

SRI GURU TEG BAHADUR KHALSA COLLEGE

SRI ANANDPUR SAHIB

SESSION: 2022-23

(A) Programme Outcomes & Programme Specific Outcomes

Department of Agriculture

B.Sc Agriculture

Programme Outcomes

Agriculture course helps to learn basics of agriculture and allied subjects like agribusiness management, agricultural management, natural resources, livestock production, soil conditions. Students learn the working of the agricultural machinery like cropping machinery, harvesters.

Programme Specific Outcomes

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

Students of diploma are in high demand in Government agricultural firms, Banks, Plantations, Government fertilizer manufacturing firms etc. They are recruited there at the level of field assistants store manager, farm manager/assistant, horticulturist, gardeners etc.

B.Voc Food Processing

Programme Outcomes

This under graduate course is meant to give theoretical and practical knowledge about food handling, sampling, analysis and preservation etc. They are trained in industry for 6 months to accustom them to the environment of food industry.

Programme Specific Outcomes

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

Students can place themselves as Food Lab Technician, Food Processing Operator, Machinery inspection, Food Handler, Research Scientists, Organic Chemists, Food Inspector, Managers and Accountants, Hospitals, Restaurants, Food Processing Companies, Catering Establishments and services, Food Research Laboratories, Retailers, Food Wholesalers, Packaging Industries, Consultant, and Entrepreneur etc.

PG Department of Chemistry
M. Sc. Chemistry

Programme Outcomes (PO)

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

- 1) Communicate scientific information in a clear and concise manner both orally and practically.
- 2) Design experiments, analyze, synthesize and interpret data to provide solutions to different industrial problems by working in the pure, inter and multi-disciplinary areas of chemical sciences.
- 3) Enhance the scientific temper among the students to develop a research culture and implementation of the policies to tackle the burning issues at global and local level.
- 4) Augment the recent developments in the field of green and eco-friendly reactions, pharmaceutical, Bioinorganic Chemistry and relevant fields of research and development.
- 5) 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 various fields of Chemistry
- 2) Apply knowledge to build up small scale industry for developing endogenous product.
- 3) Apply various aspects of chemistry in natural products isolations, pharmaceuticals, textiles, polymers, petroleum products, forensic etc. and also to develop interdisciplinary approach of the subject.
- 4) Collaborate effectively on team-oriented projects in the field of Chemistry or other related fields.
- 5) Inculcate logical thinking to address a problem and become result oriented with a positive attitude.
- 6) Explain environmental pollution issues and the remedies thereof.
- 7) Apply the knowledge to develop the sustainable and eco-friendly technology in Industrial Chemistry
- 8) Have developed their critical reasoning, judgment and communication skills.
Augment the recent developments in the field of green and eco-friendly reactions, pharmaceutical, Bioinorganic Chemistry and relevant fields of research and development.

B.Sc(Hons) 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.

B.Voc (Pharmaceutical Chemistry)

Programme Outcomes

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

- 1) Understand need, importance and use of lab management techniques.
- 2) Create awareness and sense of responsibilities towards Good Lab Practices.
Undertake higher study/job in the field of pharmaceutical/chemical sciences based institutes/industries.

Programme Specific Outcome (PSO)

- 1) Exhibit and apply the fundamental knowledge of Safely handling glass ware and chemicals.
- 2) Collaborate effectively on team-oriented projects in the field.
- 3) Apply the knowledge to employ Good Lab Practices while working in chemical laboratories.
Make the students efficient enough to use sophisticated instruments used in Pharmaceutical Industries.

PG Department of Botany

M.Sc. Botany

Programme Outcomes

On completion of program, students will be able to:

1. Design experiments based on the scientific approach.
2. Think critically to formulate hypothesis.
3. Solve problems related to plant sciences.
4. Analyze and interpret results generated through studies in taxonomical observations, field studies, excursion tours and laboratory techniques.
5. Teach at different levels in the academic organizations.
6. Use their skills and knowledge in academics, industry and research.
7. Effective Communication and collaborate with other disciplines by effectively communicating the fundamental concepts of Botany.
8. Use their expertise to collaborate botany with other branches of science.
9. Understand the environmental issues and sustainable development.
10. Work as Entrepreneurs.

Programme specific outcomes

On completion of program, students will be able to:

1. Identify different groups of plants on the basis of their morphological, anatomical and genetic characters.
2. Practice safe laboratory procedures, using appropriate protective, biosafety and emergency procedures.
3. Identify the composition of prokaryotic and eukaryotic cells, and their functions.
4. Learn about the Structure and Chemical composition of macro and micromolecules.
5. Learn about the Environmental factors affecting the life cycle of plants.
6. Learn about the different research techniques using instruments.
7. Learn about the Ecological and phytogeographical concepts.
8. Learn about the statistical analysis.
9. Learn about the conservation of biodiversity through *in situ* and *ex situ* practises.
10. Learn about the qualitative and quantitative analysis using suitable sampling and techniques.
11. Learn about the origin, history, Botany, cultivation, processing and uses of Plants.
12. Learn about the cytology and genetic characters of plants.
13. Learn about the concept of Intellectual property Rights.

B.Sc Medical (Botany)

Programme 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.
7. They can go for Indian Forest Service and other competitive examinations.
8. They can opt for higher studies in Botany, Zoology, Chemistry, Biotechnology, Microbiology, Forensic science, Environment science etc.

