Govt.Shivalik College Naya Nangal
(Computer Department)
Course Outcome of BCA (2021-22)

BCA 1st Year(Sem I)

1 (BCAB1101T) General English –I

(I).PROSE PARABLESL:-

- To develop the language ability of the students.
- To enable the students to comprehend the idea contained in the prose.
- To develop an appreciation for the literary content.
- To enhance creative and critical thinking.
- To familiarize with eminent prose writers and their works.

(ii) .GRAMMAR(RAYMOND MURPHY,ENGLISH GRAMMAR):-

- 1.The students will gain knowledge of the correct use of past and present tense in writing.
- 2. The students will understand the English language better.
- 3. It enables them to understand how sentences are formed.

2(BCAB1102T) Punjabi Compulsory or Mudla Gyan

(i) Novalbathak de khambajehesafed din:-

Students will be information about Punjabi culture students will be able able to describe the nature of the characters related noval and writers writing style.

(ii) Grammar :-

Sentence structure and speaking ablity increase through grammar

3(BCAB1103T) Fundamental of Information Technology

- Understand the computer and its general features
- Understand basic concepts and terminology of information technology
- Will be to able express basic computer hardwares
- Distinguish computer types and basic copcepts
- Know and use different number systems and the basics of programming.
- Have a basic understanding of personal computers and their operations

4 (BCAB1104T)Programming Using C

- Develop a C program
- Control the sequence of the program and give logical outputs
- Implement strings in C program
- Store different data types in the same memory
- Manage I/O operations in your C program
- Repeat the sequence of instructions and points for a memory location
- Apply code reusability with functions and pointers
- Understand the basics of file handling mechanisms
- Explain the uses of pre-processors and various memory models

5 (BCAB1105L) Software Lab –I(Windows and Office Automation)

Govt.Shivalik College Naya Nangal
(Computer Department)
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- Explain the uses of pre-processors and various memory models

5 (BCAB1105L) Software Lab –I(Windows and Office Automation)

· to perform documentation
· to perform accounting operations
· to perform presentation skills

6 (BCAB1106L) Software Lab –II(Programming Fundamental Using C)

•Understanding a functional hierarchical code organization.
• Ability to define and manage data structures based on problem subject domain.
• Ability to work with textual information, characters and strings.
• Ability to work with arrays of complex objects.
• Understanding a concept of object thinking within the framework of functional model.
• Understanding a concept of functional hierarchical code organization.
• Understanding a defensive programming concept. Ability to handle possible errors during program execution

BCA 1st Year(Sem II)

1(BCAB1201T) General English –I

(i) POETIC PALETTE:-

- To analyze various elements of poetry such as diction, tone, from, genre, imagery, figures of speech, symbolism themes etc.
- Recognize the rhythms, metrics and other aspects of poetry.
- Develop an appreciation of language and style.Understand the thought and imagination contained in the poem correlating it with contemporary scenario.
- Understand the development of poetry from the beginning to the modern age. 6. Inculcate their aesthetic sense and love for English poetry.

(ii)Grammar(RAYMOND MURPHY,ENGLISH GRAMMAR):-

- Ability to be comfortable with English in use while reading or listening.
- Ability to use receptive skills through reading and listening to acquire good exposure to language and literature.
- Ability to write and speak good English in all situations.

2(BCAB1202T) Punjabi Compulsory or Mudla Gyan

(i)Neband de book:-

Students will be able to explain Punjabi literature thought the neband the students will know about the ideology of related to the characters.

(ii) Grammar:-

Sentence structure and speaking ablity increase through grammar.

3(BCAB1203T) Digital Electronics

- Have a thorough understanding of the fundamental concepts and techniques used in digital electronics.
- To understand and examine the structure of various number systems and its application in digital design.
- The ability to understand, analyze and design various combinational and sequential circuits.
- The ability to identify and prevent various hazards and timing problems in a digital design.

4(BCAB1204T) Data Structure

- Ability to analyze algorithms and algorithm correctness.
- Ability to summarize searching and sorting techniques
- Ability to describe stack,queue and linked list operation.
- 4Ability to have knowledge of tree and graphs concepts.

5 (BCAB1205T) BasicMathematics

• To impart the required knowledge of Mathematics and statistics for managerial activities among students.

• To inculcate in students the fundamental mathematical background in computer science.

• Understand the basic concepts of Sets, Relations Functions, Matrices, Mathematical logic, and Group theory.

• Develop analytical ability to solve real-world problems using these methodologies

6 (BCAB1206L) Software lab – III(based on data structure)

- 1: Understand the concept of data structures and apply algorithm for solving problems like Sorting, searching, insertion and deletion of data.
- 2: Understand linear data structures for processing of ordered or unordered data.
- 3: Explore various operations on dynamic data structures like single linked list, circular linked list .
- 4: Explore the concept of non linear data structures such as trees and graphs.
- 5: Understand the binary search trees, hash function.

7 (BCAB1207T) Drug Abuse:-Problem,Management and Prevention***

- Learn how to include factual data about what substance abuse is; warning signs of addiction; information about how alcohol and specific drugs affect the mind and body
- Learn how to be supportive during the detoxification and rehabilitation process.
- Focus on substance abuse education- is teaching individuals about drug and alcohol abuse and how to avoid, stop, or get help for substance use disorders.
- Understand that substance abuse education is important for students alike; there are many misconceptions about commonly used legal and illegal substances, such as alcohol and marijuana.

Course Outcome (2021-2022)

BCA Sem: III

BCA-211 ENGLISH

1. Gleanings from Home and Abroad

- **Students can Identify analyze, interpret and describe the critical ideas, values and themes that appear in literary and cultural texts and understand the way these ideas, values and themes inform and impact culture and society.**
    - **Acquire knowledge and acquaintance to Indian Writing in English**
    - **Learn to use literature to develop their moral and social sense.**

2. GRAMMAR (RAYMON D MURPHY, ENGLISH GRAMMAR)

- **Students imbibe the rules of language unconsciously and tune to deduce language structure and usage.**
- **Students write paragraphs, essays, and letters.**
- **Students decipher the mechanism of age and use it for success in competitive examinations and job related speaking and writing tasks.**

BCA-212 Discrete Mathematics

• To understand the basics concepts of Discrete Mathematical Structures.
• To get the Knowledge about sets, relations and functions.
• To study the basics of lattices and graphs.
• To get familiar with propositional logic.

BCA -213 Computer System Organisation & Architecture

- To understand the structure, function and characteristics of computer systems.
- To understand the design of the various functional units and components of computers.
- To identify the elements of modern instructions sets and their impact on processor design.
- To explain the function of each element of a memory hierarchy,
- To identify and compare different methods for computer I/O.

BCA-214 C++

- Describe OOPs concepts
- Use functions and pointers in your C++ program
- Understand tokens, expressions, and control structures
- Explain arrays and strings and create programs using them
- Describe and use constructors and destructors
- Understand and employ file management
- Demonstrate how to control errors with exception handling

BCA-215 Fundamentals of Database and Management System

- Understand the basic concepts and the applications of database systems.
- Master the basics of SQL and construct queries using SQL.
- Understand the relational database design principles.

BCA-216 C++ LAB

- Describe OOPs concepts
- Use functions and pointers in your C++ program
- Understand tokens, expressions, and control structures
- Explain arrays and strings and create programs using them
- Describe and use constructors and destructors
- Understand and employ file management

BCA -217 DBMS USING MS ACCESS LAB

• Describe the fundamental elements of relational database management systems

• Explain the basic concepts of relational data model, entity-relationship model, relational database design, relational algebra and SQL.

• Design ER-models to represent simple database application scenarios

BCA -218 environment and road safety Awareness

- Articulate the interconnected and interdisciplinary nature of environmental studies;
- Communicate complex environmental information to both technical and non-technical audiences.
- Understand and evaluate the global scale of environmental problems.

- Reflect critically on their roles, responsibilities, and identities as citizens, consumers and environmental actors in a complex, interconnected world.
- Road safety education reduces fatal accidents and improves risk-avoiding behaviour.
- Road safety education has a moderate effect in reducing adverse traffic outcomes.

BCA sem-iv

BCA-222 Computer Network

- Build an understanding of the fundamental concepts of computer networking.
- Familiarize the student with the basic taxonomy and terminology of the computer networking area.
- Introduce the student to advanced networking concepts, preparing the student for entry Advanced courses in computer networking.
- Independently understand basic computer network technology.
- Identify the different types of network topologies and protocols.
- Enumerate the layers of the OSI model and TCP/IP. Explain the function(s) of each layer.

