

A constituent unit of Patliputra University, Patna



# **Program Outcomes (Pos) and Course Outcomes**

# (Cos) for all programmes offered by the institution

# **PROGRAMME OUTCOME**

#### **Masters of Arts**

The College offers a comprehensive education in social sciences, literature, and humanities, preparing students to solve problems related to mankind. The PG program equips students with knowledge of social, economic, historical, geographical, political, ideological, and philosophical traditions, enabling them to face competitive exams or choose their own postgraduate or research programme. It equips students with knowledge of research methods and the importance of finding solutions to specific issues. Specifically, the program provides students with a strong foundation while sharpening their language skills and analytical abilities while offering postgraduate courses to advance literature, history, and society. The curriculum offers students access to cutting-edge scholarship, tailored to their interests. It aims to familiarize students with economics, methodologies, tools, and analysis procedures, and to create enthusiasm for various schools of thought and social science research. It enhances understanding of Indian economy, population, income patterns, employment, and social security measures. After completing the Program, students will understand major approaches to political, sociological, financial and interpersonal life, they will be able to generate awareness, grasp global politics methodology, develop multi-centric worldviews, and develop conceptual perspectives on public administration and other relevant institutions. In a nut shell, the program offers reading and writing exercises, field work expeditions and online materials to enhance students' analytical and intellectual abilities.

#### **Master of Science**

Postgraduate courses in physics, chemistry, mathematics, zoology and botany are available in the Faculty of Science. The programs are designed to help the students in gaining the competence in gathering data with a range of lab equipment as well as in analysing and interpreting that data. The program provided to the students with pragmatic understanding and knowledge. It helps the students to learn and acquire the skillset to plan and carry out







experiments, that showcases their comprehension of the scientific technique and procedure. Students in these programmes are equipped to synthesise and produce in-depth scientific information, apply it to projects, evaluate and resolve issues, and communicate in an appropriate manner. All in all, it helps the students to comprehend the analytical techniques needed to interpret, evaluate, and draw inferences from their data. To meet the material and spiritual demands of humanity, the courses also include professional ethics into life, organisations, society, and individual lives. Students are capable of learning on their own for both professional and personal growth. They can also define managerial terms, recognise business prospects, and take the initiative to seize them.

#### **Master of Commerce**

This programme offers students a thorough and rigorous foundation to the fields of banking and finance while emphasizing the development of research, conceptual, and practical abilities necessary for efficient problem-solving and decision-making in banking transactions and financial management. Additionally, it teaches students about business practises, regulatory agencies, marketing and finance strategies, corporate tax planning, application-oriented research, statistical methodologies, corporate tax planning, national and worldwide trends, investment and portfolio management abilities, and business practises. The program aims to equip students with the necessary skills for conducting business, accounting, and auditing practices. In addition, it also aims to motivate and develop start-ups, provide a foundation for advanced studies, and foster holistic development to create responsible citizens. It also aims to bridge the gap between academia and industry, enabling individuals to face challenges and achieve excellence in their chosen career path.



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#### **Bachelor of Arts**

The Faculty of Arts offers various undergraduate programs, including Political Science, History, English, Hindi, Urdu, Maithili, Philosophy, Psychology, Sociology, Geography and Economics. The program aims to develop students' life skills, language competence, and a sense of national pride by studying various cultures, customs, literature, architecture, constitution, life skills, society, etc. The Bachelor of Arts degree requires three years of fulltime study. The degree focuses on increasing students' knowledge and critical thinking, preparing them to connect across geographical, disciplinary, social, and cultural boundaries, understand the importance of ethical behavior, and lifelong learning habits. Students seeking admission for the Bachelor in Arts are expected to imbue with qualities that will help them achieve their goals in their future life. These qualities include realization of human values, sense of social service, responsible and dutiful citizenship, critical temper, and creative ability. A graduate student in arts/social sciences/humanities shall be confident in speaking, writing, reading, listening, and understanding English and one or more Indian languages. They shall also develop an obligation to act for society's benefit, maintain a balance between the economy and ecosystems, and analyze factual evidence objectively. They shall be able to participate in decision making and uphold national development and integrity. They shall also be proficient in independent, life- long learning.

#### **Bachelor of Commerce**

The Bachelor of Commerce program is a three-year, program that aims to equip students with a comprehensive understanding of Business and Commerce through a detailed view of theory and its implications. The curriculum also focuses on developing life skills and ability enhancement, preparing students to manage challenges in the business and society. The program focuses on understanding individual and company accounting systems, banking and insurance company operations, income tax provision, and applying accounting in professional courses. Students also acquire skills in human resources management, aptitude, interviewing, personality, entrepreneurship, proposal writing, and financial assistance procurement from MSMEs (micro, small, and medium enterprises).







The program also equips students with the ability to engage in competitive exams like C.A., C.S., and ICMA. Students gain practical skills to work as Tax Consultants, Audit Assistants, and other financial supporting services. The program also prepares students for various professional roles, including exhibiting knowledge of the discipline, demonstrating professional expertise, creative, critical thinking, problem-solving, effective communication, social sensitivity, and professional and moral ethics.

#### **Bachelor of Science**

The three-year B.Sc. Programme at the College of Arts and Science offers courses in Physics, Chemistry, Mathematics, Zoology and Botany. The program aims to introduce students to various laboratory methods, critical thinking, and independent learning. Students develop laboratory skills through hands-on experiences with experimental techniques and tools, learn data analysis approaches, and become confident in using computational methods. These courses help students prepare for careers that demand scientific and technical knowledge and strong logical reasoning abilities. It emphasizes critical thinking, employability, and a strong foundation in technical knowledge. Students are encouraged to apply their knowledge of mathematics and science fundamentals to solve complex problems. They are exposed to various topics and given intensive training in laboratory-related courses. They are encouraged to use mathematical and experimental methods to study various branches of sciences. By the end of the program, students gain thorough knowledge in key areas of the subjects offered.

# **Vocational and Professional Courses (UG and PG)**

The institution offers various vocational and professional courses at both graduation and postgraduate levels, including MBA, MCA, BBA, BCA, M.Sc. Biotechnology, B.Sc. Biotechnology, B.Sc. IT, Medical Lab Technology, Nutrition and Dietetics, Journalism and Mass communication, Counselling and Rehabilitation. These courses provide students with indepth understanding of core management concepts, critical thinking, problem-solving, communication, leadership, teamwork, and decision-making skills. Students will also develop practical skills to analyze business situations, identify opportunities and challenges, design strategies, and evaluate results and impacts. Adaptability and ethical and social responsibility are also essential skills for students. They will demonstrate ethical awareness, social







responsibility, and environmental stewardship by considering the interests of multiple stakeholders. They will gain a global and local perspective on management issues by examining cultural, political, legal, and economic differences among regions and countries. Graduate students in biotechnology will have a comprehensive understanding of fundamental concepts and principles, practical skills in modern biotechnological techniques, critical thinking and analytical skills, and a thorough understanding of the ethical and social implications of biotechnological advances. Postgraduate students will have an advanced understanding of biotechnological concepts, expertise in biotechnology research methodologies, scientific and critical thinking skills, ethical and regulatory issues, and effective leadership and communication skills. In computer application, graduates will be prepared to meet the demands of the ever-evolving IT industry and contribute meaningfully to solutions that engage high levels of innovation, creativity, and critical thinking.

The PG Diploma in counselling and rehabilitation aims to equip students with various skills and knowledge. These include understanding counselling techniques, conducting individual and group sessions, enhancing cultural competency, understanding human development and psychological trauma, demonstrating ethical and professional approaches, and managing burnout. The Medical Lab Technology course focuses on laboratory operations, diagnostic procedures, specimen collection, processing, and analysis, laboratory safety, security protocols, quality control, and report preparation. The Journalism and Mass Communication diploma focuses on media and communication theories, reporting, writing, and editing news scripts and articles, using communication technology, media ethics, audience research, and broadcasting techniques.

From the academic session 2023-2024, the institution has adopted a 3+1-year degree course at undergraduate level to offer academic flexibility consider basic right of education. From then onwards the undergraduate degree under NEP will be a multi-disciplinary program of four-year duration with multiple exit and entry options. Students will have the option to exit from UG Programs after one year with a certificate, two-years with award of the diploma and after three-years with the award of the bachelor degree.