Programme Outcomes

B.Sc. Hons. 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

M.Sc. (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.

B.Sc. (Non-Medical)

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

1. The graduates will have knowledge of fundamental laws and principles in a variety of areas of Physics along with their applications.
2. The graduates will develop research skills which might include advanced laboratory techniques, numerical techniques, computer algebra, computer interfacing.
3. The graduates will become effective researcher who will be able to provide lucid summation of the scientific literature on a given topic of study.
4. The graduates will develop the skill to plan, execute and report the results of an extended experimental or theoretical Physics based project in a research environment.

PG Department of Commerce and Management

B.Com (Honours)

B.Com with Honours is similar to the B.Com degree when it comes to the subjects. This is also a 3-year degree course that is easily available in most recognized universities and colleges. This degree is a great stepping for further education, especially if one wants to do professional courses like CA, CS. Students who want a career in different industries like teaching, journalism, communications, design, etc. go for B.Com (H).

Nature and Objective of Programme:

- 1) Develop an understanding of commerce and apply the skills and knowledge in a business organization.
- 2) Equip the graduates with the know-how of operating successfully in a continuously changing business environment.
- 3) Equip graduates with the skills required to lead management decisions.
- 4) Make informed and ethical decisions based on thorough knowledge of commerce concepts.

Programme Outcomes:

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

- 1) Deep Understanding of Accounting Issues Related to Business.
- 2) Understanding of General Business Functions Impacting Organization.
- 3) Interpersonal and Communication Skills.
- 4) Understanding Ethical, Social Sustainable Business Issues.
- 5) Developing Entrepreneurship Acumen.

Programme Specification Outcomes

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

- 1) Demonstrate ability to interpret and analyze financial statements.
- 2) Understanding the rules and regulation laid down by Accounting Body.
- 3) Demonstrate ability to understand Compliance as per various enactment.
- 4) Acquiring conceptual clarity of various functions and ability to analyze.
- 5) Various Functional issues demonstrating ability to evolve strategies for business.
- 6) Demonstrate effectively oral and written Communication.
- 7) Demonstrate Ability to work in Groups. Exhibit skills like Empathy, EQ.
- 8) Managerial and Inter-Personnel skills
- 9) Demonstrate understanding of social cues and contexts in social interaction.
- 10) Develop Ethical practices and Imbibe values for better corporate governance.
- 11) Understand Ethical challenges and choices in a business setting demonstrate understanding of sustainability related concerns in varied areas
- 12) Understand the ecosystem of start up in the country.
- 13) Demonstrate the ability to create business plans.

- 14) Students will demonstrate progressive effective domain development of values, the role of Accounting in society and business Learner will get ability to clear exams like CA, CS, ICWA and others.

B.Com.

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) Understand the functions and operations of bank, technological development in banking and insurance companies.
- 3) Adequate knowledge on income tax provision and implication.

B.Voc. Retail Management

Programme Outcomes (PO):

Retail Sector has been at the helm of India's growth story. The Retail industry in India is vibrant and one of the fastest growing markets in the world especially in the sectors such as modern retail, traditional retail, e-commerce, direct selling, direct marketing etc. The B.Voc.in Retail Management is a specialised undergraduate bachelor's degree Programme which prepares the graduate to acquire such skills so that they become trained skilled manpower in the Retail sector.

Programme Objective: Following are the broad Programme Objectives:

- 1) To provide students with a comprehensive understanding of the theoretical and applied aspects of retail management.
- 2) To inculcate all the desired skills to meet the needs of today's customer by procuring the desired merchandise from the retail stores for their personal use.
- 3) To equip students with skills required to bring the customers into the store and respond to their buying needs.
- 4) Students completing the first year get a Diploma certificate, after second year they get the Advanced Diploma certificate and after completion of three years, the B.Voc. Retail Management Degree is awarded.
- 5) The course curriculum has 40% general education (theory) and 60% vocational training (practical) components.
- 6) These Programmes follow semester system and offer credits after completion of the course.
- 7) Adequate emphasis should be given to language and communication skills.
- 8) The students who have enrolled in B.Voc. Retail Management courses appreciate the practical focus and are confident that their chances of getting a suitable job are higher than other graduates.
- 9) The advantages of B.Voc. Retail Management courses are that they help ensure the learners have adequate skills, make them work-ready and enhance the employability of the graduate students.
- 10) A unique feature of the curriculum is the blend of vocational and business management concepts. This higher education system incorporates the requirements of various industries in a flexible manner which develops holistic and well – groomed graduates thus meeting the emerging needs of the economy.

- 11) Industry experts and academicians welcome this announcement and view this as an opportunity for vertical mobility.