BCA-223 MIS

- To describe the role of information technology and decision support systems in business and record the current issues with those of the firm to solve business problems.
- To introduce the fundamental principles of computer-based information systems analysis and design and develop an understanding of the principles and techniques used.
- To enable students understand the various knowledge representation methods and different expert system structures as strategic weapons to counter the threats to business and make business more competitive.
- To enable the students to use information to assess the impact of the Internet and Internet technology on electronic commerce and electronic business and understand the specific threats and vulnerabilities of computer systems
- To provide the theoretical models used in database management systems to answer business questions.

BCA-224 Computer oriented statistical and numerical methods

- .Understanding and Learning of numerical methods for numerical analysis.
- .Understanding the implementation of numerical methods using a computer.
- .Learning of tracing errors in Numerical methods and analyze and predict it.
- .Learning of application of Statistical methods.
- .Discuss concepts of numerical methods used for different applications

BCA -225 Relational Database Management Systems

- Upon successful completion of this course, students should be able to :
- Describe the fundamental elements of relational database management systems

- Explain the basic concepts of relational data model, entity-relationship model, relational database design, relational algebra and SQL.

BCA -226 PRACTICAL OF COMPUTER ORIENTED NUMERICAL AND STATISTICAL METHODS

- Skill to choose and apply appropriate numerical methods to obtain approximate solutions to difficult mathematical problems.
- Ability to apply various statistical techniques such as Measures of Central Tendency and Dispersion.
- Understanding of relationship between variables using the method of Correlation
- Trend Fit Analysis. Skill to execute programs of various Numerical Methods and Statistical Techniques for solving mathematical problems.

BCA-227 RDBMS with Oracle Lab

- Write complex SQL queries to retrieve information from databases with many tables to
- support business decision making.
- Write SQL DDL to create, modify and drop objects within a relational database. Retrieve and store information in a relational database using SQL in a multi-user

GOVERNMENT SHIVALIK COLLEGE NAYA NANGAL

COURSE OUTCOME BCA SEM 5TH

SESSION 2021- 2022

BCA -311 English Literary Skills – I

1.ALL MY SONS

- Have first hand knowledge of major dramatists and their work in the Modern age.
- Be acquainted with the literary structure, development of English drama.
- Familiar with dramatic art and techniques used in the drama.
- Demonstrate knowledge of history and literature and draw connections between social practices and political contexts in different period

2 Grammar LetterWriting,precis,Development of story,CV writing

- Students imbibe the rules of language unconsciously and tune to deduce language structure and usage.
- Students write paragraphs, essays, and letters.
- Students decipher the mechanism of language and use it for success in competitive examinations and job related speaking and writing tasks.
- Improve the writing skills and oral communication skills.

BCA-312 System Analysis and Design

On successful completion of the course students will be able to:

- A firm basis for understanding the life cycle of a systems development project
- An understanding of the analysis and development techniques required as a team member of a medium-scale information systems development project
- An understanding of the ways in which an analyst & interaction with system sponsors and users play a part in information systems development.
- Experience in developing information systems models.
- Experience in developing systems project documentation.
- An understanding of the object-oriented methods models as covered by the Unified Modelling Language.

BCA-313 SYSTEM SOFTWARE

- Distinguish between Operating Systems software and Application Systems software.
- Describe commonly used operating systems.
- Identify the primary functions of an Operating System.
- Describe the "boot" process.
- Identify Desktop and Windows features.
- Use Utility programs.
- Discuss the pros and cons of the three major operating systems.

BCA-314 Java Programming

- Use the syntax and semantics of java programming language and basic concepts of OOP.
- Develop reusable programs using the concepts of inheritance, polymorphism, interfaces and packages.
- Apply the concepts of Multithreading and Exception handling to develop efficient and error free codes
- Design event driven GUI and web related applications which mimic the real word scenarios.

BCA-315 Web Designing using HTML and DHTML

- Insert a graphic within a web page.
- Create a link within a web page.
- Create a table within a web page.
- Insert heading levels within a web page.
- Insert ordered and unordered lists within a web page.
- Use cascading style sheets.
- Create a web page.
- Validate a web page.
- Publish a web page.

BCA 316 – Java Programming lab

- Able to write programs for solving real world problems using java collection frame work.
- Able to write programs using abstract classes
- Able to write multithreaded programs.
- Able to write GUI programs using swing controls in Java.

BCA 317 HTML LAB OUTCOME

- Design and implement Static as well as dynamic websites.
- Design and develop web applications.
  understand client and server-side scripting and their applicability

BCA 318 PUNJABI

- Lokdhara de bhumika book:

  Students will be able to know about fok culture , giving information about the ancient heritage which is bring forgotten by present generation

- Grammar:

  Sentence structure and speak ing ability increase through grammar

BCA SEM 6 OUTCOME

2. B.CA (321)ENGLISH LITERARY SKILLS-II

1.Selected College Poems 1. To analyze various elements of poetry
such as diction, tone, from, genre, imagery, figures of speech, symbolism themes etc.

2. Recognize the rhythms, metrics and
other aspects of poetry.
3. Develop an appreciation of language and
style.
4. Understand the thought and imagination
contained in the poem correlating it with
contemporary scenario.
5. Understand the development of poetry
from the beginning to the modern age. 6.
Inculcate their aesthetic sense and love for
English poetry.
6. Learn to use literature to develop their
moral and social sense.
7. Interest in the different genres of British
Writings
.BCA-325
Web designing using ASP.net
 Design Web application using ASP.NET
 Create new web sites and add security features to them.
 Create database driven ASP.NET web applications and web services.
BCA-328 (PUNJABI COMPULSORY)
Contemporary Punjabi drama Students will develop an
interest in understanding
drama and theatre.through
punjabi drama and theatre,

They will get to know the

political,social economic

aspects of that period.

Grammar Sentence structure and

speaking ablity increase

through grammar

BCA- Java Lab

Course code:326

 Read and make elementary modifications to Java programs that solve real-world problems.

 Validate input in a Java program.

 Identify and fix defects and common security issues in code.

 Document a Java program using Java doc.

BCA 325

web designing using asp.net

 Explain the three pillars of object oriented programming.

 Develop working knowledge of C# programming constructs and the .NET Framework.

 Write an object oriented program using custom classes.

 Build and debug well-formed Web Forms with ASP. NET Controls.

 Perform form validation with validation controls

 Create custom controls with user controls.

 Use ADO.NET in a web application to read, insert, and update data in a database.

 How to create data base and working in sql.

BCA -323 operating system

 Understands the different services provided by Operating System at different level.

 They learn real life applications of Operating System in every field.

 Understands the use of different process scheduling algorithm and synchronization techniques to avoid deadlock.

 They will learn different memory management techniques like paging, segmentation and demand paging etc.

Government Shivalik College Naya Nangal
Department of Botany
Programme Outcomes of B. Sc

Social responsibilities: To a botanist no plant is a weed. Conservation of biodiversity in the era of urbanization and industrialization should be the priority. The courses students will go through during this 3 years undergraduate program will teach students the value of natural wealth and their conservation. Awareness of society about planting trees, their medicinal and industrial values, role of ethno botany, herbal medicines will be top priority.

Knowledge development: They will understand the range of plant diversity in terms of morphology, anatomy, phylogeny, classification and their interrelationship. Students will gather knowledge of physiology, cell biology, genetics, plant breeding and micro-propagation, tissue culture and horticulture.

Intellectual skill development: Students are able to think logically and organize tasks into a structured form. Assimilate knowledge and ideas based on wide reading in digital platforms.

Practical skills: Students learn to carry out practical work, in the field and in the laboratory. An array of techniques & practical skills like identification of algae, fungi, bryophytes, pteridophytes, gymnosperms, plant morphology and anatomy, angiosperm taxonomy, vegetation analysis techniques, micro chemical analyses of plant materials, physiology, cytology and genetics will be learnt.

Environment and sustainable development: Understand the impact of the plant diversity in societal and environmental contexts, and demonstrate the knowledge and requirement of sustainable development.

Project management: field work project will prepare students how to plan and execute a project either individually or as a team. These experiences will be invaluable in the long run.

Use of instruments: Create, select, and apply appropriate techniques, resources, and modern instruments and equipment for Biochemical estimation, cellular and physiological activities of plants with an understanding of the application and limitations.

Ability to use digital platform: Use of different software enriches their communication skill and makes them friendly to digital platforms like Microsoft, Adobe acrobat, Adobe Photoshop, Google etc.

Ethics: Being students of natural science ethics is the key to protect our mother nature. The principles of conservation need to be followed while collecting specimens or doing field work. Manipulation of laboratory data and protocols are strictly prohibited and thus building ethics among students is a must.