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# **COURSE OUTCOME**

# Postgraduate

| M. Sc.      |                   |  |
|-------------|-------------------|--|
| S.          | Subject           |  |
| No.         |                   |  |
| 1           | Physics           |  |
| 2           | Chemistry         |  |
| 3           | Mathematics       |  |
| 4           | Zoology           |  |
| 5           | Botany            |  |
| M.A./M.Com. |                   |  |
| 6           | Psychology        |  |
| 7           | Economics         |  |
| 8           | Political Science |  |
| 9           | History           |  |
| 10          | Geography         |  |
| 11          | Sociology         |  |
| 12          | English           |  |
| 13          | Hindi             |  |
| 14          | Commerce          |  |

# **Vocational and Professional Courses**

| S.No. | PG Courses             |
|-------|------------------------|
| 7     | MBA                    |
| 8     | MCA                    |
| 9     | MLIS                   |
| 10    | M. Sc. (Biotechnology) |



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| 11 | PG              | diploma |
|----|-----------------|---------|
|    | (counseling     | &       |
|    | rehabilitation) |         |

# **Psychology**

After completion of Course a student will be able to have:

- A scientific viewpoint on the intricacies of human behaviour and experiences, both individually and collectively.
- A current understanding of the fundamental psychological theories, practices, and instruments used in the field among students.
- Comprehending and using psychology knowledge in practical situations.
- Conscious of their thought processes and develop the ability to think independently while considering the topic.
- in the future develop into responsible professionals and researchers.
- A disciplinary understanding of theories, techniques, and approaches as well as an appreciation of various viewpoints.
- Capacity to apply knowledge in particular domains associated with selected specialization.
- Fundamental professional abilities include data analysis, psychological testing, observation, and the use of technology to foster conceptual development among others.
- Efficient idea expression and scientific writing with strong presentation abilities.
- The spirit of scientific inquiry; inventiveness and curiosity; self-improvement and selfcontrol.
- Cultivating virtues like compassion, empathy, social engagement, and accountability.
- The capacity to work both individually and collaboratively, interact with clients and stakeholders in an efficient manner, and master the art of negotiation.
- Effective interpersonal communication, including speaking, listening, and other skills.







- Ethical, social, and ecological perspective, such as respecting the worth and existence of others, being conscious of social hierarchy, acquiring moral principles, and demonstrating social concern.
- A dedication to overall health and well-being on many levels (personal, organizational, and societal level).
- Better idea of integration of data in evaluation and interpretation of behaviour and human abilities.

#### **Economics**

After completion of Course a student will be able to have:

- Analytical and Economic Reasoning Skills: Students are expected to be able to deduce reasonable predictions about possible economic outcomes based on economic conditions and economic theories.
- Quantitative and Qualitative Skills: Students are expected to understand how to collect
  quantitative and qualitative data, use empirical evidence to evaluate the validity of an
  economic argument, use statistical methodology, interpret statistical results and
  conduct appropriate statistical analysis of data.
- Critical Thinking Skills: Students are expected to be able to apply economic analysis to
  everyday problems in real world situations, to understand current events and evaluate
  specific policy proposals
- Able to Become an Economist and economic consultant in banking and financial areas of Public and private Sector;
- Can become teachers in schools, colleges and universities.
- It equips fundamental skills to become Researcher by using their skill of predictive analysis and critical thinking in enterprises all over the world;
- Their in-depth understanding and analytical thinking of economic scenario can make them a suitable candidate in the field of economic journalism.

#### **Political Science**



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After completion of Course a student will be able:

- To introduce to the major approaches in theorizing political life and to the major concepts in the discourse of politics.
- To generate political awareness among the students about political reflections and arguments in western political ideas.
- To enable the students to grasp the methodology of comparison in global politics and build alternative theoretical explanations.
- To develop multi- centric world- views in the ever- changing geo- politics.
- To develop conceptual perspective on public administration and institutions of public relevance.
- To comprehend the strategies and policies of the major powers in the international politics to critically analyze and predict contemporary politics.
- To create Indic awareness among students and inculcate innovative transformation in western political thought.
- To infuse an understanding of democracies and it's functioning so that the learners could develop shared sense of belongingness in the state apparatus.
- To develop a sense of CSR (Corporate Social Responsibility) and civic responsibility.
- To develop a scientific knowledge in political science through intersectional approach in the social sciences.
- To demonstrate an understanding of the fundamental and interdisciplinary research methods through analytical tools for achieving scientific data outcomes.
- To inculcate a sense of environmental sustainability for growth and development.
- To understand the demography of the state and develop gender- sensitization.

#### **History**

The course has the following outcomes after the completion:

- It provides students with a comprehensive understanding of historical trends, historiography, and debates.
- Helps students to prepare for academic competitive exams like NET/SET, TET, SSC, and Civil Service Examinations.



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- Encourages visits to museums to foster interest in museology and archaeology.
- Enhances understanding for the subject through tours to historical sites.
- Orients PG students to go ahead for higher studies and pursue research work after completion of studies.
- It inculcates in them analytical, comparative and critical thinking.
- Opens a gateway for their passion for teaching.
- It also helps them to go for competitive examinations with more balanced and mature approach.

# Geography

The outcome of this course is very impressive as:

- CBCS (Choice-Based Credit System) enhance the flexibility.
- Students study issues related to Swachh Bharat Abhiyan activities, ability enhancement course, human values and Professional ethics, Gender Sensitization, environment sustainability etc. they became more sensible towards their surrounding environment.
- Students get an opportunity to work with the team, good exposure to public speaking and ability to defend. Regular seminars and class presentation help them to sharp their understanding
- Dissertation/Project work on Socio-Economic Survey helps in their last semester. It develops their presentation skills and orientation towards further research activities.
- Practical papers on representation of statistical data, Cartographic techniques, Instrumental Surveying, GIS and GPS helps students to enhance their technical skill and knowledge.
- This course offers a job-oriented skills in respect to the market demand. It offers job
  opportunities in the field of Census Organization, Planning Departments &
  Metrological departments etc.

#### **SOCIOLOGY**

On successful completion of this program, the students would be able to:

 Promote a commitment to the improvement about the societal understanding and social institutions.







- Initiate and facilitate interactions between government and non-governmental sectors to provide ethical and workable solutions to societal needs.
- Translate research into effective practices and achievable, human policies.
- Acquire knowledge, skills and capabilities arising from the need for a more efficient and effective public administration and to utilize the job opportunities.
- Develop critical thinking and start understanding the oppressed and marginalized voices, spaces and discourses critically.
- Develop research Skills helps in acquiring sociological knowledge in the forms of theories and methods and make students good social scientists who would be capable of identifying a problem, highlighting the research gaps, preparing a proper methodology and writing report.
- Identify and apply sociological concepts and theories to understand social phenomena.
- Understand social, political, economic and intellectual context's and understand social thought.
- Develop understanding about Indian society.
- Be aware of the issues related to environmental sustainability.
- Understand Nature of Scientific Method in Social Science Research.
- Generate research interests and to keep the spirit of inquiry and to be motivated to continue higher studies in research.
- Understand overall situation of women under the system of patriarchy in India, theories
  of Gender Relations, Position of Women in India Society, planning and problems of
  urban society.
- Aware about computer and IT Skills. It enhances students sociological understanding of work and industry.
- Understand population Theory and Policy, Challenges of Population Growth and theories underlying social problems in India and problems of marginalized community.
- Understand human value and professional ethic and know about collecting quantitative and qualitative data and about report writing.
- Sensitize about human rights and duties.



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After the successful completion of the course, the students would be able to:

- Exhibit knowledge of the discipline, identifies and explains key works, and conducts guided academic inquiries.
- Instill interest in ethics and values through English language and literature study.
- Demonstrate clear understanding of literary communication and practices.
- Communicate effectively based on the context and develops soft skills and operates effectively in multicultural spaces.
- Promote research aptitude among students.
- Facilitate stress-free English language learning.
- Respect different value systems and follows academic integrity norms.
- Enhance objective, rational, skeptical, logical, and unbiased analysis of factual evidences.
- Develop their own perspectives on issues of literature and literary sensibilities. Which
  help them evolve their own sensibility while providing interpretations on books
  prescribed and beyond.
- Read texts and develop their own judgements on the books they have in their syllabi.
   Also, it drives them towards an understanding of the very rationale of studying literature.
- Pursue the professional careers in various fields such as, teaching, translator, research, tourism etc.
- Use English as a language and use their sensibility in the interpretation of practical issues like decoding messages, transmission of message as a part of communicative skills.

#### Hindi

- भाषा एवं लिपि की उत्पत्ति और विकास को बताते हुए हिंदी भाषा के उद्भव और उसके विकास
   के विभिन्न चरणों का परिचय कराना।
- स्वतंत्रता आन्दोलन में हिंदी भाषा के योगदान के बारे में बताना।
- राष्ट्रभाषा व राजभाषा के रूप में हिंदी के स्वरूप को रेखांकित करना।
- साहित्येतिहास लेखन के सिद्धांतों पर प्रकाश डालना। हिंदी साहित्येतिहास लेखन की परंपरा का परिचय कराना।



