Govt. Degree College, Indora,

# Dist. Kangra, Himachal Pradesh



# Programme Outcomes & Programme Specific Outcomes w.e.f Academic Session 2022-23

# **Department of Mathematics**

# **B.Sc.(Non-Medical) and B.A. with Mathematics**

# **Programme outcomes:**

Upon completion of the B.A.(general) Mathematics Programme, students will be able to:

1) Develop deep interest in learning mathematics.

2) Familiar with different areas of Mathematics.

3) Develop broad and balanced knowledge and understanding of definitions, concepts, principles and theorems.

4) Solve complex problems by critical understanding, analysis and synthesis.

5) Recognize and appreciate connections between theory and applications

6) Work effectively in a multi-disciplinary Non-Medical environment.

7) Get systematic understanding of application of the concepts and theories of mathematics in the real world-to an advanced level, and enhance career prospects in a huge array of fields.

# M. Sc. (Mathematics)

# **Programme Outcomes (PO):**

PO1: Critical Thinking: To develop critical thinking and prepare them to carry out scientific

investigation objectively. Critically evaluate practices and theories by following mathematical approaches.

PO2: Knowledge Skill: To develop skills among the students to formulate hypothesis, modeling, solutions and validate, and draw conclusions.

PO3: Communication Skills: To inculcate the communication skills to express mathematical ideas.

PO4: Social Responsibility: To enlightened the students to serve the society by helping them by using mathematical knowledge in their life.

PO5: Analytical Reasoning: To equip the students for demonstration of quantitative and analytical reasoning skills.

PO6: Lifelong Learning: To inculcate the habit of self-learning through self-directed learning and through peer discussion and adapting to the changing academic environment and demands.

PO7: Leadership Qualities: To develop the team spirit and leadership quality to work effectively as an individual and as a leader in diverse situations.

PO8: Research Skills: Prepare students for pursuing research in various fields of mathematics and research-oriented career.

PO9: Ethics: The students are educated to follow the moral and ethical values in their behavior and professional life.

# **PROGRAMME SPECIFIC OUTCOMES (PSO):**

At the end of the program, the students will be able to:

PSO1: Apply the knowledge of mathematical concepts and mathematical tools and techniques in interdisciplinary fields to solve the real-world problems.

PSO2: Enrich the abstract mathematical concepts and explore the possibility for further investigations.

PSO3: Modeling the real-world problems mathematically and use the inferences for improvement of quality of life.

PSO4: Identify challenging problems in mathematics and work on them.

PSO5: Pursue research in pure/applied mathematics.

PSO6: Work hard to acquire mathematical knowledge and skills suitable to professional activities and follow highest standards of ethical values.

PSO7: Qualify national level tests like NET/GATE etc.

PSO8: Effectively communicate and explore ideas of mathematics for propagation of knowledge and popularization of mathematics in the society.

#### **Department of Chemistry**

#### **B.Sc.** Chemistry Programme Outcomes (PO)

After completing B.Sc. Chemistry programme, students will be able to:

1) Understand scientific information in a clear and concise manner.

2) Undertake higher study and research in inter and multi-disciplinary areas of sciences.

3) Inculcate scientific temperament among the students to develop a logical scientific understanding and implementation of the policies to tackle the burning issues at global and local level.

4) Create awareness and sense of responsibilities towards environment and apply knowledge to solve the issues related to Environmental pollution.

## **Programme Specific Outcome (PSO)**

1) Exhibit and apply the fundamental knowledge of the basic principles in of Chemistry

2) Collaborate effectively on team-oriented projects in the field of Chemistry or other related fields.

3) Address environmental pollution issues and the remedies thereof.

4) Apply the knowledge to develop the sustainable and eco-friendly technology in Industrial Chemistry

5) To develop their critical thinking, judgment and communication skills.

#### **Department of Physics**

## Programme Outcomes B.Sc.-Non Medical(Physics)

At the end of the programme the students will be able to:

1. Apply theoretical knowledge of principles and concepts of Physics to practical problems.

2. Use mathematical techniques and interpret mathematical models of physical behavior.

3. Demonstrate the ability to plan, undertake, and report on a programme of original work; including the planning and execution of experiments, the analysis and interpretation of experimental results.

4. Assess the errors involved in an experimental work and make recommendations based on the results in an effective manner.