Govt. Shivalik College Naya Nangal

Department of Zoology

Course Outcomes

Theory Course Code I. Non-Chordates – SCIB1115T

2. Cell Biology- SCIB1114T

Class Bsc.1 (Medical)

S.No	Name of Paper	Course Outcome Bsc.1 (Medical) SEM -1
1.	Non-chordates	On completion of the course, students will be able to understand: 1. The evolutionary history of phylum. 2. The external as well as internal characters of non- chordates. 3. The distinguishing characters of non-chordates. 4. The economical importance of *Molluscs, Echinodermata.* 5. The life cycle and pathogenicity and control measures of *Fasciola hepatica Taenia solium,Ascaris lumbricoides* and *Wuchereria bancrofti.* *6.*The evolutionary significance, affinities of *Peripatus ,Balanglossus.*
2.	Cell Biology	On completion of the course, students will be able to : 1.Understand the central role of Cell biology being the rapidly developing areas of biological science. 2. Know about the Scope of cell biology, because cell is the basic unit of life. 3. Explain the Main distinguishing characters between plant cell and animal cell. 4. Understand the whole cell organelles with their structure and function. 5. Describe the cell cycle and know the importance of various cells in body of organisms. 6. Explain the various applications of cells by using cell biology. 7 Understand the Active and Passive transport system, diffusion and Facilitated transport inside the cell. 8. Know the cell processes and cell signalling.
Course Outcome Bsc.1 (Medical) SEM –II Theory Course Code 1. Chordates-SCIB1215T 2. Ecology-SCIB1214T		
1.	Chordates	On completion of the course, students will be able to: 1.Understand the diversity of among vertebrates and the relationship among the different group. 2. Classify vertebrates to their respective classes based on their concepts. 3. Develop the ability to follow the evolutionary pathway of vertebrates.

		4. Inculcate the sense of scientific enquiry on biodiversity related topics. 5. Understand the role played by each organism in the construction and maintenance of ecosystem. 6. Acquire skills to identify an organism. 7. Understand the external morphology and sexual dimorphism in chordates. 8. Explain the various systems, adaptation and dentition in Mammals.
2.	Ecology	On completion of the course, students will be able to: 1. Demonstrate an understanding of ecological relationships between organisms and their environment. 2.Inculcate understanding of key concepts in evolutionary biology, the history of life on Earth, and phylogenetic relationships between organisms. 3. Create an understanding of structure/function relationships in organisms. 4. Demonstrate scientific quantitative skills, such as the ability to evaluate experimental design, read graphs, and understand and use information from scientific papers. 5. Develop skill in communication of their ideas in writing and in oral presentations. 6.Understand the population dynamics & regulation. 7.Acquire knowledge about wild life and its conservation strategies.

Govt. Shivalik College Naya Nangal

Department of Zoology

Course Outcomes

Lab Course Code- Sem I - SCIB1116L

Sem II – SCIB1216L

Class Bsc.1 (Medical)

S.No	Name of Paper	Lab Course Outcome Bsc.1 (Medical) SEM -1
1.	Lab (Sem I)	On completion of the course, students will be able to: 1.Acquire knowledge on the scientific classification of invertebrate fauna 2. Familiarise with the diverse groups of organisms around us. 3. Create an aptitude for understanding nature and its rich biodiversity. 4. Familiarise the students about the protistan fauna living in and around us. 5.Understand the morphological characters of phylum Protozoa, Porifera, Annelida, Arthropod ,and Mollusca. 6.Know the ultrastructure of different cell organells. 7.Acquire knowledge on Barr bodies in sex determination.
Lab Course Outcome Bsc.1 (Medical) SEM -II		
2.	Lab (Sem II)	On completion of the course, students will be able to: 1.Acquire skills to identify an organism. 2. Understand the external morphology and sexual dimorphism in chordates. 3.Understand the development of advancing character in organism from lower chordates to higher chordates. 4.Acquire knowledge for identification of poisonous and non-poisonous snakes. 5.Understand the ecological habitat of various animals as well as their role in maintaining ecological balance in nature.

Govt. Shivalik College Naya Nangal

Department of Zoology

Course Outcomes

Theory Course code 1. Biochemistry-SCIB2315

2. Animal Physiology-SCIB2316

Class Bsc.II (Medical)

S.No.	Name of paper	Course Outcome Bsc.II (Medical) Sem III
1.	Biochemistry	On completion of the course, students will be able to: 1.Describe about the agencies responsible for Production of various products using biochemistry. 2. Understand the term pH, Buffer.. 3. Explain the structure and function of carbohydrate, amino acids, proteins, and lipids. 4. Describe the concept Enzymes and also Vitamins and minerals. 5. Understand the major role of Vitamins in metabolism and Deficiency disease. 6. Acquire a broad understanding on the principles of Biochemistry illustrating the different types of food, their structure, function and metabolism. 7. Learn the structure and functions of bio-molecules and their role in metabolism and will contribute to the critical societal goal of a scientifically literate citizen.
2.	Animal Physiology	On completion of the course, students will be able to: 1. Develop a deep knowledge in physiology and endocrinology. 2. Demostrate the experimental methods and designs that can be used for further study and research. 3. Create awareness on the structure and functions of various systems in the human body, their functioning and related disorders. 4. Understand the hormonal regulation of various systems of the body and the role played by various hormones in regulating the homeostasis. 5. Understand the physiology of digestion in alimentary canal. 6. Acquire knowledge the mechanism of respiration, circulation and urine formation in mammals. 7.Understand the various abnormality occur due to Endocrine glands.

Course Outcome Bsc.II (Medical) Sem IV Course code 1. Evolutionary Biology- SCIB2415 2. Genetics- SCIB2416		
1.	Evolutionary Biology	On completion of the course, students will be able to: 1. Understand the Origin and development of animals. 2. Develop awareness on the process of evolution. 3. Acquire knowledge about the evolutionary history of earth (living and non- living) and Evidences of evolution. 4. Learn various theories of evolution of life. 5. Clear the concepts of Universe, theories of life cycles. 6. Understand the Lamarkism, Neo-Lamarkism and Darwinism. 7. Understand the Geological time scale. 8. Acquired awareness on the concept of Palaentology ie. Fossils and its significance. 9. Understand the relationship between evolution and population genetics.
2.	Genetics	On completion of the course, students will be able to: 1. Understand the mode of inheritance and the process of interaction of genes. 2.Aware about the basics of genetics and classical genetics covering prokaryotic and higher eukaryotic domains. 3.Understand the central role that genetics and biotechnology plays in the life of all organism. 4.Describe the mechanism of sex determination, linkage groups and linkage map, crossing over and non- disjunction of genes in animals. 5. Understand the Mendelian genetics across these life-forms, students will be exposed to concepts of population genetics. 6. Exposed to quantitative genetics encompassing complex traits, clinical genetics and genetics of evolution. 7.Understand the various genetic abnormality occur due to recessive and dominant sex linked inheritance. 8. Learn the extra nuclear inheritance, bacterial and human genetic.

Govt. Shivalik College Naya Nangal

Department of Zoology

Course Outcomes

Lab Course Code Sem III – SCIB2317

Sem IV- SCIB2417

Class Bsc.II (Medical)

S.No	Name of Paper	Lab Course Outcome Bsc.II (Medical) SEM –III
1.	Lab (Sem III)	On completion of the course, students will be able to: 1. Understand the estimation of haemoglobin (Hb) content. 2. Will be able to estimate the blood pressure. 3.Develop knowledge for the estimation of blood group. 4. Understand the mechanism of electrocardiogram (ECG). 5.Acquire knowledge about coagulation & bleeding time. 6.Able to do analysis of urine for urea and glucose.
Lab Course Outcome Bsc.II (Medical) SEM –IV		
2.	Lab (Sem IV)	On completion of the course, students will be able to: 1. Understand the process of evolution and learn various tools and techniques for evolutionary studies. 2.Acquire knowledge on fossils record of various animals. 3.Gain knowledge on evolutionary history of Man which inculcate interest in research. 4.Analize the Karyotype and must differentiate between normal and abnormal chromosome pattern. 5.Understand the mechanism of Dermatographics and its relation to genetic disorders. 6. Describe the inheritance of ABO Blood group in man.