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- साहित्य की विविध प्रवृत्तियों को बताते हुए उनके बीच के अन्तरसंबंध को रेखांकित करना।
- पूर्ववर्ती साहित्यिक परम्पराओं को बताते हुए हिंदी साहित्य के आरंभिक काल को स्पष्ट कराना।
- आदिकाल के प्रमुख कवियों, रचनाओं और साहित्यिक प्रवृत्तियों पर प्रकाश डालना।
- भिक्तिकाल की सभी शाखाओं, प्रितिनिधि कवियों एवं भिक्ति की प्रवृत्तियों का विस्तृत परिचय कराना।
- रीतिकाल की सामान्य प्रवृत्तियों, रीति के विविध चरणों, प्रमुख रचनाकारों एवं काल विशेष का परिचय कराना।
- आरंभिक हिंदी कविता के प्रतिनिधि कवियों चंदबरदाई, अब्दुर्रहमान, विद्यापित और अमीर खुसरों के व्यक्तित्त्व और कृतित्व से पिरचित कराना।
- हिंदी साहित्य में आधुनिकता और हिंदी प्रदेश में नवजागरण के स्वरूप को स्पष्ट कराना।
   आधुनिक काल के विभिन्न कालखंडों की प्रवृत्तियों पर प्रकाश डालते हुए काल विशेष के प्रतिनिधि रचनाकारों और उनकी रचनाओं के बारे में बताना।
- हिंदी साहित्य में गद्य के विकास के विविध चरणों पर प्रकाश डालना।
- अधुनिक हिंदी साहित्य के विकास में पत्र-पत्रिकाओं का योगदान।
- आधुनिक हिंदी साहित्य एवं उसकी प्रवृत्तियों को प्रभावित करने में विभिन्न साहित्यिक आन्दोलनों,
   विचारधाराओं, संस्थानों और संगठनों का योगदान।
- समकालीन हिंदी साहित्य की प्रमुख प्रवृत्तियों, जैसे-लघु पत्रिका आन्दोलन, स्त्री लेखन, दिलत लेखन पर प्रकाश डालना।
- मध्यकालीन हिंदी कविता के प्रतिनिधि कवियों- कबीर, सूर, तुलसी, मीरा, रैदास, बिहारी और घनानंद के व्यक्तित्त्व और कृतित्त्व से परिचित कराना।
- अस्मितामूलक विमर्श और उसकी अवधारणाओं को स्पष्ट कराना। स्त्री और दिलत लेखन के विविध आयामों से परिचित कराना।
- एक साहित्यिक विधा के तौर पर उपन्यास के विकास के विविध सोपानों का परिचय कराना।
   भारतीय परिप्रेक्ष्य में उपन्यास लेखन की विविध प्रवृत्तियों की जानकारी देना। हिंदी के प्रतिनिधि उपन्यासकारों एवं उनके उपन्यासों से अवगत कराना।
- आधुनिककालीन हिंदी कविता के स्वरूप को स्पष्ट कराना। आधुनिककालीन हिंदी कविता के
   प्रतिनिधि कवियों- मैथिलीशरण गुप्त, जयशंकर प्रसाद, सुमित्रानंदन पन्त, महादेवी वर्मा,



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रामधारी सिंह दिनकर, हरिवंशराय बच्चन, गोपाल सिंह नेपाली, सुदामा पांडे धूमिल और आचार्य जानकी वल्लभ शास्त्री के व्यक्तित्व और कृतित्व से परिचित कराना।

- पत्रकारिता की परिभाषा, उसके स्वरूप एवं उसके विविध रूपों को स्पष्ट कराना। जनसंचार के विविध माध्यमों के बारे में जानकारी देना। हिंदी भाषा के प्रमुख पत्रकारों एवं उनकी पत्रकारिता से परिचित कराना।
- उर्दू भाषा और साहित्य से पिरचित कराना। उर्दू साहित्य की विविध विधाओं की जानकारी देना।
- समकालीन हिंदी कविता के स्वरूप को स्पष्ट कराना। समकालीन हिंदी कविता के प्रतिनिधि कवियों- केदारनाथ अग्रवाल, नागार्जुन, त्रिलोचन, मुक्तिबोध, अज्ञेय, शमशेर बहादुर सिंह, सर्वेश्वरदयाल सक्सेना, विजयदेव नारायण साही, कुंवर नारायण, रघुवीर सहाय, केदारनाथ सिंह, अरुण कमल, मदन कश्यप और विश्वनाथ प्रसाद तिवारी आदि के व्यक्तित्व और कृतित्व से परिचित कराना।
- भारतीय काव्यशास्त्र के इतिहास का सामान्य परिचय कराना। भारतीय काव्यशास्त्र के प्रमुख आचार्य और उनके काव्य सिद्धांतों से अवगत कराना।
- पाश्चात्य काव्यशास्त्र के प्रमुख सिद्धान्तकारों एवं उनके सिद्धांतों को स्पष्ट कराना।
- समाजशास्त्रीय दृष्टि से साहित्य अध्ययन की विभिन्न परम्पराओं से अवगत कराना।
- साहित्य के संस्कृतिमूलक अध्ययन की विभिन्न अवधारणाओं एवं दृष्टियों से परिचित कराना।
- कहानी विधा के विकास के विभिन्न सोपानों का परिचय कराना। प्रतिनिधि कहानीकारों और उनकी कहानियों के बारे में बताना।
- हिंदी लोक साहित्य का अध्ययन, विश्लेषण और मूल्यांकन। आधुनिक हिंदी साहित्य का अध्ययन, विश्लेषण और मूल्यांकन। नाटक एवं रंगमंच के विकास के विभिन्न सोपानों का परिचय कराना।
- प्रयोजनमूलक हिंदी के विभिन्न रूपों से परिचित कराना।
- हिंदी कंप्यूटिंग एवं अनुवाद से परिचय कराना।
- राजभाषा हिंदी की संवैधानिक स्थितियों से परिचित कराना।
- जनसंचार के विविध माध्यमों की जानकारी देना।
- कथेतर गद्य की विविध विधाओं का परिचय कराना।
- निबंध, रेखाचित्र, जीवनी और आत्मकथा आदि विधाओं के प्रतिनिधि रचनाकारों और उनकी रचनाओं के बारे में बताना।



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• हिंदी भाषा और साहित्य के अतिरिक्त स्नातकोत्तर के विद्यार्थियों के अन्दर अंतर विषयक दृष्टिकोण (Interdisciplinary approach) को विकसित करने, उनको समकालीन मुद्दों से जोड़ने और उनके कौशल विकास के लिए Environmental sustainability & Swachh Bharat Abhiyan", "Skill development and computer efficiency", "Human values & Professional Ethics & Gender Sensitization" और "Contemporary Issues or Human Rights" का परिचय कराना।

#### Commerce

After the successful completion of the course, the students would be able to:

- Develops strong analytical skills for assessing complex business situations.
- Understands various business disciplines like accounting, finance, marketing, and management.
- Enhances communication skills for effective collaboration and idea conveying.
- Cultivates a strong foundation in quantitative techniques and data analysis.
- Develops ethical reasoning and professionalism.
- Have a well-rounded skill set for a wide range of career opportunities.
- Have a comprehensive understanding of business management, including financial accounting, economics, and taxation.
- Open up diverse career paths across different sectors, including finance, marketing, human resources, supply chain management, entrepreneurship, and consulting.
- Find employment opportunities in banks, investment firms, and insurance companies.
- Excel in market research, advertising, brand management, and sales.
- Handle various aspects of human resource management, such as recruitment, training and development, performance management, and compensation.
- Equip with skills to optimize supply chain processes.
- Have nurturing entrepreneurial skills, encouraging individuals to start their own ventures.

#### **Physics**

The course has the following outcomes after the completion:

• Enables students to work on real life challenges.



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- Trains students to successfully compete in national level tests like UGC-CSIR NET,
   GATE etc.
- Develop capabilities to undertake independent research work and pursue for Ph.D.
- Develop intellect, critical thinking, decision making, analytical ability, problem solving, interest, attitude and values.
- Foster a sense of academic and social ethics.
- Prepare students for global competitiveness in theoretical and experimental physics.
- Having various skills including, experimental skills, effective communication, personal and social responsibility, diversity and inclusion.
- Develop technical and analytical skills for further studies.
- Prepares students for interdisciplinary studies.
- Encourages continuous learning and professional development.

#### **Chemistry**

After completion of M.Sc. Chemistry, student will be able to:

- Have sound knowledge of theories in chemistry and their applications.
- Have skills to conduct experiments for qualitative and quantitative analysis.
- Have ability of conductometric, potentiometric, calorimetric, polarimetric, spectrometric analysis.
- Work on real life challenges by developing critical thinking, values, accountability.
- Apply green chemistry and sustainability approach in research work and environmental issues.
- Overcome difficulties with scientific knowledge and logical approaches.
- Possess knowledge to synthesize a chemical compound and perform necessary characterization and analysis.
- Have job opportunities in academic and industry fields.
- Become technically trained with Chemistry-based software and devices.
- Have knowledge in different disciplines of Chemistry for participation in theory and laboratory-based research activities.
- Be team player with productive cooperations involving diverse socio-cultural backgrounds.



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• Be digitally literate for lifelong learning via e-learning resources.

#### **Mathematics**

After completion of M.Sc. Mathematics, student will be able to

- Develop a positive attitude towards mathematics as an interesting and valuable subject of study.
- Read and understand mathematical proofs and apply new mathematical concepts.
- Develop broad and balanced knowledge to understanding of definitions, concepts, principles and theorems.
- Enhance overall development and equip with mathematical modelling abilities, problem solving skills, critical thinking and power of communication necessary for various kinds of employment.
- To identify and describe the underlying principles behind mathematical techniques relevant to academia, industry and government.
- To pursue advanced studies and research in mathematical science.
- Employ critical and analytical thinking in understanding the concepts in every area of mathematics.
- Understand importance of bounded, convergent, Cauchy and monotonic sequence of real numbers.
- Apply various test to determine convergence and absolute convergence of series of real numbers.
- Solve linear system of equations, linear programming problems and numerical solutions of algebraic and transcendental equations.
- Understand the basic concepts of Rings and their elementary properties, Isomorphism of rings, Polynomial rings, Unique factorization domain.
- Identify and describe the underlying principles behind mathematical techniques relevant to academia, industry and government.
- Analyze the results and apply them in various problems appear in different branches of mathematics

#### Zoology

After completion of course student will be able to have:



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- Broad knowledge base with a deep understanding of both invertebrate and vertebrate biology, from molecular and cellular levels to evolutionary processes.
- Scientific research skills through proficiency in laboratory techniques, biostatistics, and bioinstrumentation enabling them to conduct cutting-edge research in various biological fields.
- Critical thinking and problem-solving skills since the program emphasize these skills
  by encouraging students to analyse complex biological phenomena and devise
  innovative solutions to biological challenges.
- Enhanced environmental awareness. Graduates will have an appreciation for environmental science and be equipped to address environmental issues and promote conservation efforts.
- Interdisciplinary Approach: Through courses such as genetics and biochemistry, students will understand the interdisciplinary nature of modern biology, which is crucial for addressing complex biological questions.
- Evolutionary Perspective: Students will develop an understanding of biosystematics and evolution, crucial for tracing the origins and diversification of species.
- Well-versed skills in vertebrate immunology and endocrinology, gaining insights into how organisms defend against diseases and regulate bodily functions.
- Behavioural Insights as the program delves into animal behaviour, helping graduates comprehend the intricacies of how organisms interact with their environments and each other.
- Broad knowledge of biological sciences, skills and perspectives for research and environmental conservation.
- Deep understanding of natural world.
- Well-prepared for careers in academia, research, environmental consulting, and various fields related to biology and zoology.