Programme Specific Outcome (PSO)

After completing this course students will be able to:

- 1) Explain theoretical framework of Retail Management
- 2) Demonstrate the job role of Sales Associate
- 3) Demonstrate the job role of Team leader in retailing sector
- 4) Demonstrate the job role of Departmental Manager in an organised retail sector
- 5) Demonstrate the job role of Store Manager in any retail organisation
- 6) Effectively use Point Of Sale software
- 7) Appraise and interpret various acts and laws related to retail sector
- 8) Skill-based education should be the foundation of modern education”, with a similar view, the University Grants Commission (UGC), in 2013, introduced Bachelor of Vocation, commonly known as B.Voc. Retail Management degree Programme with multiple entry and exit points. B.Voc. Retail Management is a three-year Programme which specifically focuses on skill development and makes the students industry-ready.
- 9) Bachelor of Vocation is quite different from a common degree Programme as the curriculum of B.Voc. Retail Management degrees involve 60 percent practical and 40 percent theoretical learning’s. The emphasis given on the practical and training aspect ensures that the students become more skilled and trained in their disciplines.
- 10) The multiple entry and exit points add to the flexible nature of the B.Voc. Retail Management Programme. After completing one year, if the student opts for the exit, he/she is awarded a diploma certificate. Similarly, there are other exit points from where the students can take an advanced diploma or a full-fledged B.Voc. Retail Management degree.
- 11) Enhancing the employability of the graduates and meeting the industry requirements was one of the many objectives behind introducing a Bachelor of Vocation degree course. The course not only prepares the students for getting employment but also provides them with entrepreneurship skills. The career options after completing B.Voc. Retail Management degree are trade-specific and are vast.

B.Voc. Hospitality and Tourism

Programme Outcomes (PO):

The broad category of fields within service industry includes lodging, event planning, theme parks, transportation, airline, cruise line, and such other employment opportunity within the hospitality & tourism industry. Today, service industry is a major source of income for many countries, and brings impact on the economy of both the source and host countries, in some cases being of vital importance. The B.Voc. In Hospitality and Tourism is a specialised undergraduate bachelor's degree Programme which prepares the graduate to acquire such skills so that they become trained skilled manpower in the Tourism & Hospitality Industry.

Programme Objective: Following are the broad Programme Objectives:

- 1) Industry experts and academicians welcome this announcement and view this as an opportunity for vertical mobility.
- 2) To provide students with a comprehensive understanding of the theoretical and applied aspects of Tourism & Hospitality Industry.
- 3) To inculcate all the desired skills of standard operating procedures & service provisions to meet the needs of today's customer by providing desired services required in Tourism & Hospitality Industry.
- 4) To equip students with hospitality skills required to provide customer satisfaction into the hotel & tourism sector and fulfil guest requirements for food & beverage service, meetings, conferences, events, travel moments & caterings
- 5) Students completing the first year get a Diploma certificate, after second year they get the Advanced Diploma certificate and after completion of three years, the B.Voc. Hospitality and Tourism Degree is awarded.
- 6) The course curriculum has 40% general education (theory) and 60% vocational training (practical) components.
- 7) These Programmes follow semester system and offer credits after completion of the course.
- 8) Adequate emphasis should be given to language and communication skills.
- 9) The students who have enrolled in B.Voc. Hospitality and Tourism courses appreciate the practical focus and are confident that their chances of getting a suitable job are higher than other graduates.
- 10) The advantages of B.Voc. Hospitality and Tourism courses are that they help ensure the learners have adequate skills, make them work-ready and enhance the employability of the graduate students.
- 11) A unique feature of the curriculum is the blend of vocational and business management concepts. This higher education system incorporates the requirements of various industries in a flexible manner which develops holistic and well – groomed graduates thus meeting the emerging needs of the economy.

Programme Specific Outcome (PSO)

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

- 1) Explain theoretical framework of Tourism & Hospitality Industry.
- 2) Demonstrate the job role of F&B Service Steward in Hospitality Sector.
- 3) Demonstrate the job role of Meeting, Conference and Event Planner.
- 4) Demonstrate the job role of Tour Manager in Tourism Sector. • Demonstrate the job role of Asst. Catering Manager in Hospitality Industry.
- 5) Effectively learn Customer Handling, service recovery & Guest Interfaces.
- 6) Appraise and interpret various acts and laws related to service sector.

- 7) Appraise and interpret various acts and laws related to retail sector
- 8) Skill-based education should be the foundation of modern education”, with a similar view, the University Grants Commission (UGC), in 2013, introduced Bachelor of Vocation, commonly known as B.Voc. Hospitality and Tourism degree Programme with multiple entry and exit points. B.Voc. Hospitality and Tourism is a three-year Programme which specifically focuses on skill development and makes the students industry-ready.
- 9) Bachelor of Vocation is quite different from a common degree Programme as the curriculum of B.Voc. Hospitality and Tourism degrees involve 60 percent practical and 40 percent theoretical learning’s. The emphasis given on the practical and training aspect ensures that the students become more skilled and trained in their disciplines.
- 10) The multiple entry and exit points add to the flexible nature of the B.Voc. Hospitality and Tourism Programme. After completing one year, if the student opts for the exit, he/she is awarded a diploma certificate. Similarly, there are other exit points from where the students can take an advanced diploma or a full-fledged B.Voc. Hospitality and Tourism degree.
- 11) Enhancing the employability of the graduates and meeting the industry requirements was one of the many objectives behind introducing a Bachelor of Vocation degree course. The course not only prepares the students for getting employment but also provides them with entrepreneurship skills. The career options after completing B.Voc. Hospitality and Tourism degree are trade-specific and are vast.

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.

