution Control Boards, Town developer officer, Town Ship-planner, Ground water department, Ministry of Environment and Forest and also opt for teaching jobs in colleges and universities.

Course offered : Master of Science (M.Sc.) Environmental Science

Eligibility : 10+2+3 with 55% from any recognized

University in Science Stream Duration : Four Semesters (Two Years) **Affiliating Body**: University of Rajasthan

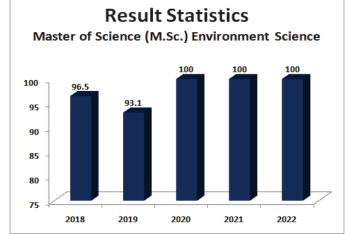
Nomenclature of the Course:

I Semester (CBCS): Ecology and Ecosystem (MES 101), Natural Resources and Biodiversity Conservation (MES 102), Environmental Pollution and Health (MES 103), Environmental Issues: Regional and Global (MES 104), Practical (MES 151)

II Semester (CBCS): Waste Management (MES 201), Environmental Policies, Legislation and Ethics (MES 202), Environmental Chemistry (MES 203), Environmental Disasters and Management (MES 204), Practical (MES 251)

III Semester: Instrumentation for Environmental Monitoring and Analysis (MES 301), Environmental Bioremediation Process and Technology (MES 302), Pollution Control Technology (MES 303), Statistics, Environmental Modeling and Research Methodology (MES 304), Practical (MES 351)

IV Semester: Environmental Impact Assessment and Sustainable Development (MES 401), Environmental Clearance and Environmental Audit (MES 402), Remote sensing and GIS for Environmental Science (MES 403), Energy and Environment (MES



404), Practical (MES 451)

Course offered : P.G. Diploma in Industrial Safety, Health and **Environmental Management (PGD-ISHEM)**

Eligibility : 10+2+3 with 55% from any recognized

University in any Science Stream

Duration : One Year (Annual) Affiliating Body : University of Rajasthan

Note: The course will commence only with a minimum strength of fifteen students.

Nomenclature of the Course:

I Year: Safety, Health and Environmental Management (ISHEM 1), Legislation on Safety, Health and environment (ISHEM 2), Safety Engineering (ISHEM3), Environmental Impact assessment and monitoring (ISHEM 4), Environmental Management System and ISO 14000 (ISHEM 5), Practical Based on Theory Paper /In-plant Training and Visits Project (ISHEM PBT6)

Course offered : P.G. Diploma in Environmental Audit, ISO & Sustainable Development (PGD-EAISDC)

Eligibility : 10+2+3 with 55% from any recognized

University in any Science Stream

Duration : One Year (Annual) Affiliating Body : University of Rajasthan

Note: The course will commence only with a minimum strength of fifteen students.

Nomenclature of the course

I Year: Environmental Management and Environmental Audit (EAISOSD 1), Environmental Audit Procedure & its Application (EAISOSD 2), ISO Certification and Environmental Management System (EAISOSD 3), ISO Documentation Categories (EAISOSD 4), Sustainable development and its application (EAISOSD 5), Practical Based on Theory Paper /In-plant Training and Visits Project (EAISOSD PBT6)

: P.G. Diploma in Water Harvesting and Course offered

Management System (PGD-WHMS)

Eligibility : 10+2+3 with 55% from any recognized

University in any Science Stream

Duration : One Year (Annual) Affiliating Body : University of Rajasthan

Note: The course will commence only with a minimum strength of fifteen students.

I Year: Fundamentals of Water Hydrology and Hydro Chemistry (WHMS 1), Water Management, Climate Change, Case Studies and Legal Aspect (WHMS 2), Geo informatics in Water Resources Management and Tools Techniques (WHMS 3), Watershed conservation and Harvesting Techniques (WHMS 4), EIA, Remote Sensing and GIS for Water Resources Development (WHMS 5), Practical Based on Theory Paper /In-plant Training and Visits Project (WHMS PBT6)



Department of Microbiology: DBT STAR DEPARTMENT

You live in intimate association with bacteria, and you couldn't survive without them. - Bonnie Bassler

The Department of Microbiology since its inception is deeply committed to provide quality education with equal emphasis on holistic theoretical and practical learning for students ensuring them the in-depth understanding of forefront of microbiology. The Department houses advance instruments like ELISA Reader, PCR-thermocycler, cooling ultracentrifuges, LAF station, BOD Incubator, Spectrophotometer, UV transilluminator and fluorescence microscope etc. The mandates of the department are to shape microbiologists of excellent caliber with good technical and research skills with essential industrial visits and certified trainings to improve their employability in academia as well as industries.