#### **Botany**

M.sc botany is a two- year (4 semester) post graduate course to impart advanced knowledge of fundamental and modern botany. Following are the course Outcomes:



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- The course curriculum fosters problem -solving and critical thinking skills in students.
- Students after completing the course attain profound expertise in discipline.
- They become able to employ problem solving and laboratory skills pertaining to biological techniques.
- Students will be able to generate, analyze, interpret data and compile results generated through studies in botany, field studies, experiments, laboratory techniques, excursion tours etc. used in various field of the subject.
- They acquire effective communication and ability to function in multidisciplinary domains by communicating the fundamental concepts of botany.
- Adapt scientific methods in plant research and may create entrepreneurship.
- Design the experiment of his own interest and execute it.
- Presentation skill is developed in the students and ready to work in any setup.
- Students develop critical thinking for shaping strategies viz. scientific, social, economic
  and legal issues for environmental protection and conservation of biodiversity and
  sustainable development.
- Understand the relationship between science and society by recognizing and discussing logical, scientific and ethical issues in botany subject.
- After the completion of the program students may opt for his carrier in the field of tissue culture (micropropagation), genetics, plant breeding and crop improvement, Genetic engineering, Microbiology etc.
- Most important they attain maturity to respond to one's calling and become self-directed with lifelong learning.
- After successful completion of the course students will be able to demonstrate and apply
  their advanced knowledge of cell and molecular biology, genetics, plant physiology
  plant pathology and microbiology, ecology and environmental biology, taxonomy and
  recent field of tissue culture and genetic engineering techniques to solve the problems
  related to the specific field.
- Students design and execute experiments related to the different field of botany like a anatomy, embryology, plant interaction with microbes and insects and Recombinant DNA technology.



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- Students will be able to demonstrate and apply various principles of taxonomy and identify and classify plants using key characters.
- They become capable of executing short-term research projects/dissertation using tools and techniques in any of the basic specialization of botany under supervision.
- They get acquitted with basic approach in the research methodology.
- Students attain expertise in various techniques of RDT and media preparation for tissue culture and also in sterilization techniques used for media and explants.
- They also become handy with equipment's used in various experiments and different laboratories.
- In-depth studies on lower plants like algae, fungi, lichens, bryophytes and pteridophytes besides gymnosperms and angiosperms.
- Students also has an edge over other students as they will be trained in skill enhancement courses like biofertilizer technology and production, vermicomposting, mushroom culture etc.
- Along with expertise in botany they also get knowledge of human values and ethics, human rights and duties. So, they learn the value of respect, honesty, fairness, responsibility, care and citizenship.
- Cleanliness of the surrounding, college campus and other places leading to swachh city and swachh bharat is also an outcome of the course.

# **Vocational and Professional Courses**

#### **MBA**

This program helps students to gain a comprehensive understanding of core management concepts, develop critical thinking, problem-solving, leadership, teamwork, and decision-making skills, apply theoretical knowledge to analyze business situations, demonstrate adaptability, demonstrate ethical and social responsibility, gain a global and local perspective, and cultivate lifelong learning. After the completion of the program the student will:



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- Understand and apply the principles of microeconomics to managerial decisionmaking.
- Analyze market structures and their impact on business decisions.
- Use economic tools and techniques to evaluate business opportunities and assess risks.
- Develop strategies for pricing, production, and resource allocation to maximize firm's profitability.
- Understand the role of government policies and regulations in business operation
- Understand the economic, political, social, and technological factors influencing business operations.
- Analyze the impact of globalization on business environment and develop strategies to adapt.
- Assess trends and developments in the industry and identify opportunities and threats.
- Understand the legal and ethical considerations in business decision-making.
- Develop effective communication and negotiation skills to manage external stakeholders.
- Understand the fundamental concepts and principles of statistical analysis.
- Apply statistical tools and techniques to analyze data and make informed business decisions.
- Interpret and present statistical data effectively.
- Use probability theory to analyze uncertainties and risks in business decision-making.
- Develop critical thinking and problem-solving skills using statistical analysis.
- Understand the key principles and functions of human resource management.
- Analyze the impact of human resource policies on employee performance and organizational effectiveness.
- Develop recruitment and selection strategies to attract and retain talent.
- Understand legal and ethical considerations in managing human resources.
- Develop effective communication and leadership skills for managing employees
- Understand the fundamental principles and concepts of marketing.
- Analyze consumer behavior and develop marketing strategies to target specific segments.
- Apply market research techniques to gather and analyze marketing data.



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- Develop marketing plans and strategies to achieve organizational objectives.
- Understand the legal environment of business:
- Develop strategic thinking and planning abilities:
- Analyze securities and manage investment portfolios:
- Understand the principles and practices of service marketing.
- Enhance business communication skills:
- Develop a fundamental understanding of computer systems: .

#### **MCA**

MCA is a 2 years (4 Semester) Postgraduate Program lies under professional educational, approved by All India Council for Technical Education (AICTE). The course outcomes are:

- To enable academically sound so much that they may pursue research and innovation in technical education.
- To impart employability by foundations and advanced technical education in both theoretical and applied Computer Applications in-line with Industry demands.
- To create highly skilled computer professionals capable of designing and innovating real life solutions.
- To sustain an academic environment conducive to teaching to generate up-skilled professionals with ethical values.
- To promote entrepreneurial initiatives and innovations capable of bridging and contributing with sustainable, socially relevant technology solutions.
- To develop computational knowledge and apply this knowledge of computing fundamentals, computing specialisation, mathematics, and domain knowledge appropriate for the computing specialisation to the abstraction and conceptualisation of computing models from defined problems and requirements.
- To Identify, formulate, research literature, and solve complex computing problems reaching substantiated conclusions using fundamental principles of mathematics, computing sciences, and relevant domain disciplines.



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- To design and evaluate solutions for complex computing problems, and design and
  evaluate systems, components, or processes that meet specified needs with appropriate
  consideration for public health and safety, cultural, societal, and environmental
  considerations.
- To use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- To create, select, adapt and apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations.
- To understand and commit to professional ethics and cyber regulations, responsibilities, and norms of professional computing practice.
- To demonstrate knowledge and understanding of the computing and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- To identify a timely opportunity and using innovation to pursue that opportunity to create value and wealth for the betterment of the individual and society at large using and imparting new ideas and solutions.

#### **MLIS**

MLIS is a one-year post graduate programme to impart latest trends and technology being used in field of Library & Information Science field. Following are the course outcomes:

- Critical Thinking and Problem Solving: Students will demonstrate the ability to think critically, identify information-related problems, and develop solutions.
- Information Literacy: Students will be information literate, able to access, evaluate, and use information effectively in various contexts.
- Effective Communication: Students will possess strong communication skills, enabling them to interact with library users and stakeholders, and convey information effectively.
- Professional Ethics: Students will adhere to ethical standards in the field of library and information science, ensuring responsible and ethical use of information resources.



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- Continuous Learning and Adaptability: Students will recognize the importance of lifelong learning and adapt to changes in the information landscape, including emerging technologies.
- Leadership and Management: Students will be prepared for leadership and managerial roles in libraries and information centers, capable of overseeing operations and staff.
- Research and Scholarship: Students will contribute to the field through research, scholarship, and dissemination of knowledge.
- Community and User-Centered Focus: Students will be user-focused, meeting the information needs of diverse communities and user groups effectively.
- Cultural Sensitivity and Inclusivity: Students will demonstrate an understanding of cultural diversity and inclusivity, ensuring equitable access to information for all.
- Lifelong Learning: Students will recognize the importance of continuous learning and adapt to changes in the information landscape and emerging trends.
- Strategic Planning: Graduates will be able to develop and implement strategic plans to meet the goals and objectives of their libraries.

#### M. Sc. (Biotechnology)

This program explores the molecular basis for the changes occurring in living cells. It uses the methods of chemistry, physics, molecular biology and immunology to study the structure and behaviour of the complex molecules found in biological material and the ways these molecules interact and communicate within and between cells and organs. Following are the course outcomes:

- The program focuses on techniques used in industry for production of microbial products thus it enables develop an understanding of an applied aspect of microbes in industry.
- To train the students in all the fundamentals of the subject of Biotechnology, progressively giving way to all essentials of the subject with good practical training and exposure to most modern concepts.
- The curriculum carries multiple options in terms of electives for incorporating innovative ideas generated in this field.