Bachelor of Commerce (Accounting and Finance) B.Com (A & F)

Programme Outcomes (PO):

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

- 1) Describe, explain, and integrate fundamental concepts underlying accounting, finance, management, marketing, and economics
- 2) Use information to support business processes and practices, such as problem analysis and decision making
- 3) Apply quantitative skills to help analyze and solve business problems and to take advantage of business opportunities
- 4) Apply oral and written communication skills
- 5) Describe and explain the ethical and social responsibilities of accountants in ensuring the integrity of financial information
- 6) Develop an understanding of internal control issues and the effects of the regulatory environment on financial reporting
- 7) Apply knowledge of managerial accounting theories to business organizations, state and local governments, and nonprofit organizations
- 8) Apply knowledge of federal tax laws and procedures to individuals and businesses

Programme Specific Outcome (PSO)

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

- 1) Students will be able to demonstrate progressive learning of knowledge of Accounting and Computerised set of Accounting books.

- 2) Learner will acquire practical skills to work as Tax Consultant, Audit Assistant and other Financial supporting services.
- 3) Develop communication skills, both written and oral, for specialized and non-specialized audiences.

Master of Commerce

Programme Outcome

- 1) To acquaint a student with conventional as well as contemporary areas in the discipline of Commerce.
- 2) To enable a student well versed in national as well as international trends.
- 3) To enable the students for conducting business, accounting and auditing practices, role of regulatory bodies in corporate and financial sectors nature of various financial instruments.
- 4) To provide in-depth understanding of all core areas specifically Advanced Accounting, International Accounting, Management, Security Market Operations and Business Environment, Research Methodology and Tax planning.

Programme Specific Outcome

After the completion of the M.Com Course, a student is able

- 1) For pursuing research in their chosen areas.
- 2) For teaching in Schools and Colleges after qualifying requisite tests.
- 3) For working as data analyst.
- 4) To work as investment consultants after a brief internship in suitable organizations absorbed in Banking and Insurance sector as executives

**PG Department of Computer Science
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

B.Sc. (H) AI & DS

Programme outcomes:

At the end of the three year B.Sc.(H) AI & DS Programme the students will be able to:

- 1) Exhibit good domain knowledge and completes the assigned responsibilities effectively and efficiently in par with the expected quality standards.
- 2) Apply analytical and critical thinking to identify, formulate, analyse, and solve complex problems in order to reach authenticated conclusions.
- 3) Establish the ability to listen, read, proficiently communicate and articulate complex ideas with respect to the needs and abilities of diverse audiences.
- 4) Deliver innovative ideas to instigate new business ventures and possess the qualities of a good entrepreneur.
- 5) Acquire the qualities of a good leader and engage in efficient decision making. Graduates will be able to undertake any responsibility as an individual/member of multidisciplinary teams and have an understanding of team.

Programme Specific Outcomes:

- 1) Enable graduates to design and harness the power of AI in broad application fields from vision to advanced autonomous systems.
- 2) Explain and critically assess a range of artificial intelligence techniques used in data analytics and in other related areas.

- 3) Examine large amounts of data to uncover hidden patterns, correlations, insights, and help organizations harness their data to identify new opportunities.
- 4) Critically evaluate emerging data analysis technologies and assess how it can be applied to different types and amounts of data.
- 5) Obtain expertise to turn actionable insights and cutting-edge technology into innovative products to solve real world problems.
- 6) Effectively communicate findings in terms of reports and presentations.
- 7) Inculcate independent research ability that addresses fundamental problems.

B.Voc. (SD)

Programme Outcomes:

Programme has been designed to prepare graduate for attaining the following outcomes:

- 1) The B.Voc. Programme is focused on universities and colleges providing undergraduate studies which would also incorporate specific job roles and their NOSs along with broad based general education.
- 2) This would enable the graduates completing B.Voc. to make a meaningful participation in accelerating India's economy by gaining appropriate employment, becoming entrepreneurs and creating appropriate knowledge. Improve their computer literacy, their basic understanding of operative systems and a working. Knowledge of software commonly used in academic and professional environments.

Programme Specific outcomes:

- 1) Understand analyze and develop computer Programmes in the areas related to web design, mobile application design.
- 2) Apply standard software engineering process and strategies in software project development using open source Programmemeing environment to deliver a quality product for business success.
- 3) Acquaintance with latest trends in software development and thereby innovate new ideas in the area of software development.
- 4) Provide industry exposure through 6 month industrial training.
- 5) Able to assist in performing software construction and testing entry level tasks in the IT services industry.
- 6) Able to develop knowledge, skills and competence in software development sector.
- 7) Able to contribute to design of software products and applications.
- 8) Able to provide data/ information in standard formats.

Diploma in Computer Hardware and Networking

Programme outcomes:

The one year course aims to develop personals, capable of taking responsibilities such as installation, repair and maintenance, networking, security administration and operating computer units.

Programme Specific Outcomes:

- 1) The course provides learners with a cutting edge in the domain and enables them to construct a machine from scratch.
- 2) The course builds a strong foundation in Computer Hardware Maintenance & also empowers the students with the knowledge of the most widely used networking platforms.

Add on Certificate Course in Web Designing

Programme Outcomes:

The course has been designed to provide the basic knowledge for design of the web pages / sites.

Programme specific Outcomes:

- 1) Enable students to create, publish and manage websites.
- 2) Enable students to work with different website developing tools.
- 3) Enable students to create multimedia content of websites.
- 4) Enable students to apply proper layout and interactive website design.