Govt. Shivalik College Naya Nangal

Department of Zoology

Course Outcomes

Theory Course code 1. Molecular Biology- SCIB3514

2. Developmental Biology- SCIB3515

Class Bsc.III (Medical)

S.No.	Name of paper	Course Outcome Bsc.III (Medical) Sem V
1.	Molecular Biology	On completion of the course, students will be able to: 1. Develop understanding on the cell biology and molecular biology. 2. Know the various cell types and cell divisions. 3.Understand the structure and function of the cells. 4.Provide a basic understanding on the term cell signalling. 5. Analyse the fundamental processes of the cell (DNA Replication, transcription translations) 6. Acquire knowledge on the Tools and Techniques: recombinant DNA technology, quantitative estimation/Isolation of DNA by using spectrophotometer. 7. Understand the ELISA technique and DNA finger printing. 8. Understand genetic, molecular and cellular techniques, including genome editing, used to investigate developmental and cell biology processes in various organisms. 9.Demonstrate observational and technical skills to collect and analyse quantitative data, record observations, interpret findings and present experimental data
2.	Developmental Biology	On completion of the course, students will be able to: 1. Understand the basic developmental processes that lead to the establishment of the body plan of vertebrates. 2. Provide a basic understanding of the experimental methods and designs that can be used for further study and research. 3. Learn the pathology related to mechanisms of development and differentiation. 4. Benefit students in their further studies in the biological/physiological sciences and health-related fields 5. Contribute to the critical societal goal of a scientifically literate citizenry. 6. Acquire knowledge on birth defects and causes and reduce the risk by educating society. 7.Describe the morphological processes that transform a fertilised egg into a multicellular organism.

		8. Identify model organisms used to investigate developmental biology and compare the developmental programmes of different organisms. 9.Work effectively in diverse groups to investigate and communicate concepts in cell and developmental biology
Course Outcome Bsc.III (Medical) Sem VI Course Code 1. Medical zoology and Medical Laboratory Technology- SCIB3614 2. Immunology- SCIB3615		
1.	Medical zoology and Medical Laboratory Technology	On completion of the course, students will be able to: 1. Understand the physical, mental and social health and also know the safer disposal of various wastes. 2. Gain the knowledge about the preventive measure. 3 Acquiring knowledge on epidemic and endemic diseases. 4 Gain the knowledge about the maintenance of hygienic conditions, various diseases and their preventive measure. 5. Know the methods of various instrumentations related to biological systems. 6. Gain knowledge about the establishment of clinical laboratory and also useful for research purpose.
2.	Immunology	On completion of the course, students will be able to: 1.Develop the basic knowledge of immunological processes at a cellular and molecular level. 2.Inculcate knowledge on the central immunological principles and concepts outline, compare and contrast the key mechanisms and cellular players of innate and adaptive immunity and how they relate elucidate the genetic basis for immunological diversity and the generation of adaptive immune responses. 3. Understand the key events and cellular players in antigen presentation, and how the nature of the antigen will shape resulting effector responses. 4. Identify the main mechanisms of inflammation. 5.Understand and explain the basis of allergy and allergic diseases. 6.Explain the role of immune system in cancer; tumor immunology and principles of immune-therapy.

Govt. Shivalik College Naya Nangal

Department of Zoology

Course Outcomes

Lab Course Code Sem V- SCIB3516

Sem VI- SCIB3616

Class Bsc.III (Medical)

S.No	Name of Paper	Lab Course Outcome Bsc.III (Medical) SEM –V
1.	Lab (Sem V)	On completion of the course, students will be able to 1.Describe the development of Frog and Chick. 2.Understand the various stages of gametogenesis. 3.Acquire knowledge on various type of placenta. 4.Quantitative estimation of DNA by using spectrophotometer. 5.Separation of DNA by electrophoresis. 6.Solve numerical problems on Genetic Code .
Lab Course Outcome Bsc.III (Medical) SEM –VI		
2.	Lab (Sem VI)	On completion of the course, students will be able to: 1.Gain knowledge about the establishment of clinical laboratory and also useful for research purpose. 2.Estimate haemoglobin count. 3.Counting of WBC, RBC&DLC. 4.Analysis of blood group A, B, AB, O and Rh. 5.Acquire knowledge on estimation of ESR, bleeding time, and coagulation time. 6.Provide a basic understanding on the autoimmune disease. 7.Use various lab apparatus like autoclave, centrifuge and spectrophotometer during future research work.

Govt. Shivalik College Naya Nangal

Department of zoology

Theory Program Outcome

Course Code- SCIB03PUP

Class Bsc. (Medical)

At the end of the program in Zoology the students will able to:

1. Develop deeper understanding of key concepts of zoology at molecular, cellular level, physiology and reproduction at organism level.
2. Describe the role of taxonomy and systematics in animal studies and gain in-depth knowledge of animals including invertebrates and vertebrates..
3. Place zoological knowledge in context and show an understanding of the way zoologists think and understand the needs of zoology in shaping our planet.
4. Comprehend, interpret, general evolutionary relationships among and between different animal groups.
5. Correlate between the various animal habitats, their behavior and during the course of evolution
6. Learn the skills of handling various scientific equipment, designing and performing the laboratory experiments.
7. Explore applied fields with the knowledge of Medical Zoology & Laboratory techniques.
8. Communicate the importance of ecological factors, biodiversity, environmental conservation processes, pollution control and protection of threatened species to the society
9. Enhance their scientific temper and scientific thinking and exhibit creativity in designing, planning, problem solving, model making for various scientific concepts

Govt. Shivalik College Naya Nangal

Department of Zoology

Lab Program Outcome

Course Code- SCIB03PUP

At the end of the program in Zoology the students will able:

1.To know the scope and importance of Zoology.

2.To develop scientific temper among students.

3. To inculcate interest in nature and living forms and their conservation.

4.To make the students eco-friendly by creating a sense of environmental awareness in them.

5.To give better exposure to the diversity of life forms.

6.To study different ecological sites for animals in their natural habitats by field study.

7.To provide opportunities for the application of the acquired knowledge in day- to - day life.

8.To develop skills in doing experiments, familiarizing equipments and biological specimens.

9. To undertake scientific projects which help to develop research aptitude in students.

10.To attain interdisciplinary approach to understand the application of the subject in daily life.

11. To knowing the rules of taxonomy and the principle of animal classification.

12. To understood the diversity morphology, biological characters and taxonomical importance some selected museum specimens of different animal groups.

13.To attained knowledge of qualitative analysis of macromolecules, excretory products, blood glucose and cholesterol.

14. Skill development for the observation of blood cells and haemin crystals.

15.To understood the working principle and applications of physiological instruments.

16.To attained knowledge on the observation of preserved specimens and instruments of blood related experiments.

Course Outcome of B.Sc. First Year

Course Outcome- B.Sc. Chemistry Semester I	
Course	**Outcomes**
	After completion of these courses' studentsshould be able to;
Inorganic Chemistry **(SCIB1108T)**	**1.** Know the idea of de-Broglie equation andHeisenberg's uncertainty principal **2.** To understand the quantum numbers andprincipal of extra stability. **3.** To understand the periodic properties ofelements in periodic table. **4.** To explain the VBT and MOT of differentmolecule. **5.** To discuss the alkali and alkaline earthmetal with their properties. **6.** To understand type of hybridization and shapes of inorganic molecules and ions.
Organic Chemistry **(SCIB1109T)**	**1.** To understand the electronic displacement and concept of organic reactions mechanism. **2**. knows the basic concept of isomerism in alkanes and their preparation. **3.** To describe preparation and application of dienes and alkynes. **4.** To understand the preparation of cyclo alkanes with their chemical properties. **5.** To explain the aromaticity and Huckel`s rule of aromatic compounds.
Physical Chemistry **(SCIB1110T)**	**1.** To explain the behaviour of real and ideal gas. **2.** To explain the kinetic theory of gases. **3.** Explain the properties of liquids. **4.** To understand the various methods and tests required to improve the accuracy of data. **5.** To understand the basic mathematical concepts.
Practical Chemistry **(SCIB1111T)**	**Semi-micro analysis:** Will be able to identify and separating 2 cations and 2 anions with no interference.

Course Outcome- B.Sc. Chemistry Sem -2	
Course	**Course Outcome**
Inorganic Chemistry **(SCIB1208T)**	**1.** To understand the structure of Ionic Solids by studying radius ratio rule and coordination number. **2.** To understand the periodic properties of p-block elements. **3.** To understand the chemistry of interhalogen compounds. **4.** To understand the diagonal relationship of alkali and alkaline eath metals and their biological importance.
Organic chemistry **(SCIB1209T)**	**1.** To understand the basic concept of isomerism and chirality. **2.** To understand the chemistry of benzene. **3.** Discuss electrophilic and nucleophilic inaromatic compounds. **4.** To study the methods of preparations of alkyl and aryl halides. **5.** To discuss the reactivity of alkyl halides vs allyl, vinyl and aryl halides.
Physical Chemistry **(SCIB1210T)**	**1.** To differentiate between colloidal, true and suspensions. **2.** To describe the colligative properties and the methods for the determination of colligative properties. **3**. To explain the theories of chemical kinetics. **4.** To understand the effect of various factors on the rate of reaction. **5**. To discuss the reactions of various orders. **6.** To study the concept of catalysis.
Practical Chemistry **(SCIB1211L)**	**1.** Will be able to determine the melting point/ boiling point/crystallization. **2.** To understand and find out viscosity, surface tension and the concept of reaction rate. **3.** Will be able to determine molecular weight by Rast method.