Modern Microbiology is the hub of the 'Cutting Edge' sciences that encompasses vast areas such as Medical Microbiology, Pharmaceutical and Industrial Microbiology, Agricultural and Environmental Microbiology, Genetic Engineering, Biosafety, Bioethics, IPR and Computational Biology. These are the most rapidly developing arenas and will offer highly qualified manpower to industry and academia in the country. For this exact reason, Microbiology is a buzzword. The department aims to place students in good positions in the marketplace, therefore attracts a large number of students looking at the vast scope of the subject. The graduates from this department are already employed in various National/International academic, research and industrial organizations. Considering modern microbiological approaches and applications, the curriculum is designed to enlighten the students in basics of Microbiology to recent advancements.

Course offered : Master of Science (M.Sc.) Microbiology

Eligibility: 10+2+3 with 55% from any recognized

University in Science Stream (Zoology, Botany, Chemistry, Biotechnology, Microbiology and

Biochemistry)

Duration : Four Semesters (Two Years) **Affiliating Body** : University of Rajasthan

Nomenclature of the Course:

I Semester (CBCS): General Microbiology, Microbial techniques and Bioinstrumentation, Microbial Biochemistry and Physiology, Food and Dairy Microbiology, Lab 1-Based on Papers 1 & 2, Lab 2-Based on Papers 3 & 4.

II Semester (CBCS): Bacteriology and Extremophiles, M crobial genetics and Molecular biology, Microbial Ecology, Medical Microbiology, Lab 1-Based on Papers 1 & 2, Lab 2-Based on Papers 3 & 4.

III Semester: Virology, Environmental and Agricultur Microbiology, Elective I (Genetic Engineering/Pharmaceutical Microbiology/Biostatistics and computer application), Elective II (Fungal Biotechnology and Bio-prospecting/Research especials)

Dissertation and Industrial training), Lab 1-Based on Papers 1 & 2, Lab 2-Based on Papers 3 & 4.

IV Semester: Immunology and Immunotechniques, Industrial Microbiology, Elective I (Genomics and Proteomics/Clinical and Diagnostic Microbiology/Bioinformatics), Elective II (Bioprocess Engineering and Technology/Bioethics, Biosafety and IPR/ Dissertation and Industrial training)

Note: The course will commence only with minimum strength of twenty students.



Department of Biotechnology: DBT STAR DEPARTMENT

"I think the biggest innovations of the 21st century will be at the intersection of biology and technology. A new era is beginning." - Steve Jobs

The Department of Biotechnology was established with the vision to accomplish new epitome in the domain of biotechnology education and research, shaping life sciences into a premier precision tool for the future and develop technologies that seek solutions to real life. Recently the department has received fund under DBT STAR Scheme for the establishment of state-of-the-art research center. The primary responsibility of the department is to set high teaching and research standards using modern tools and technology that encourage the students to pursue new scientific knowledge and career opportunities in Biotechnology. Apart from the academic curricula, the students are assigned research institute visits, excursions, and Industrial visits and special in-plant training, genetic engineering and immunological work in industries. The students are encouraged for research through the projects, dissertations and summer trainings.

Course offered Eligibility

: Master of Science (M.Sc.) Biotechnology

: 10+2+3 with 55% from any recognized University in Science Stream (Zoology, Botany and Chemistry), Biotechnology, Microbiology and Biochemistry

: Four Semesters (Two Years) Duration Affiliating Body : University of Rajasthan

Nomenclature of the Course:

I Semester (CBCS): Paper I-Cell Biology, Paper II-Genetics, Paper III-Microbiology, Paper IV- Elective 1 (Analytical techniques), Lab 1-Based on Papers 1 & 2, Lab 2- Based on Papers 3 & 4.

II Semester (CBCS): Paper I-Molecular Biology, Paper II-Enzymology, Paper III- Immunology, Paper IV- Elective 2 (Virology), Lab 1- Based on Papers 1 & 2, Lab 2- Based on Papers 3 & 4

III Semester: Paper I -Genetic Engineering, Paper II- Animal Biotechnology, Paper III-Seminar, Scientific Writing and Power Point Presentation, Paper IV- Elective 3(Bioinformatics & Biostatistics), Lab 1- Based on Papers 1 & 2, Lab 2- Based on Papers 3 & 4

IV Semester: Paper I-Plant Biotechnology, Paper II-IPR & Bioethics, Paper III-Dissertation and Industrial training, Paper IV- Elective 4 (Bio-processing Engineering), Lab 1- Based on Papers 1 & 2, Lab 2-Based on Papers 3 & 4

Note: The course will commence only with minimum strength of twenty students.