M.Sc. (IT)

Programme Outcomes:

- 1) The M.Sc. (IT) Programme is designed to equip post graduate students with an integrated set of skills that will allow them to develop their professional careers in this area of information technology.
- 2) The focus of the Programme is to equip students with the theoretical and practical that is necessary to enable them to practical knowledge in the design of complex Computer applications/science.
- 3) The Programme not only presents the knowledge in the design and implementation of computer applications but also prepares students to embrace future developments in the field and has a demonstrated professional relevance.
- 4) Thus, the M.Sc. (IT) Programme is intended to prepare post graduates to pursue careers in industry, as software engineers, to establish their own consulting or software development companies.

Programme Specific Outcomes:

- 1) Demonstrate a comprehensive understanding of the broad themes in Information

Technology.

- 2) Use and apply current technical concepts and practices in the core information technologies of networking, data management, software engineering etc.
- 3) Demonstrate a deep understanding of the IT methodologies and frameworks used to solve complex computing problems related to at least one IT Body-of-Knowledge.
- 4) Identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems.
- 5) Effectively integrate IT-based solutions into the user environment.
- 6) Developed and implement optimal solutions to complex computing problems using industry-recognized best practices and standards.
- 7) Apply ethical decision making in the development, implementation and management of IT systems.

M.Sc. (AI &DS)

Programme outcomes:

M.Sc. in Artificial Intelligence is two year postgraduate course which concentrates on the development of systems for the integration of artificial intelligence through the various tools and Programming languages. Enrich the knowledge in the areas like Artificial Intelligence, Data Science and Machine learning. Students understand the artificial intelligence and data science with demonstration of all concepts with practicals and case studies. Develop in-house applications in terms of projects and case studies. The need for professionals in the artificial intelligence domain is in huge demand and the course makes the candidate learn much about the aspects of artificial intelligence and data science.

Programme specific outcomes:

- 1) Develop original ideas and solve complex problems in new or unfamiliar environments, based on advanced knowledge of the principles and methodologies of Artificial Intelligence and data science.
- 2) Integrate knowledge and handle complexity in this area of computer science, formulating sound judgments with incomplete or limited data.
- 3) Communicate conclusions and the underpinning knowledge and rationale clearly and unambiguously to specialist and non-specialist audiences.
- 4) Develop independent learning skills as required for continued professional development.

PGDCA (Post Graduate Diploma in Computer Application)

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.

Value Added Course

Ms Office (Word, Power Point & Excel)

Programme Outcomes:

The course has been designed to provide the basic knowledge of Ms Office (**Word, Power Point & Excel**).

Programme specific Outcomes:

1. Utilize the functionality and productivity of Microsoft office.
2. Hands on practical knowledge.
3. Proficiency in creating professional documents and reports.
4. Explore slideshow presentation concepts.
5. Build spreadsheets to perform calculations, display data and conduct analysis.

PG Department of Political Science

M.A. (Political Science)

Programme Outcomes:-

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

Programme Specific Outcomes:-

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

- For pursuing research in their chosen areas.
- For teaching in schools and colleges after qualifying requisite tests.
- For working as political advisor.
- For working or participating in political institutions, political groups and international political sector.

B.A. (Political Science)

Programme Outcomes:-

- To acquaint a student with conventional as well as contemporary areas in the discipline of Political Science.
- To enable a student well versed in national as well as international trends.
- To enable the students for conducting politics and law related practices, role of regulatory bodies in political and international sectors, nature of various political institutions.
- To provide in-depth understanding of all core areas specifically advanced national, 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

- For teaching in schools after qualifying requisite tests.
- For working or participating in political institutions, political groups and international political sector.

- For pursuing further studies in the field of state, national and international politics.

B.A. (Public Administration)

Programme Outcomes:-

- To acquaint a student with conventional as well as contemporary areas in the discipline of Public Administration.
- To enable a student well versed in national administrative trends.
- 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.
- To provide in-depth understanding of all core areas specifically advanced national, 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

Course Name: Under Graduate Physical Education(Elective Subject in BA)

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.

PG Department of 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

M.A. PUNJABI

Programme Specific Outcomes

The dawn of the 21st century and third millennium has, hopefully, ushered in an era qualitatively different from the earlier ones in terms of foundational postulates, value systems, mindset and life styles. Higher education in the present century comes face to face with challenges, new tasks and new opportunities. As a significant means of development of human resource, education will have to play a significant role in shaping the 21st century society and the third millennium civilization. The process will affect not only the market economy of the nation as a whole, but also the whole system of higher education, which has to prepare its graduates for participation in the social and the economic development of the country, and the type of the cultural environment and ethics it will need to foster. Information technology is further contributing to this dynamic change and will have major impact on the structure, management and mode of delivery of the educational system. All of us are conscious of the fact that through the process of crisis in higher education, several crucial areas have emerged in which the university system has to re-examine itself and its relationship with social and economic development. These include the relevance and quality of education, the gradual process of internationalization of education as not only students and faculty cross borders but even the system of education are doing so. There is also a concomitant demand for accountability. The department of Punjabi with its Post-graduate programme, intends to preserve further and disseminate the various aspects and forms of ancient Indian knowledge traditions in modern perspectives. The programme aims at equipping enabling future researchers with the fundamental concepts, theories and practices of different knowledge domains. To empower the students with modern and scientific tools, inter-disciplinary approach and to design such modules to help them in becoming good citizens are some of the main objectives of the course.