5. Develop communication skills, both written and oral, for specialized and non-specialized audiences

#### **Department of Botany**

#### **B.Sc Medical (Botany) Programmme Outcomes**

Bachelor of Science (BSc) offers theoretical as well as practical knowledge about different disciplines. These subject areas include Chemistry, Botany, Zoology and other fields depending on the specialisation a student.

The programme is also beneficial for students who wish to pursue multi and inter-disciplinary science careers in the future. Following are the outcomes of programme:

1. This programme forms the basis of science and comprises of the subjects like chemistry, botany, zoology.

2. It helps to develop scientific temper and thus can prove to be more beneficial for the society as the scientific developments can make a nation or society to grow at a rapid pace.

3. After the completion of this course, students have the option to go for higher studies i.e., M.Sc., PhD and then do research for the welfare of mankind.

4. After higher studies, students can join as scientist and can even look for professional job oriented courses.

5. This programme also offers opportunities for serving in Indian Army, Indian Navy and Indian Air Force as officers.

6. Students after this course have the option to join Indian Civil Services as IAS, IFS etc.

7. Science graduates can go to serve in industries or may opt for establishing their own industrial units.

#### **Programme Specific outcomes:**

1. B.Sc. Medical student is able to acquire knowledge regarding Botany, Zoology, Chemistry, Biotechnology, Microbiology and Plant Taxonomy.

2. Medical Students will be able to define and explain major concepts in the biological sciences.

3. They are able to correctly use biological instrumentation and proper laboratory techniques.

4. Students will be able to communicate biological knowledge in oral and written form.

5. Students will be able to recognize the relationship between structure and function at all levels: molecular, cellular and organism.

6. They can go for Indian Forest Service and other competitive examinations.

7. They can opt for higher studies in Botany, Zoology, Chemistry, Biotechnology, Microbiology, Forensic science, Environment science etc.

# **DEPARTMENT OF ZOOLOGY**

# **B.SC. MEDICAL (ZOOLOGY)**

# **PROGRAMME SPECIFIC OUTCOMES:**

1. Students gain knowledge and skill in the fundamentals of animal sciences, understands the complex interactions among various living organisms.

2. Analyse complex interactions among the various animals of different phyla, their distribution and their relationship with the environment.

3. Apply the knowledge of internal structure of cell, its functions in control of various metabolic functions of organisms.

4. Understands the complex evolutionary processes and behaviour of animals.

5. Correlates the physiological processes of animals and relationship of organ systems.

6. Understands about various concepts of genetics and its importance in human health.

7. Apply the knowledge and understanding of Zoology to one's own life and work.

8. Develops empathy and love towards the animals.

## **Department of Commerce**

#### **B.Com. Program Outcomes**

The aim of three years degree Programme in B.Com. is to provide the learners a platform for character building to perform well & contribute to the society. Learning outcomes based curriculum framework (LOCF) is adopted to impart students with sound knowledge and humanistic skills, constructive & productive character developments so that they can respect the best people of the society.

#### **Programme Outcomes (PO):**

At the end of the Programme the students will be able to:

1) Learning outcomes based curriculum framework LOCF based curriculum three years degree B.Com. Programme help students to develop in depth knowledge of the areas like accounting, finance, marketing, human resource management, economics and business laws.

2) The graduates of B.Com. Programme will be able to develop skills and attitudes needed for critical thinking which will help them in a comprehensive problem solving approach. They shall be exposed to the pedagogy that helps them understand real life situations through class room training & and case studies. It aims at building the basic ability to think critically, evaluate dispassionately and solve complex problems creatively. The content is organised in such a way that the students would be able to think from diverse perspectives and suggest solutions according to their own sensibilities.

3) The Programme will help the students to develop reasoning based analytical ability which often requires in practical business life. B.Com. Programme is prepared in such a way that it helps students to solve various issues related to business: Basics of accounting will help them to

solve the problems like making accurate financial statements. Managerial skills will help them to tackle various managerial centric problems like; to plan, to organise, decision- making, ideas formulating, controlling

4) B.Com. Programme contains various courses like principles of management, HR management, Industrial Relations which will help to learn managerial & entrepreneurial skills to work & timely manage the affairs of the business. These attitudes are developed through application of concept based practices, participative classroom discussions, problem solving tasks, case studies etc.