Department of Geography: DBT STAR DEPARTMENT

"Geography is the subject which holds the key to our future"-Michael Palin

Geography is a multidisciplinary course that relates with various fields of Social Sciences, Sciences and Technology. It helps in unfolding the hidden relations of society in space and time. The Department of Geography was established in 2006 with B.A., B.Sc., and further established M.A., M.Sc. programme in 2009 and B.A. (Hons) Geography in 2016. The Department has paved its way to modernization by embracing the G.P.S and Remote Sensing techniques. The Department has well equipped laboratory comprising of four sections: one is dedicated for surveying instruments, second; developed with World Atlas, Maps, Charts, Globe, Models etc. The third section is well furnished with technologically advanced field survey instruments such as Total Station, Electronic Theodolite, Astronomical Telescope, G.P.S, Distance Meter, Weather Station, Pan Evaporator Meter, Topographical Sheets, Compass and other digital equipment's and fourth; embellished with Cartography equipment's. Department of Geography imparts pragmatic knowledge of fieldwork and theoretical applications to the contemporary problems of the society. According to great geographer Vidal de La Blache, "Nature sets limits and offers possibilities for human settlement, but the way man reacts or adjusts to these conditions depends on his own traditional way of living."

Course offered : Master of Science (M.Sc.) Geography

Eligibility : 10+2+3 with 55% from any recognized

University in Science / Arts Stream

Master of Arts (M.A.) Geography

Duration : Four Semesters (Two Years) **Affiliating Body** : University of Rajasthan

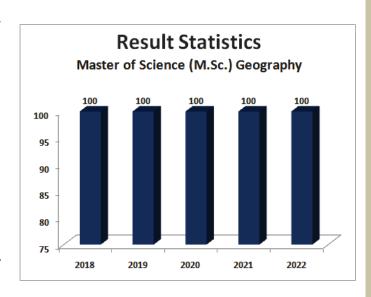
Nomenclature of the Courses:

I Semester (CBCS): Geographical Thought -I (Up to Medieval Period) (MGEO101), Dynamic Geomorphology (MGEO102), Economic Geography (MGEO103) Elective: Man and Natural Environment -I (MGEO104A), Quantitative Techniques in Geography-I (MGEO104B), Practical (MGEO105)

II Semester (CBCS): Geographical Thought-II (Modern) (MGEO201), Climatology and Oceanography (MGEO202), Principles and Theory of Economic Geography (MGEO203), Elective: (A) Man and Natural Environment- II (MGEO204A), (B) Quantitative Techniques in Geography-II (MGEO204B), Practical (MGEO205)

III Semester: Advanced Geography of India (MGEO-301), Elective: Agricultural Geography -I (MGEO302A), Disaster perception and Management (MGEO302B), Elective: Urban Geography (MGEO303A), Regional Planning (MGEO303B), Elective: Political Geography (MGEO304A), Water Resources and their Management-I (MGEO304B), Research Methodology (MGEO304C), Practical (MGEO305)

IV Semester: Geography of Rajasthan (MGEO401), Elective: Agricultural Geography -II (MGEO402A), Climatology (MGEO402B), Elective: Industrial Geography (MGEO403A), Fundamentals of Remote Sensing (MGEO403B), Elective: Biogeography (MGEO404A), Water Resource and their Management -II (MGEO404B), Applied Geography (MGEO404C), Practical (MGEO405)



Department of Psychology

"It is not primarily our physical selves that limit us but rather our mindset about our physical limits." - Ellen J. Langer

Psychology helps in understanding the thought process of other people and helping them bring about positive changes in their lives. It is a science that involves the study of mind, behavior, and the factors that influence the way it works by understanding behavior and mental processes. It is a broad discipline that studies the intersection of relationships between the brain function and behavior, and between the environment and behavior. Students will demonstrate the acquisition of both factual knowledge and the ability to conceptualize and apply this knowledge to their own behavior, to ways of interacting with others, and to their roles in culture and society. The introductory courses will develop an awareness and familiarity of the scientific study of human behavior and the neural, cognitive, sensory and motor processes underlying it. Students will learn about current psychological research and theory on intelligence, emotions, personality, social interactions, and psychological disorders and their treatment. Psychology helps in understanding how psychological theories and principles relate to everyday life and apply knowledge of behavior modification and life skill training to solve everyday problems. The Department of Psychology offers a two-year Master's program with specialization in Clinical Psychology and Counseling. This program has been designed to ensure that students are able to enhance their academic interest in the subject, along with their personal growth and awareness. By gaining an in-depth understanding of the field, students will be able to demonstrate their skills in counseling and research. The program offers opportunities for students to get hands on experience in research, and internships. The program aims to prepare competent professional psychologists who would excel in knowledge and practice adhering to ethical standards.