The syllabus of M.A. (Punjabi) was restructured with a futuristic approach, keeping in mind the new challenges of Globalisation and Post-situations.

Course Outcome

- 1.To analyse literature and to write on literary topics at an advanced level.
- 2.Course will help to develop complex reading, writing and research skills.
3. Students will be able to express knowledge to literary terms, major periods and authors.
- 4.Students will manifest the knowledge of 'best practices' regarding, research, writing, teaching and the academic profession of academic studies.
5. Students will reveal an appreciation for literary theory.
6. The course motivates the students to indulge in literary creation.
7. This is a career oriented course. Students can enter various fields such as academics, research and media.

B.A. (Punjabi)

Programme Specific Outcomes

B.A. Punjabi is an undergraduate program that envelops the study of topics such as Poetry, Modern Punjabi Story, Punjabi Sufi-Poetry, Old And Modern Punjabi Folklore and culture, Punjabi Literature, Punjabi Criticism and Western Literary Approaches etc.

Those candidate who are interested in Punjabi in Punjabi language and its related fields etc. most appropriate for this course and also those who are willing to go for teaching fields at higher degree level both in private colleges or government institutions.

This program empowers the candidate to go for a wide variety of Punjabi jobs of an interpreter or translator which may be of various sorts , for example general interpreting consecutive interpreting and liaison interpreting. Most of translator work in an assortment of fields, which incorporate specialized logical abstract, technical scier literary or business.

Bachelor of arts (B.A) Punjabi is the specialization or primary concentration of one degree. Punjabi is the study and philosophy of the Punjabi language. Subjects typically study Drama, Poetry, Fiction, Literary, History And criticism etc. under BA Punjabi Course structure.

Course Outcomes

B.A. course has major emphasis is given on its social aspects ,origin, literature, grammar, etc alongside that how its literature, grammer, etc alongside that how its literature created with the commitment of numerous contemporary scholars, artists, vocalists and by other cultural loving people.

Defence Studies

Programme Outcomes

1. Upon completion of the Course in Defence Studies, a student should have acquired basic competency in strategic affairs covering a wide spectrum of interstate security to global security issues including non-kinetic dimensions. Shall develop capability in understanding the implications of use and threat of use of force in International relations.
2. Shall seek, identify and apply the acquired knowledge in defence and strategic studies on contemporary issues of strategic relevance.
3. Ability to move from LOTS (Lower Order of Thinking Skills) to HOTS (Higher Order of Thinking Skills) in Defence and Strategic Studies.
4. The learning of strategic studies shall arm the candidates to independently choose further course of action in his/her life whether pursuing higher education by taking specialized course in honours or identifying a career for himself or herself.
5. Understand and Appreciate Professional Ethics, Community Living and Nation

PG 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

M.Sc. ZOOLOGY

PROGRAMME SPECIFIC OUTCOMES

1. Understand the nature and basic concepts of cell biology, genetics, taxonomy, physiology, ecology and applied Zoology.
2. Analyse the relationships among animals, plants and microbes 3. PSO3. Perform procedures as per laboratory standards in the areas of Taxonomy, Physiology, Ecology, Cell biology, Genetics, Applied Zoology, Clinical science, tools and techniques of Zoology, Toxicology, Entomology, Nematology Sericulture, Biochemistry, Fish biology, Animal biotechnology, Immunology and research methodology.
3. Understand the applications of biological sciences in Apiculture, Aquaculture, Agriculture and Medicine.
4. Gains knowledge about research methodologies, effective communication and skills of problem solving methods.

5. Used the evidences of comparative biology to explain how the theory of evolution offers the only scientific explanation for the unity and diversity of life on earth. They are able to use specific examples to explicate how descent with modification has shaped animal morphology, physiology, life history, and behavior.
6. Explicated the ecological interconnectedness of life on earth by tracing energy and nutrient flows through the environment. They are able to relate the physical features of the environment to the structure of populations, communities, and ecosystems.
7. Subjects such as invasive or endangered species, embryonic development in mammals and ageing in social insects. Lead to advances in medicine to prevent disease amongst both animals and human beings.
8. Developed knowledge and understood of living organisms at several levels of Zoological and Biological organization from the molecular, through to cells and whole organisms and ecosystems all organs of evolutionary perspectives. Understood how the chemistry and structure of the major biological macromolecules, including proteins and nucleic acids, determines their biological properties.

Department of Fine Arts

B.A. (Fine Arts)

Programme Outcomes (PO):

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

- 1) Apply theoretical knowledge of principles and concepts of Fine arts to practical problems.
- 2) Enhance skills to understand the concepts of principles, terminology of art and aesthetics.
- 3) Students will be able to develop their observation, imagination, creation and develop skills and sensitivity towards the use of visual elements for an effective work.
- 4) Students will be able to develop their observation, imagination, creation and develop skills and sensitivity towards the use of visual elements for an effective work.

- 5) To impart knowledge of theoretical perspectives of art.
- 6) The range of experience covers two- and three-dimensional forms both the point of view of specially defined structural problems and their social and historic significance.