#### **Programme Specific Outcome (PSO):**

At the end of the Programme the students will be able to:

1) Understanding of individual and company accounting system.

2) Understanding the functions and operations of bank, technological development in banking and insurance companies.

3) Adequate knowledge on income tax provision and implication.

#### **Department of Business Administration**

#### **BBA Programme Outcomes (PO)**

At the end of the Programme the students will be able to:

1) Enable students to apply knowledge of management theories and practical to solve business problems.

2) Encourage analytical and critical thinking abilities for decision making.

3) Promote ethical and value based leadership ability.

4) Enable students to effectively communicate business issues, management concepts, plans and decisional both in oral and written form using appropriate supportive technologies.

5) Enable students to demonstrate the appropriate techniques to effectively manage business challenges.

6) Make students capable of recognizing and resolving ethical issues.

7) Helps to prepare students for managerial roles and as entrepreneurs.

# **Programme Specific Outcome (PSO):**

At the end of the Programme the students will be able to:

1) Provide verbal, reasoning, data interpretation, Quantitative and communication skill to solve specific business problems and decision making.

2) Apply ethical principles and commitment towards professional ethics and responsibility.

3) Providing an opportunity for the students to gain practical exposure towards the workplace and make them industry ready.

4) Promote entrepreneurship by providing understanding of fundamentals of creating and managing innovation, new business development and high growth potential entities.

5) Ability to analyze various functional issues affecting the organization.

6) Demonstrate effectively Oral and Written Communication.

7) Demonstrate ability to work in Groups.

# **Department of Computer Application**

#### **BCA Programme outcomes**

At the end of the three year BCA Programme the students will be able to:

1) Understand, analyse and develop computer Programmes in the areas related to algorithm, web design and networking for efficient design of computer based system.

2) Work in the IT sector as system engineer, software tester, junior Programmer, web developer, system administrator, software developer etc.

3) Apply standard software engineering practices and strategies in software project development using open source Programming environment to deliver a quality of product for business success.

## **Programme Specific outcomes:**

1) To provide thorough understanding of nature, scope and application of computer and computer languages.

2) To work effectively both as individual and a team leader on multidisciplinary projects.

3) Possess strong foundation for their higher studies.

4) Improves communication skills so that they can effectively present technical information in oral and written reports.

5) To work in the IT sector, public sector undertakings and Government organizations.

# **PGDCA (Post Graduate Diploma in Computer Application)**

# **PGDCA Programme outcomes**

The Post Graduate Diploma in Computer Application Programme will prepare its graduates to achieve:

1) Students are eligible to and apply for jobs in various multinational companies, industries, banks. They can start their own business in web development and software development.

2) Students are able to use their knowledge to develop different web and windows based applications.

3) Students can create database, websites and applications for their clients.

# Programme specific outcome:

1) The understanding to apply knowledge of computing and technological advances appropriate to the Programme.

2) Skills to analyse a problem, and identify and define the logical modelling of solutions.

3) Analyze real world problems and use available technological solutions to design and implement the same.

4) Effectiveness in communicating with a wide range of audiences.

5) An ability to analyse the local and global impact of business solutions on individuals, organisations, and society.

6) An identification of the need to engage in continuing professional development.

7) The students acquire knowledge about basics and fundamentals of information technology, basic Programming. Students learn to develop and debug codes in different languages.

# **Department of Political Science**

# **B.A. (Political Science)**

Programme Outcomes:-

- To acquaint a student with conventional as well as contemporary areas in the discipline of Political Science.
- 2) To enable a student well versed in national as well as international trends.
- 3) To enable the students for conducting politics and law related practices, role of regulatorybodies in political and international sectors, nature of various political institutions.
- 4) To provide in-depth understanding of all core areas specifically advanced national and international politics, emerging trends, recent theories, research methodology and global politics.

# **Programme Specific Outcomes:-**

After the completion of the Bachelor's course, a student is able:

- 1) For teaching in schools after qualifying requisite tests.
- 2) For working or participating in political institutions, political groups and international political sector.
- 3) For pursuing further studies in the field of state, national and international politics.

# **Department of Public Administration**

# **B.A. (Public Administration)**

# **Programme Outcomes:-**

1) To acquaint a student with conventional as well as contemporary areas in the discipline of Public Administration.

2) To enable a student well versed in national administrative trends.