Course Outcome of B.Sc. 2nd Year

Course Outcome - B.Sc. Chemistry Semester III	
Organic Chemistry (SCIB2309)	**1.** To understand the methods of formation and chemical properties of alcohols, glycerols. **2.** To discuss the acidic strength of alcohols and phenols. **3.** Able to understand the Gatterman synthesis, Hauben Hostch and Reimer-Tiemann reactions. **4.** To understand the concept of acetals as protecting groups. **5.** To understand the concept and importance of α,β-unsaturated aldehydes and ketones.
Physical Chemistry (SCIB2310)	**1.** To study the concepts of enthalpy, entropy and second law of thermodynamic. **2.** To describe the carnot theorem and problems based on efficiency of carnot cycle. **3**. To understand the concept of entropy and its change in mixture of ideal gases. **4.** To understand the third law of thermodynamics and natural phenomenon related to third law of thermodynamics. **5.** To write the expressions for equilibrium constants.
Practical Chemistry (SCIB2308)	**Volumetric Analysis :** **1.** Determination of acetic acid acid in a commercial vinegar using NaOH. **2.** Determination of alkaline content in antacid tablet. **3**. Estimation of hardness of water by EDTA. **4.** Estimation of ferrous and ferric by dichromate method. **5.** Estimation of copper using sodium thiosulphate. **Thin Layer Chromatography** : Determination of R_F Value of different components.

GOVT.SHIVALIK COLLEGE NAYA NANGAL

DEPARTMENT OF ECONOMICS

COURSE OUTCOME

Post Graduate	
Course Name and course code	Course Outcomes
Micro Economic Analysis **Semester (I &II)** **ECOM1101(i)** **ECOM1201(ii)**	**Course Objective:** To develop an advanced theoretical understanding of consumer behaviour and decision-making. To develop a theoretical understanding of strategic behaviour of economic agents. The outcome of the paper is to understand the economic behaviour of individuals, firms and markets. It is mainly to equip the students in a rigorous and comprehensive understanding with the various aspects of consumer behaviour and demand analysis, production theory and behaviour of costs, the theory of traditional markets and equilibrium of firm. **Course Learning Outcomes:** On successful completion of the course, a student will be able to develop a sound understanding of the core microeconomic concepts that economists use to understand the process of decision-making by an economic agent(s). The student should be able to apply mathematical tools and techniques to study behaviour of economic agents. Besides students will be able to identify strategic behaviour of economic agents and formulate them in a game theoretic framework. They will be able to identify and analyse strategic interactions and explain negotiation and exchange between economic agents in game theory models.
Macro-Economic Analysis **Semester (I&II)** **ECOM1102(I)** **Ecom1202(II)**	**Course Outcome:** • Get an overview of the major developments in macroeconomic theory, with particular emphasis on the policy prescriptions of the earlier macroeconomic schools of thought. • Develop an understanding of the interrelationships among the various macroeconomic variables and the way they impact upon the working of the economy as a whole, thereby determining the course of the economy. • Gain in depth knowledge about Keynesian vs Monetarist policy formulations as well as the theoretical justifications of such policies, together with the effectiveness of alternative policies with respect to the policy goals. • Get acquainted with disequilibrium transactions and quasi equilibrium situations in general disequilibrium macro models. • The second half includes the Monetary Theory expositions by Sir John Hicks. The course aims to provide an understanding of Money

	and the Classical and Keynesian definitions and motives for holding money. The course prepares the students with a theoretical base on the evolution of money and deeper insights into the utility of money in different macroeconomic frameworks.
Basic quantitative methods **Semester (I and II)** **ECOM1103(I)** **ECOM1203(ii)**	1.To transmit the body of basic statistics and mathematics that enables the study of economic theory at the undergraduate level. 2. A learner will be able to understand theoretical foundation of statistics 3. To equip the students to quantify economic variables and to enable them to apply statistical techniques in Economics. 4. The student will be able to apply statistical and mathematical techniques in Economics. BASIC QUANTITATIVE METHODS-I 5. A student will be able to demonstrate quantitative skills 6. A student will be able to understand basic mathematics for economics 7. A learner will be able to analyse data using descriptive statistics
Agricultural Economic **Semester (I& II)** **ECOM1105(i)** **ECOM1205(ii)**	**Course Outcomes:** • Understanding of the role of agriculture in economic development • Gathering knowledge about several celebrated models of agricultural development • Generating awareness about the relationship between technical change and peasant agriculture • Understanding the various aspects of agricultural price policy in developing countries • Learn about the structure and characteristics of the agricultural sector in less developed countries like India. • Understand the various constraints specific to less developed agriculture. • Exposure to theories regarding the operation of various institutions within the agricultural sector of LDCs. • Develop an understanding of the manifold obstacles to agricultural development, and the policies adopted to overcome them, with particular emphasis on the Indian agricultural scenario.
Economics of Growth and Development **Semester (I& II)** **ECOM1104(i)** **ECOM1204(ii)**	The paper provides fundamental foundation of basic growth and development issues, approaches and models. The paper attempts to discuss the structure and change in variables. It helps understand the overall static and dynamic perspectives of the economy in a purely theoretical perspective.

Political Economy of Development **SEM (iii AND iv)** **ECOM2301(iii)** **ECOM2401(iv)**	Understanding of dialectical and historical materialism and mode of production in this subject. Understanding of Non- Marxian theories of development in political economy Helpful in understanding the MODE OF PUNJAB ECONOMY. Exposure to the theories regarding Transformation of Traditional Agriculture given by Schultz and Schumpeter theory of development Helpful in understanding Marxian political economy which includes analysis of capitalist agriculture, process of market mechanism and planning, process of reproduction Helpful in understanding the concept if Imperialism and Third world
Evoluation and structure of Indian economy **SEM (iii and iv)** **ECOM2302(iii)** **ECOM2402(iv)**	• The course on Indian Economy examines issues relating to the evolution and performance on all aspects of the Indian economy. • It is based on the concepts of development economics. The course is fairly exhaustive and is useful for increasing the general awareness of students on issues affecting the Indian Economy. • The course is spread over two semesters. • Indian Economy I: India's economic development since independence; Population and Economic Development in India; Growth and Distributional issues (poverty, inequality and unemployment); and International Comparisons (India with other countries). • Indian Economy II: Macroeconomic Policies and their impact (Fiscal Policy, Financial and Monetary Policies, Trade and Investment Policy and Labour Regulation); Policies and Performance in Agriculture; Policies and performance in Industry; and Trends and performance in Services.
Public Economics **Semester (III & IV)** **ECOM2303(iii)** **ECOM2403(iv)**	1 **Course Outcomes:** • The overall outcome of the course is the development of an understanding of public sector financial resources. • Understanding of the rationale for the existence of modern governments • Familiarity with the micro and macro aspects of public expenditure. • Acquaintance with the phenomenon of externality and the role of government. • An understanding of the mechanics of government budget. The students will be familiar with the knowledge and application of tax and non-tax sources of public revenue, its expenditure and uses.