Programme Specific Outcome (PSO)

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

- 1) Apply theoretical knowledge of principles and concepts of Fine arts to practical problems.
- 2) Enhance skills to understand the concepts of principles, terminology of art and aesthetics.
- 3) Students will be able to develop their observation, imagination, creation and develop skills and sensitivity towards the use of visual elements for an effective work.
- 4) Students will be able to develop their observation, imagination, creation and develop skills and sensitivity towards the use of visual elements for an effective work.
- 5) To impart knowledge of theoretical perspectives of art.
- 6) The range of experience covers two- and three-dimensional forms both the point of view of specially defined structural problems and their social and historic significance.

Department of Journalism and Mass Communication (JMC)

B.A. (JMC)

Programme Outcomes

The students will be able to understand the different phases of print and broadcast journalism. To develop the communication skills, theoretical and practical knowledge among the students in print, electronic and new media. The Communication and Journalism Department is committed to providing undergraduate students with a quality education in the communication and journalism disciplines that is current, relevant,

practical, and personal. The department's goals include enabling students who graduate to be able to compete successfully for positions at graduate schools nationwide. Another departmental goal is that students who graduate in communication will be prepared for entry-level positions as professionals within communication-related fields. Students who graduate in journalism will be prepared for entry-level positions as professionals within journalism and related fields.

Programme Specific Outcomes

Students will be able to write a variety of mass media products, including news stories, press releases, and advertising copy, following accepted journalistic standards, including Associated Press style. Students will be able to create and design emerging media products, including blogs, digital audio, digital video, social media, digital photography, and multimedia.

Department of Religious Studies

B.A. (Religious Studies)

Programme Outcomes

The department of Religious studies with its graduate programme, intends to preserve further and disseminate the various aspects and forms of religious education and knowledge of religious traditions in modern perspectives. The programme aims at equipping enabling future researchers with the fundamental concepts, theories and practices of different religions knowledge domains. To empower the students with modern and scientific tools, inter – religious approach and to design such modules to help them in becoming good citizens are some of the main objectives of the course.

Programme Specific Outcomes

- 1) It helps the students develop an understanding of themselves and others.
- 2) It promotes the spiritual, moral, social and cultural development of individuals and of groups and communities.
- 3) Course will help to develop complex reading, writing and research skills.

- 4) Students will be able to express knowledge to interfaith and communal harmony in the society.
- 5) Students will manifest the knowledge of 'best practices' regarding, research, writing, teaching and the academic profession of religious academic studies.
- 6) Students will reveal an appreciation for literary theory.

PG Department of English

B.A. Honours in English

Programme Outcomes

Pursuing B.A Honours 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 master's 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.

M.A. (English)

Programme Outcomes

- 1) To acquaint a student with conventional as well as contemporary areas in the discipline of English.
- 2) The study of this paper will enhance the critical thinking of the students.
- 3) Students will obtain ample knowledge about the various critical approaches
- 4) To provide in-depth understanding of all core areas specifically
- 5) Literature and Modernity, Twentieth Century Poetry and Fiction, Literature and Postcoloniality, Literature and Gender, Creative Writing.

Programme Specific Outcomes

After the completion of the M.A Course, a student is able

- 1) For pursuing research in their chosen areas.
- 2) For teaching in Schools and Colleges after qualifying requisite tests.
- 3) For working as data analyst.
- 4) For obtaining ample knowledge about the various critical approaches.

PG Department of Music Vocal and Gurmat Sangeet

BA (Gurmat Sangeet)

Programme Outcomes:

1. To Introduce various definitions in context of Gurmat Sangeet such as: Raag, Rahao, Mahalla, Ank etc.
2. To impart knowledge about the various gayan shailies of Gurmat Sangeet.
3. To increase the knowledge about Notation system of Gurmat Sangeet.

Programme Specific Outcomes:

1. The students 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.

BA (Music Vocal)

Programme Outcomes:

1. To Introduce various definitions in context of Indian Classical Music.
2. To impart knowledge about various Gayan Shailies 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.

M.A. (Music Vocal)

Programme Outcomes (PO)

After completing undergraduate program in Music Vocal, a student will be able to: - PO

PO 1 Have further study of music.

PO 2. Will have the eligibility to understand the classical Raag gayan system.

PO 3. The students will be able to learn the shastriya Sangeet in future.

PO 4. The study will complete the basic need and students can make their future in this field.

PO 5. The students will be able to learn about the technical and scientific terms and scales of music and essential aspects of music like voice culture.

PO 6. The students will have the enrichment of Raag elements and to define the notation system.

Programme Educational Objectives (PEO)

PEO 1. To make the students well known about the development of Indian music in ancient to modern period and also about the proper study of gharanas.

PEO 2. The students will be able to know about the eminent music scholars and musicians.

PEO 3. The students will be able know about the various shellies of Hindustani music and study about the important Granths of Indian music.

PEO 4. The students will have the stage performance of various Raags in different Gayan shellies like Khayal, Dhrupad, Dhamar etc.

PEO 5. The students will be able to learn about the comparative study of Hindustani and Karnataka styles of music. 4

Programme Specific Outcomes (PSO)

PSO 1. To make the ability of students to study the gharana tradition in Punjab and to know about the eminent musicians who are the Indian classical music legends.

PSO 2. T performance in Raags in khayal Gayaki and dhrupad will enhance the quality of the students.

PSO 3. To enable the Students will be to make their future in various Musical fields.

PSO 4. To equip the students about the relative study of Music with other fields.

PSO 5. To make the students to perform with their creativity in Music.