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- To help the students to mold themselves as competent enough in an international pursuit of knowledge.
- To provide ample opportunity for the students to gain sufficient practical knowledge in the subject with properly designed experiments.
- Explore new areas of research in all the branches of biotechnology in addition to interdisciplinary fields.
- The interdisciplinary nature of the subject is to be incorporated to have option for employment and higher studies.
- To carry out professional responsibilities such as teaching and research in allied subjects.
- To equip the students for seeking suitable careers in various disciplines of Life sciences.

# PG diploma in Counseling and Rehabilitation)

Post Graduate Diploma in Counselling and Rehabilitation (PGDCR) is a one-year professional course which has two semesters of 6 months each. The course is designed to train students in counselling persons suffering from various personal and emotional issues such as emotional distresses, relationship difficulties, career and job-related stresses, domestic violence and addiction related issues of people of all ages and the emotional and the related psychological issues faced by and physical challenged individuals.

The broad objective of the program is to hone the skills of the trainee in understanding human behaviour in general and the problem behaviour in particular. After the completion of the course the trainees will:

- Develop the biopsychosocial basis of human behaviour and experiences which includes all types of cognitive, emotional and behavioral aspects.
- Develop an insight into the role of developmental issues and normal and abnormal behaviour.
- Be equip to tackle various types of educational, behavioral challenges of the normal and the differently challenged children, adolescents and adults.
- Be able in assessing the psychological characteristics of the individuals such as intelligence, personality, aptitude and interests of the normal and the differently abled



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individuals and provide the necessary psychological support in the form of counselling and psychotherapy.

- Develop an empathic understanding of the challenges faced by the persons suffering from emotional and behavioural difficulties and give support in the best professional way keeping in view the dignity and well-being of the individual.
- Have facilitating acquisition of basic skills in major areas of application (e.g. psychological testing, counselling, interviewing, behaviour modification).
- Have better self-understanding endorsing personal growth.
- Understand the complexities of self and human relationships and how the two make each other up.
- Develop a strong sense of ethical and moral aptness in general and in the context of learning and its assessment in particular.



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# Undergraduate

| B. Sc. (H)               |  |  |
|--------------------------|--|--|
| Subject                  |  |  |
| Physics                  |  |  |
| Chemistry                |  |  |
| Mathematics              |  |  |
| Zoology                  |  |  |
| Botany                   |  |  |
| B. A.(H)/B.Com.          |  |  |
| Subject                  |  |  |
| Psychology               |  |  |
| Economics                |  |  |
| Political Science        |  |  |
| History                  |  |  |
| Geography                |  |  |
| Philosophy               |  |  |
| Sociology                |  |  |
| English                  |  |  |
| Hindi                    |  |  |
| Urdu                     |  |  |
| Maithili                 |  |  |
| Commerce                 |  |  |
| Commerce (self-financed) |  |  |
|                          |  |  |

# **Vocational and Professional Courses**

| S.No. | UG Courses            |
|-------|-----------------------|
| 1     | BCA                   |
| 2     | B.Sc. (IT)            |
| 3     | BBM                   |
| 4     | B.Sc. (Biotechnology) |
| 5     | B.Sc. (Bio. Chem.)    |
| 6     | B LIS                 |



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| 7 | Law                                      |
|---|--|
|   | Mass Communications                      |
|   | Nutrition & Dietetics Certificate Course |
|   | Nutrition and Dietetics Diploma Course   |
|   | Medical Lab Technology (MLT)             |

# **Psychology**

The three years B.A. Honors Program emphasizes on developing analytical skills, interdisciplinary collaboration, and contributing to humanistic services. This program trains students in psychology fundamentals for career opportunities. After the completion of the course the student will:

- Have value-based education equivalent to international standards.
- Develop an insight into their own and others' behaviour and underlying mental processes.
- Gain insights into motivations, thought processes, and the influences of groups that make them more thoughtful about the various aspects of human behavior.
- Possess basic psychological skills for dealing with individuals of various socio-cultural, economic, and educational levels.
- Understand the code of ethics in clinical psychology.
- Learn to apply psychological principles to personal, social, and organizational issues.
- Learn to collect data, solve statistical problems, and construct psychological tests.
- Get acquainted with implications of experimental findings.
- Learn to apply effective self-management strategies.
- Learn about personality, self-presentation, and other life skills.
- Understand the basics of prejudice, stereotypes and the impact of labelling bias and develop compassion, self-reflection, better interpersonal relationships, and emotional management.
- Understanding practical aspects of psychology.
- Encompass ability to work as specialized workforce for services in educational institutions, corporates, and primary healthcare settings.



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• Develop a focus on preventive and curative approaches to stimulate positive mental health.

#### **Economics**

After the completion of the course the student will able:

- To make the students understand the fundamental basic concepts of economics and working of different economies of the world.
- Develop the necessary skills to perform economic analysis for both public and private sector positions as well as for post- graduate studies in related fields.
- Learn the basic concept of economics, markets & economic activities such as production, distribution, consumption and the growth of productive resources.
- Learn about the determinants of macro-economic conditions (national output, employment and inflation), causes of business cycles, and interactions of monetary and fiscal policy.
- Learn to apply economic theories and methodologies in analyzing economic issues in various sub-fields of applied micro-economics and international economics.

#### **Political Science**

After the completion of the course the students will be able to:

- Attain an understanding of the various interchangeable concepts in political science like political theory, political philosophy and political ideology.
- Analyze and understand the geo- political crisis in the globe and empower them with rational and ethical response.
- Develop a holistic understanding of the constitution in the pragmatic application of their rights/ duties in everyday life.
- Empower the students with international, global and cosmopolitan knowledge for its application in professional competence.
- Draw parallels and comparison in India as well as western thought process. This will help to decolonize the mindset of the young learners.
- Develop interpersonal skills of team work, leadership, negotiation/ persuasion, communication skills in organization and administration.



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#### History

History always follows its motto 'looking backward for moving forward'. After the completion of the course the students will be able to:

- Learn history with a vision to peep into the past happenings and get acquainted to our rich legacy.
- Identify problems through recalling historical events.
- Get enriched by learning administrative skills from the examples of our past rulers.
- Aware of the work done by some the great personalities which act as a beacon light for them.
- They also learn to avoid autocratic mistakes.
- Promotes balance in citizenship.
- Preserving archaeological findings of the past gives them a sense of Glory and they feel proud of our rich cultural heritage.
- Demonstrates organizational leadership, justice, and creativity.
- Learn and apply historical theories and principles in daily life.
- Follow cultural traditions and conventions.
- Preserve cultural and social heritage.
- Knowledge of societal trends and changes in thoughts.

#### Geography

After the completion of the course the students will be able to:

- Formulate the exercise and apply the theoretical concepts and technical skills to a wide range of practical usage. Learning the concepts of geomorphology helps them to understand about geomorphic process and its resultant features.
- Helps students to understand the structure and composition of atmosphere. Also help them to understand different weather conditions through diagrams and instruments.
- Analyze the data with the help of Correlation and Regression analysis.
- Have a proper understanding and knowledge, students feel confident within themselves.
- Get an equal opportunity and platform, the course enriches them personally as well as academically. Continuous seminar and class presentation helps students to develop their learning ability.



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• Get adapted with various means of technical knowledge. Learn new concepts of analyzing geographical data like Geographic Information System & Remote Sensing.

# Sociology

After the completion of the course the students will be able to:

- Demonstrate knowledge of core sociological concepts.
- Develop the sociological knowledge and skills.
- Think critically about society and social issues.
- Provide the students to understand various culture religion and society in present context.
- Demonstrate knowledge of how to use theory to conceptualize a sociological problem.
- Develop an ability to use social scientific research methods to address sociological questions.
- Develop the knowledge, skill and attitude necessary to be engaged member of the community.
- Critical thinking, effective communication and will also aware about environmental sustainability.
- Get knowledge about basic concepts of sociology, define sociology along with its subject matter.
- Know about nature and scope of sociology and learn about its relationship with other subjects and also about Indian society and culture.
- Learn about Indian Social Institutions, Social Anthropology, Social psychology and Social Research.
- Get aware about how sociology is useful in everyday life, people origin their psychology and how research can be pursued.
- Get aware about Western Sociological Thinkers, Rural Sociology, Social Disintegration and gives concepts about Social Demography.
- Makes students aware about how society works at village level and about population theory.

#### **Philosophy**

After the completion of the course the students will be able to:



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- Develop the ability to think critically, logically and scientifically to analyze and solve problems and assess proposed solutions to write and speak clearly attending in details.
- Develop the ability of logical aptitude and reasoning in resolving the various issues and to ascertain the truth of life, get rid of superstitions and illusion.
- Develop understanding related to right belief, faith and reality in socio-religious realm in life and remove the ambiguity and vagueness of language and reach the clarity of thought and vision.
- Understand the ethics that helps them to gain the ability so that they can make themselves to become a proper social being.
- Understand beyond physical sciences enabling them to defend their views in oral and written contexts. Studying the nature of Soul, Man, World, and God helps them in this prospect.
- Recognize ethical issues, make responsible decisions, develop morality, engage in respectful discourse, and appreciate the benefits of philosophical engagement.