Money banking **Semester (III& IV)** **ECOM2304(iii)** **ECOM2404(iv)**	On completion of the course students would be able to: 1. Explain the broad features of Indian financial institutions with its apex banks' objectives and purview. Also understand the instruments to control credit in the country 2. .2. Effectively narrate the kinds and components of money with its regulatory system, be aware of the functions, objectives and limitations of commercial banks. 3. 3. Identify the existence and development of non-banking financial institutions, know the important role of Mutual funds, LIC, investment companies etc., utilize and effectively participate in the development process. 4. 4. Understand the conditions of financial markets and its impact in the economy. 5. 5. Demonstrate the role and significance of foreign exchange rate and its markets with its impact on various sectors in the economy.
Computer application for economists **SEM (iii and iv)** **ECOM2305(iii)** **ECOM2405(iv)**	• This is a course for computer application in economic analysis. • It deals with basic knowledge on computer, data, and estimation of statistical tools by using software and analysing the results of economic relationships, testing economic hypotheses and forecasting. By the end of the course, the student should be able: • To become familiar with basic knowledge on computer • To become familiar with a statistical software • To prepare a algorithms of various statics topics • To estimate the parameters of multiple regressions with the help of software and interpret it • To become a familiar with various dos command. • To estimate the various parameters like factor analysis ,MDA, MANOVA analysis
UNDER GRADUATE COURSES	
B.A	
B.A SEM(First) **Micro Economics and Indian Economy-I** **ARTB1101T**	• Understanding of Micro Economics under the course will be helpful for students to describe issues such as wage inequalities, understanding of producer choice and consumer behaviour. • Study of Indian economy under the course will be helpful to students to identify the nature and characteristics of Indian Economy from since Independence to till date.
B.A SEM(Second) **Micro Economics and Indian Economy-II** **ARTB1201T**	• Study of Micro Economics under the course will be helpful for students to apply micro economic principles and models to define and address market failures. • Understanding of Indian economy under the course will be helpful to the students to gain the ability to examine various agricultural, industrial and foreign policies which will help them to understand the working of public and private sector development and organization in the era of globalization.

B.A SEM(Third) **Macro Economics and Public Finance** **ARTB2301T**	• Study of macroeconomics under the course will be helpful to the students to identify the causes of prosperity, growth and economic change over time and the macro-economic mechanism with the help of basic principles of macroeconomics like classical and Keynesian models. • Study of public finance under the course will be helpful to the students to understand the budgetary policy of the Government and to evaluate the functioning of the Government.
B.A SEM(Fourth) Macro Economics and International Economics ARTB2401T	• Considering the increasing role of Government in economy, this course aims to generate theoretical and empirical understanding of students about different aspect of Governmental activities and their rationality. • It covers fundamental concepts of public economics, public expenditure, public revenue, and public debt with special reference of Indian economy. • To provide strong theoretical background to the students on the subject of international trade. It also help understands the empirical aspects such as trade reforms and their impact on India economy.
B.A SEM(Fifth) **Economics of Development** **ARTB2501T**	• Understanding the basic facts of economic growth. • Comprehension of relationship between growth and development. • Familiarity with the wide-ranging policy issues and theories in growth economics. • Understanding the Keynesian Analysis of economic growth with a comparison to some other growth models. • A thorough understanding of literature on neoclassical growth models and empirics. • A critical account of the extension of the neoclassical growth model and applications. • Understanding the interactions of the basic tenets of growth theories and those of debt with the drivers of globalisation. It will enable them to understand the evolution of the measures of development. • It will acquaint them with the latest theories of economic development. • modalities associated with the Human Capital Project of the World Bank Group. • Familiarity with the application of econometric tools to study the factors in the demand and supply sides economics of health care
B.A SEM(Sixth) **Quantitative Methods** **ARTB3601T**	• A student will be able to demonstrate quantitative skills • A student will be able to understand basic mathematics for economics • A learner will be able to analyse data using descriptive statistics

	• To transmit the body of basic statistics and mathematics that enables the study of economic theory at the undergraduate level. • A learner will be able to understand theoretical foundation of statistics • To equip the students to quantify economic variables and to enable them to apply statistical techniques in Economics. • The student will be able to apply statistical and mathematical techniques in Economics.

Programme Outcomes:

The Master of Arts programme in Economics has been designed with the objective to develop in-depth knowledge of students in frontier areas of economic theory and methods, so that they are able to use the knowledge to study real world economic problems. The course has a strong focus on theoretical and quantitative skills and train students in the collection and analysis of the data using their software skills. The programme offers specialised optional courses, which allow student to pursue their studies in their area of interest. The students are required to submit report and present their findings of field-study. Besides, to hone the student's writing and analytical skills they are required to submit a term paper on current economic problem. Thus, the Masters in Economics programme seek to:

• Prepare students to develop critical thinking to carry out investigation about various socio-economic issues objectively while bridging the gap between theory and practice.

• Equip the student with skills to analyse problems, formulate a hypothesis, evaluate and validate results and draw reasonable conclusions thereof.

• Prepare students for pursuing research or careers that provide employment through entrepreneurship and innovative methods. Because today's unemployment problem can also be solved by developing the micro and small entrepreneurship

• Prepare students to develop own thinking /opinion regarding current national or international policies and issues

• Create awareness to become a rational and an enlightened citizen so that they can take the responsibility to spread the governments' initiatives/schemes to the rural areas for the upliftment of the poor or vulnerable section of the society for inclusive growth.

Programme Learning Outcome:

At the end of the programme, the students will have adequate competency in the frontier areas of economic theory and methods. The students will acquire additional specialisation through optional courses. They will be able to use common software for analysis of economic data. Besides, students will be able to execute in-depth analysis of economic issues based on their understanding of economic theory, which will not only widen their opportunities for employment, but also help them

to pursue their doctoral studies. Keeping the programme objectives in view, the specific learning outcomes of Masters in Economics are:

- Understanding the basic assumptions in various economic theories and enhance capabilities of developing ideas based on them

- Prepare and motivate students for research studies in Economics especially by developing questionnaire, collecting primary data through field surveys

- Provide knowledge of a wide range of econometric techniques using excel or other statistical software

- Motivate students to extract or utilize different websites for secondary data collection, generating concepts for various facets of economic studies and gather latest information provided by various Universities, UGC, or ICSSR

- Motivate students in preparing for various competitive examinations, NET, SET, Indian Economic Service etc., by developing or gaining value addition day by day by giving assignments, by following a routine or developing discipline / concentration etc.

GOVERNMENT SHIVALIK COLLEGE, NAYA NANGAL

COURSE OUTCOME(2021-22)

DEPARTMENT OF HINDI

Sr no.	Course name & course code **B.A (SEM-1)** HINDI SAHITYA (OPTION-1	outcome
1	**HINDI LITERATURE(ADIKAL) (ARTB1108T)**	● UNDERSTANDING THE ORIGIN OF HINDI LITERATURE ● UNDERSTANDING THE BASIS OF CLASSIFICATION OF HINDI LITERATURE ● UNDERSTANDING THE FEATURES OF ADIKAL IN CONTEXT OF SOCIAL CULTURE AND POLITICAL CONDITIONS OF THE PERIOD ● UNDERSTANDING THE LITERACY TRENDS OF ADIKAL ● UNDERSTANDING THE RELATION BETWEEN THE SOCIETY AND LITERATURE AND ANALYSIS THE ROLE PLAYED BY HINDI LITERATURE
1.1	**THAKYE PAON NOVEL BY BHAGWATICHARAN VERM**A	● UNDERSTANDING THE VISION OF BHAGWATICHARAN VERMA ABOUT MIDDLE CLASS LIFE AND HIS CONCERN FOR THE PEOPLE WHO SERVIVE IN THAT CONDITION ● UNDERSTAND SOCIAL VALUES AND ETHICS ● DEVELOP CRITICAL THINKING AND WRITING ● UNDERSTANDING SOCIAL ISSUES IN THE SOCIETY AND IMPECT ON HINDI LITERATURE

1.2	**DEEPIKA (ADUNIK HINDI KAVYA)POETRY BOOK**	● UNDERSTANDING THE ORIGIN AND DEVELOPMENT OF HINDI POETRY THROUGH THE SELECTED POEM SUCH AS AANSU,PREM PATHIK, JUHI KI KALI, VIDVA ,TAJ ,BHARAT MATA, MERA CHEHRA UDAAS, POSTER OR AADMI ETC. ● MAKE STUDENTS UNDERSTAND THE BEAUTY AND FEELINGS OF POEM ● IILESTRATE SOCIAL ETHIES AND VALUES
1.3	**GRAMMAR AND TRANSLATION**	● DEVELOP CORRECT USAGE OF GRAMMAR ● ENHENCE COMMUNICATION SKILLS AND WRITING SKILLS THROUGH LEARNING GRAMMAR ● UNDERSTANDING THE BASIC PRINCIPALS OF GRAMMAR ● UNDERSTANDING THE IMPORTANCE OF TRANSLATION

NISHA GANDHI
(DEPTT. OF HINDI)

GOVERNMENT SHIVALIK COLLEGE
NAYA NANGAL
COURSE OUTCOME(2021-22)
DEPARTMENT OF HINDI

s no.	**Course name & course code** **B.A(sem-2)** **HINDI SAHITYA(OPT-1)**	**outcome**
2	**BHAKTIKAL (HINDI LITERATURE) (ARTB0208T)**	● : The main outcome of studying Hindi Literature will widely help to express and improve the ability to read works of literary, historical and cultural criticism ● Understanding the features of BhaktI kal in context of socioL - cultural and political condition of that period ● Understanding of History of Hindi literature and language of BHAKTIKAL ● Hindi Literature helps the students to build the skills of creative and intellectual ideas and makes them to enrich their career.
2.1	**SAAT KAHANIYAN (TEXT BOOK)**	● Through Hindi SHORT STORIES and Biographies students can understand our rich culture and heritage ● To acquire command over the use of Hindi for creative writing ● Hindi STORIES helps their mental growth and increase thinking ability