PSO 6. To increase the Confidence level in Performing Art in Music.

PSO 7. To impart the quality of Listening the Best music forms.

PSO 8. To make the ability of various forms in Classical Music.

Department of Mathematics

B.A. (General) Mathematics

Programme outcome:

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.

Programme specific outcome:

Part-1(sem1-sem2)

After completion these two semesters, students will be able to

- 1) Solve complex problems using knowledge of calculus.
- 2) Develop the knowledge and understanding of definitions, concepts and principles.

Part-2(sem3-sem4)

After completion of these two semesters, students will able to

- 1) Get systematic understanding of application of the concept and theories of mathematics in the real world.

Part-3(sem5-sem6)

After completion these two semesters, students will be able to

- 1) Recognize and appreciate connections between theory and application.
- 2) Work effectively in a multi-disciplinary environment.

B.Sc(Non-Medical) Mathematics

Programme outcome:

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 application
 - 6) Work effectively in a multi-disciplinary 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.

B.Sc.(Honors) Mathematics

Programme outcome:

B.Sc. (Hons.) Mathematics Programme endeavor's to instil in students with a genuine interest in their subject area by fostering a creative spirit to help them fulfil their potential, to become creative mathematician.

Upon completion of the B.Sc. (Hons.) 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 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.

Programme specific outcome:

Part-1(sem1 -sem2)

After completion these semesters students will be able to:

- 1) Develop deep interest in learning mathematics.
- 2) Recognize and appreciate connections between theory and applications.

Part-2(sem3-sem4)

After completion of these two semesters students will be able to:

- 1) Develop broad and balanced knowledge and understanding of definitions, concepts, principles and theorems.
- 2) To Solve complex problems by critical understanding, analysis and synthesis.

Part 3(sem5-sem6)

After completion of these two semesters students will be able to

- 1) To Find the error analysis of numerical methods.
- 2) The practical applications of the subject will be known to the student.

M.Sc Mathematics

Programme outcome:

On completion of course students will be able:

- 1) To develop skills required for sound analytical and practical knowledge to pursue Careers in research, education and industry.
- 2) To train computational scientists who can work for real life challenging problems.
- 3) To develop their understanding and professional capabilities through lifelong Learning.
- 4) To develop an ability to communicate effectively with a range of audiences.
- 5) To inculcate recognition of the need for and an ability to engage in continuing Professional development.

Programme specific outcome:

Part 1(sem1-sem2)

After completion these semester of course, students will be able:

- 1) To develop an ability to communicate effectively with a range of audiences.
- 2) To understand pure branch of mathematics.

Part-2 (sem3-sem4)

After completion these two semesters students will be able:

- (1) To develop skills required for sound analytical and practical knowledge to pursue Careers in research, education and industry.
- (2) To develop their understanding and professional capabilities through lifelong Learning.

Department of Hindi

B.A. Hindi

Programme Outcomes	PO 1:- छात्रों को हिन्दी साहित्य के विभिन्न विधाओं, प्रवृत्तियों, रचनाओं एवं रचनाकारों का परिचय प्राप्त होगा।
	PO 2:- छात्रों को भारतीय एवं पाश्चात्य साहित्यशास्त्र का सैद्धांतिक ज्ञान प्राप्त होगा।
	PO 3:- समीक्षात्मक दृष्टिकोण विकसित होगा।
	PO 4:- छात्रों में हिन्दी साहित्य के अध्ययन से उनके नैतिक मूल्यों, राष्ट्रीय मूल्यों तथा सामाजिक मूल्यों में अभिवृद्धि होगी।
	PO 5:- छात्रों को शासकीय कार्यालयों में अनुपयुक्त कार्यलयीय हिन्दी भाषा का परिचय होगा।
	PO 6:- हिन्दी भाषा और उसकी विविध बोलियों के विकास के संबंध में ज्ञान प्राप्त होगा।
	PO 7:- विभिन्न भारतीय साहित्य का परिचयात्मक ज्ञान प्राप्त होगा।
	PO 8:- खोज करने की क्षमता का निर्माण 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 real-world 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 well-rounded 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 program.

PG Department of Economics

MA Economics

PROGRAMME OBJECTIVES (POS)

Deep insight about the key indicators of economics which help the students to know about the working of economic variables, business cycles, international economic indicators to make international economic comparisons, working of economic policies and their impact at micro and macro level. It also helps the students to know about the functioning of production sector viz. agriculture, industry and services and their effect on household sector. It also equips the students with knowledge to make them more logical and realistic.

PROGRAMME SPECIFIC OUTCOMES (PSOS)

The Programme will help the students to develop a realistic view which make them competitive globally. It will enhance their overall knowledge and help them to fetch jobs

both in public and private domain. The students can compete easily for different jobs like economic services, insurance sector, banking and other private jobs. It also helps to equip more knowledge about business environment and to start their own venture and help them self employment.

PSO1 To equip students with advanced knowledge of Economics & Development Issues of Indian Economy in general and Punjab Economy in particular

PSO2 To familiarise the students with suitable alternative methods of knowledge on the basis of the heterogeneity of societies

PSO3 To develop right skills in students catering to the needs of the industry and policy makers

PSO4 To make the students capable of addressing and solving the issues in the society and the economy by contextualising the knowledge they have acquired and finally

PSO5 To create academic excellence through holistic education.