3) To enable the students for conducting administrative and law related practices, role of regulatory bodies in public and international sectors, nature of various administrative institutions.

4) To provide in-depth understanding of all core areas specifically advanced national, and international administration, emerging trends, recent theories, research methodology and global administration.

# **Programme Specific Outcomes:-**

After the completion of the Bachelor's course, a student is able

- For teaching in schools after qualifying requisite tests.
- For working or participating in political-administrative institutions, bureaucracy and international administrative sector.
- For pursuing further studies in the field of state, national and international administration.

# **Department of Physical Education**

# **B.A.** (Physical Education)

## **Programme Outcomes :**

1. To develop potentialities and organize physical education programmes and activities.

2. To develop capacity to organized leisure and recreational activities.

3. To empower them to inspire their students to actively participate in physical and yogic exercises.

4. To promote appreciation and interest for indigenous games, sports and yogic exercises.

5. To create awareness about health and hygiene in the community.

# **Programme Specific Outcomes:**

At the end of the programme the students will be able to:

1. To produce quality physical education teachers for imparting instructions in the subject of physical education.

2. To make people aware about the benefits of physical activity through extension lectures and demonstrations .

3. To collaborate with the different organizations which are involved in promoting the quality life of the human beings i.e., educational institutions and NGOs.

4. To promote mass participation in Physical Education activities (Games, Sports Displays etc.) through intra – mural and Extra- mural programmes.

5. To provide opportunity to faculty and students of the department for their self evaluations, accountability, autonomy and innovations in the area of physical education and sports.

# **Department of History**

# **B.A.(History)**

## **Programme outcomes:**

- 1) Teaching in Universities, Colleges and Schools.
- 2) Helpful for Civil Service Exams: IAS, IPS, State Civil Services.
- 3) National and International Organization.
- 4) Public Relations Department.
- 5) Research.
- 6) Develop leadership qualities in Students.

# **Programme specific outcomes:**

- 1) To develop the overall personality of the students.
- 2) To introduce the students about every aspect of the History.
- 3) To provide the best professional opportunities to the students and look forward to their bright future.
- 4) To encourage the students for competitive exam.

# **Department of English**

# B.A. (English)

# **Programme Outcomes:**

Pursuing B.A. in English chiefly makes the students' understanding of English Literature more profound. The course is designed to help learners to analyse, appreciate, understand and critically engage with literary texts written in English from various perspectives, paying attention to themes, generic conventions, historical contexts, and linguistic and stylistic variations and innovations. This course provides the students with a good literary base to take up their masters and further research oriented courses in English Literature. Depending upon how students engage their time in building their profile and skills, this course can open many career options: from being a content writer to a civil servant. Students can also go for English related jobs in various sectors such as information technology, educational institutions, free lancing and commercial undertakings etc.

#### **Programme Specific Outcomes:**

Apart from developing the literary skills, the course helps students build skills of analytical and interpretive argument; become careful and critical readers; practice writing in a variety of genres as a process of intellectual inquiry and creative expression; and ultimately to become more effective thinkers and communicators who are well-equipped for a variety of careers in our information-intensive society.

#### **Department of Music**

#### **B.A. (Music Vocal)**

## **Programme Outcomes:**

1. To Introduce various definitions in context of Indian Classical Music.

2. To impart knowledge about various Gayan Shaillies of Indian Classical Music.

3. To aware the students about brief knowledge about Bhatkhande and Digumber Pulskar Notation system.

#### **Programme Specific Outcomes:**

1. The student will be learning about the historical background, Musical terms, Role of Music in Human life and contribution of different musicologist in the field of music.

2. The students will also know about the different Raags and Taals, and how Instruments are used.

# **Department of Hindi**

# B.A. (Hindi)

# **Programme Outcomes:**

PO1:- छात्रों को हहन्दी साहहत्य केहिहिन्न हिधाओं, प्रिृहियों, रचनाओं ऐिरचनाकारों का पररचय प्राप्त होगा।

PO 2:- छात्रों को िारिीय एि पाश्चात्य साहहत्यशास्त्र का सैद्ांहिक ज्ञान प्राप्त होगा।

PO 3:- समीक्षात्मक दहिकोण हिकहसि होगा।

PO 4:- छात्रों मेंहहन्दी साहहत्य के अध्ययन सेउनके नैहिक मूल्यों, राष्ट्रीय मूल्यों िथा सामाहजक मूल्यों मेंअहििृहद् होगी।