2.2	**KARBALAA(NATAK) TEXT BOOK**	● Through Hindi Novels and Biographies students can understand our rich culture and heritage ● By Reading and observing Drama's and one act plays they can become good actors ● The study of significant writers like MUNCHI PREMCHAND, Kabir, Rahim and Tulsidas, strengthens the moral and human values of the students. They learn to live in harmony with all religions and respect of all castes and faiths
2.3	**GRAMMAR**	● To acquire command over the use of Hindi for creative writing ● Develop Reading, Writing & Communication Skills in Hindi ● Develop Approach of Hindi Linguistics & Grammar

NISHA GANDHI
(DEPTT. OF HINDI)

GOVERNMENT SHIVALIK COLLEGE
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COURSE OUTCOME(2021-22)
DEPARTMENT OF HINDI

S NO.	COURSE NAME & Course code **B.a(SEM-3)** **HINDI SAHITYA(OPT.1)**	OUTCOME		
3.	**REETIKAL (HINDI SAHITYA) (ARTB2308T)**	● Hindi Literature helps the students to build the skills of creative and intellectual ideas and makes them to enrich their career ● The study of Hindi literature augments their creative writing skills which opens doors to opportunities ● Hindi Literature helps their mental growth and increase thinking ability		
3.1	**REETISAURAB (POERTY BOOK)**	● Through Prose and Poetry they learn the Human values and practice in day to day life. ● This course is designed to help the students develop literary sensibility, critical thinking, and an acute and penetrating understanding of literary history, literary criticism and a wide range of literary texts in INDIAN poetry WITH THE HELP OF RASKHAN,SENAPTI,BIHARI,GHANANAND,GURU GOBIND SINGH JI		

3.2	**Hindi Bhasha Aur Sahitya Ka Vikas**	● Students can work anywhere in India, as they know Hindi – Our National Language ● Hindi is used as an Official Language as well as second Language. So they can easily be employed easily in those countries also ● Identifying the dialects of Hindi language family. Analysing the development of Khariboli Hindi ● Understanding the origin of Hindi language		
3.3	**Pratynidhi kahaniyan (text book) by Jaishankar prasha**d	● .Relation between literature and real life ● Emotional development of human mind. ● Through Prose and stories they learn the Human values and practice in day to day life ● Understanding the cultural spirit of jaishankar prashad through his stories “gram,akashdeep,andhi,madhuwaa,puruskar”		

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Government Shivalik College
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course outcome(2021-22)
DEPARTMENT OF HINDI

S NO.	COURSENAME & course code b.A (SEM-4) Hindi sahitya opt-1	OUTCOME
4.	AADUNIK KAL (HINDI LITERATURE) (ARTB2408T)	● Ability to understand the development to Hindi language and literature of modern era (Aadhunikkaal ● . To able to understand the reason of emergence of Adhunikkal in Hindi literature. ● Hindi Literature helps the students to build the skills of creative and intellectual ideas and makes them to enrich their career ●
4.1	Pachapan khambhe lal divarre(Usha priyavanda) upniyas	● Ability to understand the development of plays & essays of Hindi. ● .Understanding of development of Hindi novels and short stories. ● Differentiation and departure points of Hindi novels and short stories. ● Ability to think about Hindi novels and short stories.

4.2	**Gadya triveni (text book)**	● gained: Ability to understand the development of Hindi 'Gadya Ki Vividh Vidhaen.' ● gained: Ability to understand the development of Hindi 'Gadya Ki Vividh Vidhaen.' ● By Reading and observing Drama's and one act plays they can become good actors
4.3	**GRAMMAR**	● students attempt in different area and theory such as vocabulary and vice versa ● To able to understand the introductorily concepts of Hindi grammar. ● To able to understand the importance of linguistic. ● To able to understand various forms of writing

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course outcome(2021-22)
DEPARTMENT OF HINDI

S NO	COURSE NAME course code b.A (SEM-5) Hindi sahitya OR KAVYASHASTRA	OUTCOME
5.	KAVYASHASTRA (ARTB3608T)	• Learners of Hindi kavyashastra can easily acquire wide knowledge and allow them to be effective in their interpretations • It also produces opportunities to maintain traditional aspects and flourishes the learner to be National friendly • Learn the literary works on the basis of the foundation laid by the scholars
5.1	Madhya (poetry book)	• Through Prose and Poetry they learn the Human values and practice in day to day life • Hindipoetry helps the students to build the skills of creative and intellectual ideas and makes them to enrich their career • Ability to understand the development of Modern Hindi Poetry

5.2	**Nibandh parivesh (text book)**	• To able to understand the characters in different stories and understand the psychology of all characters • Through Hindi Novels and Biographies students can understand our rich culture and heritage. • Evaluating the concept of Hindi from past to present and making the society more closely through literature • Bhartendu ji,puran singh ji,chaderdhar sharma guleri, dharamvir bharti ji these nibhadkar have deep impect on students mind
5.3	**GRAMMAR**	• To make a attempt in different area and theory such as vocabulary • Develop Reading, Writing & Communication Skills in Hindi. Develop competency in Literary Forms. (Hindi Poetry & Fiction) Develop Approach of Hindi Linguistics & Grammar.

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course outcome(2021-22)
DEPARTMENT OF HINDI

S NO	COURSENAME & course code b.A (SEM-6) Hindi sahitya	OUTCOME
6	Adhunik kaal or naveen vidhaye or vidha gat parichay (hindi literature) (ARTB3608T)	● Understanding the importance and basis of the names given in adhunik kal ● Evaluating the concept of Hindi from past to present and making the society more closely through literature ● : Moreover, it makes to enquire everything with an awareness and curiosity as literature reflects the life. ● Elaborating and understanding its philosophical methods of Hindi Literature
6.1	Gadiya sahitya (Mahadevi verma)	● Through stories they learn the Human values and practice in day to day life ● Hindi lekhan helps the students to build the skills of creative and intellectual ideas and makes them to enrich their career ● Ability to understand the development of Modern Hindi short stories ● Rama ,gheesa, bhaktin these characters inspired a lot that hho to deal with poverty

6.2	**Dharuvswamini natak (text book)**	● Ability to understand the development of plays & essays of Hindi ● Understanding of Hindi plays and essays. ● Differentiation and departure points of Hindi plays & essays. ● Ability to think about Hindi plays & essays.
6.3	**GRAMMAR**	● To make a attempt in different area and theory such as vocabulary ● Develop Reading, Writing & Communication Skills in Hindi. Develop competency in Literary Forms. (Hindi Poetry & Fiction) Develop Approach of Hindi Linguistics & Grammar.

NISHA GANDHI
(DEPTT. OF HINDI)

Government shivalik college
Naya nangal
course outcome(2021-22)
DEPARTMENT OF HINDI

Program Specific Outcomes

1. **PSO1 :** Hindi, being the National Language of the country, students can work anywhere in India and in other countries also. Hindi is used as an Official language as well as second language. So, the students can easily be employed in anywhere in the country and other counties . It also offers plenty of teaching and translation opportunities in Abroad too
2. **PSO2** : Such graduates can pursue the subject professionally in position such as teacher, translator, freelancer or interpreters. Translators also work in scientific, technical or business related fields. Freelancing is the new trend in the field of language. Freelancers join research forms, Translation Bureaus, Publishing houses, International Organizations, Hotel industry and Travel & Tourism Sectors, among other areas.
3. **PSO3** : Such professionals can be hired as Consultant Hindi Proof Reading, Teacher, Customer Service Associate, Sales Coordinator, Interpreter (from one language to other), Hindi translator, Assistant Professor in College or University, Hindi Journalism, Data entry Operator etc.
4. **PSO4** : Colleges and Universities, Private Organizations, Private Academic Institutions, Translation Service Providers, Tourism Sector, Print Media, Electronic Media etc. hire qualified Hindi Graduates.

NISHA GANDHI
DEPARMENT OF HINDI

Govt. Shivalik College Naya Nangal

Course Outcome

English Department

Session 2021-22

SR. NOCLASSCOURSEOUTCOME

1.B.A (SEM 1) 1.PROSE PARABLES1. To develop the language ability of the students.2. To enable the students to comprehend the idea contained in the prose.3. To develop an appreciation for the literary content.4. To enhance creative and critical thinking.5. To familiarize with eminent prose writers and their works.