#### **English**

English as a particular subject Honors, Indians are more accustomed to the west hence, nationalist and cultural issues are reinforced among students to realize their cultural foundations and antiquarian values. After the completion of the course the student will:

- Systematically understand English literature and develop understanding of literary and life values.
- Have a sense of understanding among students about the importance of classical literature.
- Understand various literary genres and stylistic variations.
- Have a refreshing perspective on the Indian mythology and the rich, old literature as part of the exercise to get them connected to the native literature.
- Demonstrate clear understanding of literary communication and practices and using critical aptitude and reflexive thinking to analyze scholarship and expand knowledge.
- Develops proficiency in independent, life-long, and progressive learning abilities in the context of changing socio-politico-economic-cultural and technological scenarios.
- Apply methodologies for creative and analytical development of students.



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- Evaluate literary texts as part of local and global culture and develop the ability to relate ideas, knowledge, books, and people.
- Ability to think rationally and adopt technology for disseminating thoughts and develops an obligation to act for societal benefit.
- Nurtures a moral obligation to minimize adverse effects on those around them.
- Enhances objective, rational, skeptical, logical, and unbiased analysis of factual evidences.
- Cultivates progressive citizenship for a knowledge society for peace and prosperity.
- Recognizes the importance of principles and standards of behavior and to understands and promotes human development goals as it shows how to live in adverse circumstances.
- Recognize employability options in English studies program.

#### Hindi

- हिंदी साहित्य के हजार वर्षों से अधिक के इतिहास के प्रारंभिक एवं संक्रमणकालीन दौर के निर्माण की गाथा से परिचय कराना।
- हिंदी साहित्य के विभिन्न कालखंडों और उनकी प्रवृत्तियों से पिरचय कराना।
- हिंदी भाषा के उद्भव और विकासका परिचय कराना।
- हिंदी भाषा और उसकी विभिन्न बोलियों का परिचय कराना।
- हिंदी साहित्य की एक हजार वर्षों सेअधिकलम्बीकाव्य-यात्रा से परिचय कराना।
- विभिन्न कवियों, काव्य ग्रंथोंऔर काव्य कालखंडों सेपरिचय कराना।
- हिंदी साहित्य केप्रारंभिक गद्य साहित्य और तत्कालीन परिस्थितियों से परिचय कराना।
- गद्य की विविध विधाओं.जैसे-निबंध, कहानी, उपन्यास, नाटक, एकांकी, आलोचना आदि से परिचय कराना।
- अन्य गद्य विधाओं के विकास औरउनके स्वरुप से परिचय कराना।
- गद्य कीविविध विधाओं,जैसे-संस्मरण, रेखाचित्र,रिपोर्ताज, यात्रावृत्तांत आदि से परिचय कराना।

#### Urdu

After the completion of the three-year graduation:



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- The understanding of literature with all its tenets will be imparted to the students.
- The basic understanding of linguistic history and growth of languages must be achieved.
- The diversity of culture embodied in literature would be the salient feature of teaching-learning practices in the department.
- The pluralistic aspect of literature must be the target of teaching to be achieved.
- The features of multilingualism will be imparted as the basic tenets of Urdu teaching-learning program in Indian context.
- The international outlook will be one of the core principles of teaching so as the reach of Urdu is global.
- The understanding of literature must be strengthened with a good knowledge of other disciplines, especially of social sciences like World History, Indian History, History of Religions, Sociology, Psychology, Education, Polity, Economy, Geography etc. must be achieved to create the multi-disciplinary teaching-learning atmosphere among students.
- This will be the main target to achieve that through the Urdu teaching-learning program, a student will be able to learn the basic aspect of comparative language and literature so that he will be able to succeed in a multilingual society.
- We have to create a scientific, liberal, secular and rational temperament through the teaching of Urdu language.
- Through the teaching of Urdu literature, it will be our ultimate target to transform the students into a better human being so that thousands of our literary pieces advocate these features.
- The democratic mindset of learner must be achieved through the teaching of Urdu literary pieces and it is expected from the learning that she/he will be a good citizen of the country and the world.
- The student will be able to make career in Self-expression of sentences and essays.
- The student will be able read and understand Urdu essayists, novelists, dramatists, and poets.
- The student will be able have understanding of authors and their contributions to Urdu literature.
- The student will be able understand history of Urdu language and literature.



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- The student will be able to learn and use proper Urdu grammar.
- The student will be able learn the importance of Urdu language and its practical application.
- The student will be able understand the mode of teaching literature, its objectives and nature.
- The student will be able acquire language skills and being sensitive to language use.
- The student will be able to make career in journalism, judiciary, tourism industry, linguistics, professional writing, television, radio, newspapers, editing and research etc.

#### Maithili

- मैथिली साहित्य के कथा एवं उपन्यास विधा से परिचय कराना
- मैथिली साहित्य में नाटक के उत्पति काल से परिचय करण एवं उसके महत्व को बताना
- मैथिली भाषा साहित्य के आधुनिक काल के पद्य के विकास क्रम से परिचय कराना
- मैथिली साहित्य के काव्य की प्रारंभिक रचना से परिचय करना एवं उसकी आलोचनात्मक व्याख्या कराना
- मैथिली साहित्य के प्राचीन पद्य, महाकाव्य, खंडकाव्य, मुक्तकाव्य, से परिचय कराना
- मैथिली साहित्य के आधुनिक काल के रचना गद्य एवं निबंध से परिचय कराना
- मैथिली साहित्य के इतिहास से परिचय कराना एवं मैथिली साहित्य के विकास क्रम को दिखाना
- मैथिली साहित्य एक क्षेत्रीय भाषा है, इसका आधार कहां कहां मिलता है परिचय कराना

#### Commerce

After completion of bachelor in Commerce (B.Com.) a student will be able to have:

- Strong analytical skills: Developed to assess complex business situations and make informed decisions.
- Comprehensive understanding of various business disciplines: Accounting, Finance, Marketing, and Management.
- Excellent communication skills: Developed for effective collaboration and clear idea conveying.
- Quantitative techniques and data analysis: Proficiency in using spreadsheets and financial software for data analysis.
- Ethical reasoning and professionalism: Develops a strong ethical framework and sense of social responsibility.



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- Comprehensive understanding of business management: Provides a holistic approach to tackling business complexities.
- Diverse career opportunities: Explores roles in finance, marketing, human resources, supply chain management, entrepreneurship, and consulting.
- Employment opportunities: Financial analysts, investment bankers, portfolio managers, or risk analysts.
- Marketing: excels in market research, advertising, brand management, and sales.
- Human resources: Handles recruitment, training and development, performance management, and compensation.
- Supply chain management: Equips graduates with skills to optimize supply chain processes.
- Entrepreneurial skills, enabling graduates to start their own ventures.
- Skills like critical thinking, problem-solving, communication, analytical reasoning, and teamwork.
- The course will open up career opportunities in finance, marketing, human resources, supply chain management, entrepreneurship, and consulting.
- Equips graduates with knowledge, skills, and versatility for success in the business world.

# **Physics**

After completion of Course a student will be able:

- To create ability to think logically, independently, and to impart unprejudiced view of events and problems of life.
- To learn subject to the level of employment or pursue higher education
- To inculcate scientific temper, appreciate social diversity, inclusion and national integrity
- Learn scientific principles and laws.
- To acquire core knowledge in Mathematical Physics, Mechanics, Properties of Matter,
   Special Theory of Relativity, Quantum Physics, Interesting world of Materials,
   Electrodynamic Phenomena, Statistical Physics, Physics of Atoms, Molecules and



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Nuclei, Optics, Earlier Developments in Physics and in the nutshell the Mysteries of Mother Nature.

- To develop written and oral communication skills in physics-related topics.
- To understand the impact of Physics and Science on Society.
- To conduct experiments to understand scientific processes, Learn Scientific Culture and Interpret Results.
- To do error analysis, devise methods to minimize errors and recognize equipment limitations.
- Explore Physics concepts in other disciplines.
- To apply conceptual understanding of Physics to real-world situations.

## Chemistry

## A graduate student will:

- Have understanding of laws and theories in chemistry and able to apply them in solving real life problems.
- Have scientific temper, critical thinking, sense of inquiry, values and a good communication skill.
- Have skills for qualitative and quantitative analysis of organic and inorganic compounds.
- Have sufficient knowledge to get job or pursue higher education.
- Gain knowledge of fundamental chemistry and applied chemistry through theory and practical application.
- Ensure latest understanding of the field.
- Possess communication skills for problem-solving.
- Develop good communication skills for sharing ideas and concepts.
- Develop ability to design, carry out, record, and analyze chemical reaction results.

#### **Mathematics**

After completion of B.Sc. (Hons.) Mathematics, student will be able to:



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- Develop a positive attitude towards mathematics as an interesting and valuable subject of study.
- Read and understand mathematical proofs and apply new mathematical concepts.
- Develop broad and balanced knowledge to understanding of definitions, concepts, principles and theorems.
- Enhance overall development and equip with mathematical modelling abilities, problem solving skills, critical thinking and power of communication necessary for various kinds of employment.
- To identify and describe the underlying principles behind mathematical techniques relevant to academia, industry and government.
- To pursue advanced studies and research in mathematical science.
- Employ critical and analytical thinking in understanding the concepts in every area of mathematics.
- Express theoretical and applied concepts through effective writing and oral communication skills.
- Solve linear system of equations, linear programming problems and numerical solutions of algebraic and transcendental equations.
- Understand the role spherical trigonometry and astronomy.
- Understand the basic concepts of Groups, Subgroups, Cyclic and Permutation groups,
   Sylow theorem and their applications.
- Identify and describe the underlying principles behind mathematical techniques relevant to academia, industry and government.
- Analyze the results and apply them in various problems appear in different branches of mathematics.