PO 5:- छात्रों को शासकीय कायाालयों मेंअनुपयुक्त कायालीय हहन्दी िाषा का पररचय होगा।

PO 6:- हहन्दी िाषा और उसकी हिहिध बोहलयो केहिकास केसंबंध में ज्ञान प्राप्त होगा।

PO 7:- हिहिन्न िारिीय साहहत्य का पररचयात्मक ज्ञान प्राप्त होगा।

PO 8:- खोज करनेकी क्षमिा का हनमााण होगा।

# **DEPARTMENT OF GEOGRAPHY**

# **B.A.(Geography)**

# Programme Outcomes:-

- Students should acquire a strong foundation in geographic concepts, theories, and principles, including the study of Earth's physical features, human societies, and their interactions.
- Geography programs often emphasize fieldwork and research, and students should learn to design, conduct, and analyze geographic research projects.

- Students should gain an understanding of environmental issues and sustainability, including the impact of human activities on the natural environment.
- Geography programs often explore cultural diversity, globalization, and the ways in which cultures interact and shape the world.
- Students should become proficient in cartographic techniques and the creation of maps and other Geo spatial visualizations.
- Geography programs aim to develop critical thinking and problem-solving skills, encouraging students to analyze complex issues and make informed decisions.
- Students should be able to present their findings and ideas clearly, both in writing and verbally. Depending on the program, students may develop expertise in specific regions or areas of the world, including the study of regional geography.
- Geography often intersects with other disciplines, such as environmental science, economics, and urban planning.
- Students should be able to integrate geographic knowledge with other fields. Geography programs often promote an understanding of global issues, ethical considerations, and social justice in the context of geographical research and practice.
- Geography programs may include career development components, helping students
- prepare for careers in various fields, including urban planning, environmental management, education, and more.

Programme Specific Outcomes Program Specific Outcomes (PSOs) in the context of a geography program typically refer to the specific knowledge, skills, and abilities that students are expected to acquire or demonstrate upon completing their geography education. These PSOs are often designed to align with the overall goals and objectives of the program. The specific PSOs for a geography program can vary depending on the educational institution and the level of the program. Here are some common PSOs for a geography program:

- Students should have a deep understanding of global and regional geography, including physical geography (landforms, climate, ecosystems), human geography (population, culture, urbanization), and regional geography.
- Students should be able to design and conduct geographic research projects, including data collection, analysis, and interpretation.

- Students should be able to assess and address environmental challenges and promote sustainability through the application of geographic knowledge and principles.
- Students should be skilled in creating and interpreting maps, including thematic maps, topographic maps, and interactive web maps.
- Students should have experience in conducting fieldwork, including data collection, surveys, and observations in various geographic settings.
- Students should be able to think critically and apply geographic concepts to solve realworld problems and make informed decisions.
- Students should be able to work effectively with professionals from other disciplines to address complex geographic issues.
- Students should understand the social and cultural factors that influence geographical patterns and processes.
- Students should be able to communicate their geographic knowledge and research findings effectively through written reports, presentations, and other forms of communication.

These PSOs are typically designed to ensure that graduates of a geography program have a wellrounded and comprehensive skill set that prepares them for various career opportunities, including roles in environmental management, urban planning, geographic information science, education, and more. The specific PSOs may vary from one educational institution to another and may be tailored to meet the unique goals and priorities of the programme.

# **Department of Sociology**

# **B.A. Sociology**

# **POs Sociology Specific Outcomes:**

PO1: The Programme seeks to develop in students the sociological Knowledge and skills that will enable them to critically and imaginatively think about society and social issues.

PO2: The ability to demonstrate sociological understanding of phenomena for e.g. how individual behaviors are shaped by social structure, social institution, cultural practices and multiple areas of difference and inequality.

PO3: The course intents to orient the students to certain basic perspective in sociology.

PO4: Students have to learn about institutions, folkways, culture, social contract, social inequality, population composition, population policy, society and culture in India.

PO5: Students will develop an understanding of various aspects of doing social science research with focus on methodology, making research proposal, doing field work & report writing.

PO6: Analyze the critical aspect of sociology of development & planning, the theories and the planning system of development.

PO7: Explain how environmental sociology can be used to analyze contemporary issues and to develop policies for social change.