Course offered : Master of Science (M.Sc.) Psychology
Master of Arts (M.A.) Psychology

Eligibility : 10+2+3 with 55% from any recognized

University in Science / Arts Stream

Duration : Four Semesters (Two Years) **Affiliating Body** : University of Rajasthan

Nomenclature of the Course:

I Semester (CBCS): Systems and Theories of Psychology-I (MPSY101), Cognitive Psychology-I (MPSY102), Physiological Psychology-I (MPSY103), Statistics and Research Methods-I(MPSY104), Practical (MPSY105), Internship (MPSY106)

II Semester (CBCS): Systems and Theories of Psychology-II (MPSY201), Cognitive Psychology-II(MPSY202), Physiological Psychology-II (MPSY203), Statistics and Research Methods-II(MPSY204), Practical (MPSY205), Internship (MPSY206)

III Semester: Applications of Psychology-I (MPSY301), Social Psychology-I (MPSY302) Elective: Clinical Psychology-I (MPSY303-A), Personality Theories-I (MPSY304-A)Elective: Guidance and Counseling-I (MPSY303-B), Theories and Foundations of Counseling-I (MPSY304-B), Practical (MPSY305), Internship (MPSY306), Dissertation in lieu of Group A or B (MPSY307)

IV Semester: Applications of Psychology-I (MPSY401), Social Psychology-I (MPSY402) Elective: Clinical Psychology-I (MPSY403-A), Personality Theories-I (MPSY404-A) Elective: Guidance and Counseling-I (MPSY403-B), Theories and Foundations of Counseling-I (MPSY404-B), Practical (MPSY405), Internship (MPSY406), Dissertation in lieu of Group A or B (MPSY407)



Bachelor of Commerce (B.Com. Pass Course)

"Innovation and commerce are as powerful tools for creating social progress as they are for driving technological advancement."-Kiran Mazumdar-Shaw

B.Com. Pass Course has been designed for imparting knowledge of business. The content of the curriculum focuses on giving full exposure to the students and helping them undergo overall personality development. Along with it, the institution also encourages students to pursue professional programs to make their approach business oriented.

Optional Subjects: Accountancy and Business Statistics, Business Administration, Economic Administration and Financial Management **Compulsory Subjects:**

I Semester : General EnglishII Semester : General Hindi

III Semester : Elementary Computer Application (Theory &

Practical)

IV Semester : Environmental Studies and Sustainable

Development

V Semester : Mental Ability and Reasoning

VI Semester : Anandam-Joy of Giving / NCC, NSS, Rovers and

Rangers, Sports, Red Ribbon Club, Extracurricular

and co-curricular activities

Eligibility : 10+2 with 48% from Rajasthan Board/CBSE in

Rajasthan State or 60% from CBSE or any other

Equivalent recognized Board from other State

Duration : Six Semesters (Three Years) **Affiliating Body** : University of Rajasthan



Bachelor of Commerce (B. Com. Honours)

Commerce is a game of skill which everyone cannot play and few can play well.- Ralph Waldo Emerson

Compulsory Subjects:

I Semester : General English II Semester : General Hindi

III Semester : Elementary Computer Application (Theory &

Practical)

 $\textbf{IV Semester} \qquad : \textbf{Environmental Studies and Sustainable Development}$

V Semester : Mental Ability and Reasoning

VI Semester : Anandam-Joy of Giving / NCC, NSS, Rovers and

Rangers, Sports, Red Ribbon Club, Extracurricular

and co-curricular activities

Eligibility : 10+2 with 50% from Rajasthan Board/CBSE in

Rajasthan State or 60% from CBSE or any other

Equivalent recognized Board from other State

Duration : Six Semesters (Three Years)

Affiliating Body: University of Rajasthan

Department of ABST

B.Com. (Honours) ABST

Nomenclature of the course

I Semester (CBCS): Financial Accounting (BH 101), Elementary Statistics

(BH 102), Financial Management (BH 103)

Subsidiary Papers: Business Contract, Business Economics

II Semester (CBCS): Corporate Accounting (BH 201), Business Statistics

(BH 202), Functional Accounting (BH 203)

Subsidiary Papers: Business Laws, Managerial Economics

III Semester : Income Tax Law (BH 301), Elements of Cost Accounting

(BH 302), Custom Duty (BH 303), Operation Research (BH 304)

Subsidiary Papers: Corporate Law I, Economic environment in India **IV Semester:** Income Tax Law & Practices (BH 401), Methods & Techniques of Costing (BH 402), Corporate Tax (BH 403), Quantitative

Techniques (BH 404)

Subsidiary Papers : Corporate Law II, International Trade and Finance

V Semester: Auditing (BH 501), Higher Accounting (BH 502), Tax

 $Planning \, (BH \, 503), Advanced \, Cost \, Accounting \, (BH \, 504)$

Subsidiary Papers: Functional Management, Rural Development and

Cooperation

VI Semester : Goods and Service Tax (BH 601), Advanced Accounting (BH 602), Project Planning and Management (BH 603), Cost and

Management Audit (BH 604)

Subsidiary Papers: Functional Management II, Economy of Rajasthan