### Zoology

Three-year Degree programme focuses on vital aspects of zoological science. On successful completion of course students:

- Develop Understanding of various animal phyla along with insight of their diversity and evolutionary history.
- Get in tune with their environment, ecological processes and environmental dynamics.



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- By the study of animal behaviour, Zoogeography & Palaeozoology, they get the knowledge of fields of Ethology, different Zoogeographical realms of the worlds and importance of wildlife conservation.
- Gain knowledge of various sectors ensuring the economic sustainability of agriculture,
   Economic development and Disease vectors and control methods.
- Acquire statistical skills which are essential for experimental designed and data analysis in various scientific disciplines.
- Get understanding of evolutionary relationship, adaptations and physiological processes. Concepts of cell biology, immunology, molecular biology, genetics, biochemistry, Embryology, Endocrinology and physiology help them understand basic functional and regulatory mechanism.
- Acquire skills in both the theoretical and practical aspects.

### **Botany**

B.Sc. Botany under graduate programme imparts advanced knowledge of basic and modern botany. The B.Sc. Honours Botany program content is designed to provide students with a comprehensive understanding of various aspects of plant biology, including the study of plants, microbes, and their ecological and economic significance. Following are the course outcomes:

- Students are introduced to the vast diversity of plants and microbes, including their different habitats, morphology, and modes of reproduction which enable them to maintaining plant health, soil fertility and ecosystem stability.
- The program includes understanding of Genetics and Molecular Biology of Plants
  which is the rapidly expanding field and has a high demand for professionals with
  expertise in these areas. This makes it easier to find job opportunities and secure
  funding for research projects.
- Students learn about Fungi and Disease-Causing Microbes and their role in ecosystems
  as well as their significance as disease-causing agents. This knowledge helps in
  exploiting bacteria in industrial processes that can produce important specialty products
  such as detergents, plastics, fuels and essential oils etc.
- The program explores the economic importance of plants and how they are utilized in biotechnology. This includes studying the use of plants in agriculture, pharmaceuticals, and other industries.



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- Students are exposed to the evolution of plant forms and the resulting biodiversity. This knowledge helps to create awareness about the threats to biodiversity, gaining insight into the variety and variability of life on Earth and foster a sense of responsibility for biodiversity conservation, which is essential for sustainable development.
- Students are exposed to the ecological and economic significance of microbes, fungi, and different plant groups. This knowledge helps students understand the role of these organisms in ecosystems and their impact on human well-being.
- Students are made aware of the economic importance of various organisms for human well-being. Understanding these aspects helps students appreciate the interplay between nature and society.
- The course provides an overview of the evolution of plants on Earth. Understanding
  plant evolution and the resulting biodiversity is essential for recognizing the threats to
  biodiversity and raising awareness about biodiversity conservation for sustainable
  development.
- The course includes laboratory classes in which students acquire hands-on experience with techniques used to generate information and detect genetic variation, reinforcing their practical skills.
- Students gain insight into the natural genetic variation in plants and how cellular-level factors contribute to the expression of genotypes and phenotypic variation. This knowledge is helps for plant breeding and genetics.

### **Vocational and Professional Courses**

## **BCA**

#### The course aims to:

- Attract young minds interested in computer hardware, software, and networks and instills logical thinking among students.
- Build a foundation graduate program for higher studies in Computer Science/Applications.
- Develop skills in software development for self-employment in Indian and Global software market.
- Develop responsible citizens with leadership qualities to strengthen India's IT sector.



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- Encourage analytical and computational approaches to face challenges.
- Drive scientific and societal advancement through technological innovation and become successful entrepreneurs.
- Develop understanding of fundamental concepts of computers, software hardware, and peripheral devices.
- Equip the students to work efficiently with various operating system platforms and knowledge of computer networks, network devices, configuration protocols, security concepts.
- Develop understanding of arrays, linked structures, stacks, queues, trees, and graphs in memory and used by algorithms, Boolean algebra and designing the circuit using logic gates.
- Help in gaining knowledge to identify, explain, and apply functional programming and object-oriented programming techniques.
- Familiarization with Database Management System, Database Models, Ability to code database transactions using SQL.

### B.Sc. (IT)

#### The course focuses on:

- Preparing students for roles pertaining to computer applications and IT industry.
- Developing programming skills, networking skills, learn applications, packages, programming languages and modern techniques of IT.
- Enhancing skills and info not only about computers and information technology but also in organization and management.
- Programming languages such as Java, C++, HTML, SQL, etc.
- Providing information about various computer applications and latest development in IT
- Providing overview of the topics in IT like networking, computer graphics, web development, trouble shooting, and hardware and software skills.
- Emphasizing the Technical Aptitude by providing the knowledge of programming, hardware organization, operating systems, theory of computation and principles of programming language.



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- Inculcating the ability to solve problems quickly and effectively, which may involve a
  methodical approach that allows breaking down complex problems into single and
  manageable components.
- Effective Communication since the employees in the digital age must be able effectively to convey and receive messages.
- Incorporating human values and morality by responsibly accepting the roles to work for the sustainable development of self and society.

#### BBM

After the completion of the course student will:

- Have knowledge regarding the basic concepts, principles and functions of management.
- Accomplish desired goals through group action economic analysis for both public and private sector posit and enhance informational, interpersonal and decisional roles.
- Develop business and entrepreneurial aptitude among the students.
- Achieve the management goals related to planning, organizing, mentoring, staffing.
- Equipped with leadership, communication, time management skills.
- Understand how to collect quantitative and qualitative data, use empirical evidence to evaluate the validity of an economic argument, use statistical methodology, interpret statistical results and conduct appropriate statistical analysis of data.
- Able to apply economic analysis to everyday problems in real world situations, to understand current events and evaluate specific policy proposals.
- Students will learn to apply strategic, operational, tactical and contingency planning in management.
- Knowledge and requisite skills in different areas of management like human resource, finance, operations and marketing to give a holistic understanding of a business system.
- Equip with knowledge related to qualitative and quantitative techniques for critical thinking and problem solving.
- Develop IT skills in the areas of information search, word processing, office management software, and presentation software needed to excel in business.



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- Have practical industrial exposure to the students to hone their managerial competencies and business acumen while attaining a holistic understanding of a business/industry.
- Prepare the students to deliver effective oral business presentations using a variety of appropriate technologies and achieve excellence in written communications.
- Have global view of the industrial and organizational establishments and their functions for taking viable decisions in international business setting.
- To be an Economist and economic consultant in banking and financial areas of Public and private Sector, teachers in schools, colleges and universities.
- Be able in fundamental skills to become Researcher by using their skill of predictive analysis and critical thinking in enterprises all over the world.
- Their in-depth understanding and analytical thinking of economic scenario can make them a suitable candidate in the field of economic journalism.

## **B.Sc.** (Biotechnology)

The program has been aligned with the National Biotechnology Development Strategy (2015-2020) by DBT, Govt. of India, which provides a strategic roadmap for India's emergence as a global biotechnology innovation, which also highlighted importance of human resource development. After the completion of the course student will:

- Be equipped with technical skills required for isolation, visualization, identification and characterization of different microorganisms from air, water, soil and body fluids
- Learn the molecular biology techniques/methods used to isolate and/or quantify different macromolecular constituents of a cell viz nucleic acids, proteins, lipids and sugars.
- Be able to perform enzyme assays and analyze its kinetics data which will inculcate
  the basic biochemical skills indispensable for an academic or industrial
  professional.
- Comprehend the utilization of different chromatographic techniques in molecular biology.
- Learn the serological techniques used in health care industry for diagnosis of different infectious diseases.



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- Be equipped with skills required to perform different immunological techniques utilized in research and/or industry for identifying antigen-antibody interactions such as RIA, ELISA and in-gel assays.
- Learn the process of generation and isolation of antibodies against an antigen of interest.
- Learn basic technique of slide preparation, staining, cell counting and visualization of cells for cytological analysis of specimens.
- Be able to identify, separate and quantify different cellular constituents of blood used in medical laboratory.
- Gain the technical know-how of the process widely used in research as well as industry for separation of different subcellular organelles from cells/tissue.
- Learn the basic technique of plasmid isolation, manipulation, retransfection and selection of bacteria which is a vital part of the RDT used in cloning of a target gene in research/industry.
- Get hands-on training on the technique of aseptic plant and animal cell culture and its manipulation/maintenance for commercial or research use.
- Learn the sophisticated molecular method used for production of monoclonal antibodies which has widespread use in life science industry as well as research academia.
- Have exposure to large scale fermenters will give a glimpse of the practical implementation of biotechnological knowledge in commercial industry.

### B.Sc. (Bio. Chem.)

## Following are the Course Outcomes:

- Instills basic biochemistry concepts and their applications in a systematic, methodical, scientific, evidence-based process.
- Exposure to theoretical and practical background in fundamental concepts.
- Insights into various technical areas of Biochemistry.
- Application of contextual knowledge and modern tools in biochemical research.
- Development of leadership qualities through persuasive idea expression and develops communication skills in scientific reasoning and data analysis in written and oral forms.
- Demonstration of professional and ethical attitude with responsibility to serve society.



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- Proficiency in basic laboratory techniques and application of scientific method in experimentation, hypothesis testing, data interpretation, and logical conclusions.
- Ability to use modern library search tools for literature retrieval and critical evaluation.
- Graduates can apply major theories and research procedures to contemporary social problems.
- Develops analytical skills in living cells and molecular machinery.
- Develops practical laboratory skills in Chemistry, Microbiology, & Bioinformatics.
- Understands Biochemistry applications in Clinical Biochemistry, Genetic Engineering,
   Molecular biology, & Biotechnology.
- Acquires practical skills for future interdisciplinary careers such as, hospitals, university labs, food industries, agriculture, research technician, scientific trainee, tissue culture technician, quality control scientist etc.
- Prepares students for various fields of higher education or related professions.

#### **BLIS**

BLIS degree offers a variety of career opportunities for graduates. Demand for librarians and information professionals are expected to increase in the coming years, making it a great opportunity to pursue a career in this field. Following are the course outcomes:

- Able to work with a wide variety of materials, from rare books and manuscripts to historical photographs and digital materials.
- The program equips the student with knowledge and skills in the management of library operations, the systematic organization, conservation, preservation and restoration of books, historical and cultural documents and other intellectual properties and the integration of information technologies and management information system for effective organization, use and delivery of learning resource and services.
- Get the opportunity to develop a wide range of skills, i.e., strong communication, research, and organizational skills and understand the latest technologies and trends in library and information science.



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- It provides students with a solid foundation in library and information science principles, as well as the latest technologies and trends in the field.
- The course gives an informative and approachable job prospect. Students get the opportunity to work in a variety of environments such as, libraries, archives, museums, and other information management institutions.

#### Law

A law graduate will encompass the legal knowledge, professional practice, professional skills and lawyering skills in the following areas:

- Possess knowledge of national and global laws,
- Ability to communicate effectively
- Formulate legal problems using appropriate concepts and methods, and solve clients' problems.
- Able to demonstrate the application of Constitutional Law in legal practice.
- Understand the supremacy of the Constitution and its role in safeguarding rights of vulnerable society.
- Developing extensive knowledge of Constitutional Law, Fundamental Rights, and Fundamental Duties.
- Understanding the role of Indian Judiciary in protecting constitutional rights.
- Evaluating classical and contemporary perspectives on fundamental rights and compliance procedures.
- Interpreting the duty of state and the inter-relationship between fundamental rights and directive principles.
- Demonstrating knowledge of key substantive areas within the law field and evaluating competing perspectives.
- Developing a sense of ethics in lifelong learning g and competence in legal research
- Successful defense of clients accused by the legal system.
- Understanding basic principles of law of crimes.
- Efficient and successful dispensation of the criminal justice system.
- High understanding of fundamental principles in criminal law practice.
- Able to analyze social issues, understand social dynamics, gather and interpret relevant facts, and conduct legal research.



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#### **Journalism and Mass Communications**

Department of Journalism and Mass Communication Course is divided into Print and Electronic Media segments. Print media includes newspapers in English, Hindi, and Urdu, focusing on journalistic skills like news hunting, story-telling, sensationalism, and yellow journalism. Following are the course outcomes:

- The course helps in the development of communicative abilities and making stories out of very trivial issues.
- Electronic media includes TV channels, news, sports, and films, aiming to create a group of budding journalists committed to objectivity and truth.
- Students get skilled in news reading, anchoring programs, page making, page layout, content writing for advertisements, and news gathering.
- Several job opportunities are provided and numerous students are placed in various print and electronic media houses including Newspapers Hindustan, Dainik Bhaskar, Dainik Aaj, Qaumi Tanzeem Urdu & Delhi Editions and Amar Ujala.
- The course instills concepts of communication, its role in society, and impart knowledge of Mass communication & Journalism.
- Skills related to Information Communication Technologies (ICTs) are imparted, including digital and media literacy and competencies.
- Students are trained to apply objectivity and critical thinking for communication through various mediums.
- The course aims to create awareness to become an enlightened citizen and dynamic professional, adhering to the highest standard of ethics and professionalism.

#### **Nutrition & Dietetics Certificate Course**

The course outcomes are notable as after completion of the program students will be well-prepared to make informed nutritional decisions, promote health and well-being through dietary choices, and have the practical skills to assess and plan diets for individuals and groups in diverse settings. More specifically, on successful completion of course students will be able to:



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- Understand the fundamental principles of nutrition and the importance of a balanced diet in maintaining overall health.
- Identify various food groups and their specific roles in providing essential nutrients to the body.
- Analyse the different types of essential nutrients (carbohydrates, proteins, fats, vitamins, minerals) and their functions in the body.
- Understand the anatomy and physiology of the human digestive system, including the process of digestion and absorption of nutrients.
- Identify sources and causes of food contamination by microbes and potential health risks associated with it.
- Learn and apply measures for the prevention and control of food contamination by microbes, ensuring safe food handling and storage practices.
- Acquire skills in food storage techniques and preservation methods to extend the shelf life of perishable items.
- Develop the ability to plan a balanced diet tailored to specific nutritional needs and dietary preferences.
- Create customized diet plans for various age groups, lifestyles, and special dietary requirements.
- Understand strategies for cost-effective food shopping while making nutritious choices.
- Recognize common deficiency diseases and understand the role of nutrition in preventing and managing these conditions.
- Apply dietary strategies to manage conditions like diabetes, hypertension, and obesity.
- Perform experiments to measure weight and estimate the nutritive value of food items, as well as practice cooking techniques that align with healthy eating.

## **Nutrition and Dietetics Diploma Course**

By the end of this Diploma program, students will be well-prepared to work as professionals in the field of Nutrition and Dietetics. They will possess the knowledge and skills necessary to assess, plan, and implement dietary interventions for individuals and communities, and make a meaningful impact on improving the nutritional well-being and health of diverse populations. Following are the course outcomes:



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- Develop the ability to plan and manage well-balanced meals for individuals and groups, considering dietary preferences, cultural influences, and specific nutritional requirements.
- Master the art of diet therapy, including the assessment of medical conditions, formulation of therapeutic diets, and monitoring patient progress to address health issues such as diabetes, cardiovascular diseases, and gastrointestinal disorders.
- Understand and apply the principles of nutritional support, including enteral and parenteral nutrition, to manage malnutrition and support the health and recovery of patients in clinical settings.
- Gain proficiency in conducting nutritional assessments and experiments in the laboratory, including techniques for analysing the nutritional content of various foods and understanding nutrient metabolism.
- Apply research methods in the field, including sampling techniques, surveys, and interviews to collect data on the nutritional requirements of diverse population groups in various geographical areas.
- Learn how to design and conduct surveys to assess the nutritional needs of specific populations, taking into account factors like age, gender, socioeconomic status, and cultural variations.
- Acquire hands-on experience in a hospital or clinical setting, working with healthcare
  professionals to provide nutritional guidance to patients, and gain practical exposure to
  the healthcare environment.

### **Nutrition & Dietetics Advanced Diploma Course**

After the completion of this program, students will be well-prepared to work as community health and nutrition professionals, equipped with the knowledge, skills, and practical experience needed to address the unique health and nutrition challenges of diverse communities and promote well-being at the local level. Few course outcomes are as follows:

- Understand the factors affecting community health and nutrition, including socioeconomic, cultural, and environmental determinants.
- Learn effective methods for working with communities to address their specific health and nutrition needs, fostering collaboration and empowerment.



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- Acquire proficiency in communication strategies, including mass media and community-based techniques, for disseminating nutrition and health information.
- Develop a deep understanding of community-based strategies for addressing nutrition and health issues, including designing and implementing nutrition programs.
- Gain practical experience through field studies and surveys in various community settings, focusing on community needs assessment, and program evaluation.
- Learn analytical methods to assess nutritional status and apply research techniques for data collection, analysis, and interpretation.
- Develop entrepreneurial skills to create and manage community-based nutrition and health initiatives, addressing local needs and fostering economic development.
- Receive hands-on training through outstation placements, providing exposure to different community settings, practices, and challenges.

## **Medical Lab Technology**

Medical Lab Technology (MLT) is a UGC sponsored add on course. Upon the successful completion of the course student will be able to:

- Apply the knowledge and technical skills associated with medical lab technology.
- Perform routine clinical laboratory procedures within acceptable quality control parameters in hematology, chemistry, immunohematology, and microbiology.
- Have technical skills, social behavior, and professional awareness imperative for a laboratory technician.
- Apply problem solving techniques in identification and correction of procedural errors, instrument malfunctions and verifying the accuracy of laboratory results.
- Demonstrate ability to plan and implement professional activities.
- Understand professional and ethical responsibility in medical lab technology practices.
- Efficiently execute well- designed research experiments, and contribute to organization, analysis and interpretation of clinical data.
- Understand the impact of laboratory tests in global and environmental context.
- Work as a leader in the diverse professional and industrial research areas.
- Communicate effectively by oral, written, and graphical means.



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• Recognize the need to engage in lifelong learning through continuing education and research.