2.GRAMMAR(RAYMOND MURPHY,ENGLISH GRAMMAR)1.The students will gain knowledge of the correct use of past and present tense in writing.2. The students will understand the English language better.3. It enables them to understand how sentences are formed.

2. B.A(SEM 2)1.POETIC PALETTETo analyze various elements of poetry such as diction, tone, from, genre, imagery, figures of speech, symbolism themes etc.Recognize the rhythms, metrics and other aspects of poetry.Develop an appreciation of language and style.Understand the thought and imagination contained in the poem correlating it with contemporary scenario.Understand the development of poetry from the beginning to the modern age. 6. Inculcate their aesthetic sense and love for English poetry.

2.Grammar(RAYMOND MURPHY,ENGLISH GRAMMAR)Ability to be comfortable with English in use while reading or listening.Ability to use receptive skills through reading and listening to acquire good exposure to language and literature.Ability to write and speak good English in all situations.Students should develop style in speech and writing and manipulate the tools of language for effective communication

Sr.No.ClassCODE:CourseOutcome

1.B.A (SEM -3)1.Gleanings from Home and Abroad1. Identify analyze, interpret and describe the critical ideas, values and themes that appear in literary and cultural texts and understand the way these ideas, values and themes inform and impact culture and society.2. Acquire knowledge and acquaintance to Indian Writing in English3. Learn to use literature to develop their moral and social sense.

2.GRAMMAR(RAYMOND MURPHY,ENGLISH GRAMMAR)Students imbibe the rules of language unconsciously and tune to deduce language structure and usage.Students write paragraphs, essays, and letters.Students decipher the mechanism of language and use it for success in competitive examinations and job related speaking and writing tasks.

2.B.A (SEM -4)1.Pride and Prejudice Develop the critical understanding of literature. Acquire knowledge and acquaintance to British Literature. Learn to use literature to develop their moral and social sense. Interest in the different genres of British writingsDevelop passion for literature.

2.GRAMMAR(RAYMOND MURPHY,ENGLISH GRAMMAR)1. Development of comprehensive ability. 2. Improvement of vocabulary. 3. Effective communication skills.4.Write effectively and coherently.

GOVERNMENT SHIVALIK COLLEGE NAYA NANGAL

COURSE OUTCOME

ENGLISH DEPARTMENT

SESSION 2021- 2022

Sr.No.ClassCODE:CourseOutcome

1.B.A (SEM -5)1.ALL MY SONS The students will get first hand knowledge of major dramatists and their work in the Modern age.Be acquainted with the literary structure, development of English drama.Familiar with dramatic art and techniques used in the drama.Demonstrate knowledge of history and literature and draw connections between social practices and political contexts in different periods.

2.Letter Writing,precis,Development of story,CV writing1.Students imbibe the rules of language unconsciously and tune to deduce language structure and usage.2.Students write paragraphs, essays, and letters.3.Students decipher the mechanism of language and use it for success in competitive examinations and job related speaking and writing tasks.4.Improve the writing skills and oral communication skills.

2.B.A (SEM -6)1.Selected College Poems 1. To analyze various elements of poetry such as diction, tone, from, genre, imagery, figures of speech, symbolism themes etc. 2. Recognize the rhythms, metrics and other aspects of poetry. 3. Develop an appreciation of language and style. 4. Understand the thought and imagination contained in the poem correlating it with contemporary scenario. 5. Understand the development of poetry from the beginning to the modern age. 6. Inculcate their aesthetic sense and love for English poetry.6. Learn to use literature to develop their moral and social sense.7. Interest in the different genres of British writings.8.Develop passion for literature.

GOVERNMENT SHIVALIK COLLEGE NAYA NANGAL

COURSE OUTCOME

ENGLISH DEPARTMENT

SESSION 2021- 2022

Sr.No.ClassCODE:CourseOutcome

1.B.Sc(SEM -3)1.Perspective;Selection from Modern English Prose and Composition And Writing Skills1. Develop the critical understanding of literature 2.Acquire knowledge and acquaintance to different writings in English. 3. Learn to use literature to develop their moral and social sense.

2 Grammar,Writing Skills1 .Students imbibe the rules of language unconsciously and tune to deduce language structure and usage.2. Students write paragraphs, essays, and letters.3 .Students decipher the mechanism of language and use it for success in competitive examinations and job related speaking and writing tasks.4 .Improve the writing skills and oral communication skills5 Ability to discuss and respond to the content of the passage.6 Knowledge of development of science and information technology. 7. Develop the writing skills through exercises in grammar and composition.

2.B.Sc(SEM -4)1.Six One Act Plays 1. Learn to use literature to develop their moral and social sense.2. Interest in the different genres of British writings.3..Develop passion for literature.

GOVERNMENT SHIVALIK COLLEGE NAYA NANGAL

COURSE OUTCOME

ENGLISH DEPARTMENT

SESSION 2021- 2022

Sr.No.ClassCourseOutcome

1.B.com(SEM -1)1.CONTEMPORARY ENGLISH PROSE2 Business Letters,Advertisement,Report Writing1. Develop the critical understanding of literature 2.Acquire knowledge and acquaintance to different writings in English. 3. Learn to use literature to develop their moral and social sense. 1 .Students imbibe the rules of language unconsciously and tune to deduce language structure and usage.2. Students write paragraphs, essays, and letters.3 .Students decipher the mechanism of language and use it for success in competitive examinations and job related speaking and writing tasks.4 .Improve the writing skills and oral communication skills.

2.B.com(SEM -2)1.A Thing of Beauty 1. To analyze various elements of poetry such as diction, tone, from, genre, imagery, figures of speech, symbolism themes etc. 2. Recognize the rhythms, metrics and other aspects of poetry. 3. Develop an appreciation of language and style. 4. Understand the thought and imagination contained in the poem correlating it with contemporary scenario. 5. Understand the development of poetry from the beginning to the modern age. 6. Inculcate their aesthetic sense and love for English poetry.6. Learn to use literature to develop their moral and social sense.7. Interest in the different genres of British writings.8.Develop passion for literature.

GOVERNMENT SHIVALIK COLLEGE NAYA NANGAL

PROGRAMME OUTCOME

DEPARTMENT OF ENGLISH

SESSION 2021-22

Objectives

- To help learners gain better listening, speaking, reading and writing skills so that they can express themselves fluently in personal and professional contexts
- Learners get acquainted with some of the landmark texts – poems, short stories and prose writings from different literatures of English all over the world and get enlightened by the experience of reading them
- Learners learn to develop writing skills and integrate writing and thought, to acquire the correct sense of format, syntax, grammar, punctuation and spelling along with the concepts, principles and vocabulary of reasoning and argumentation and use analysis, synthesis and evaluation of advance arguments
- To get an awareness of the basic concepts and theoretical frameworks of Creative Writing, Translation Studies
- To help learners to improve their proficiency in applying various skills in their personal and professional lives thereby enhancing their employability prospects

OUTCOME

- Students should be familiar with representative literary and cultural texts within a significant number of historical, geographical, and cultural contexts
- Students should be able to apply critical and theoretical approaches to the reading and analysis of literary and cultural texts in multiple genres
- Students should be able to identify, analyze, interpret and describe the critical ideas, values, and themes that appear in literary and cultural texts and understand the way these ideas, values, and themes inform and impact culture and society, both now and in the past
- Students should be able to write analytically in a variety of formats, including essays, research papers, reflective writing, and critical reviews of secondary sources
- Students should be able to ethically gather, understand, evaluate and synthesize information from a variety of written and electronic sources
- Students should be able to understand the process of communicating and interpreting human experiences through literary representation using historical contexts and disciplinary methodologies

GOVT. SHIVALIK COLLEGE NAYA NANGAL

Department of Mathematics (Session 2021-22)

Programme CODE :- SCIB03PUP

Programme OUTCOME :-

COURSE :- B. Sc. MATHEMATICS

Mathematical Knowledge

Familiarize the students with suitable tools of mathematical analysis to handle issues and problems in mathematics and related sciences. A student should be able to recall basic facts about mathematics and should be able to display knowledge of conventions such as notations , terminology.

Problem Solving Skills

This programme also offers training in problem solving skills.

Analytical & Logical thinking:-

Students should be able to apply their skills and knowledge that is translate information presented verbally into mathematical form, select and use appropriate mathematical formulae or techniques in order to process the information and draw the relevant conclusion.

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GOVT. SHIVALIK COLLEGE NAYA NANGAL

Department of Mathematics

COURSE OUTCOME

COURSE SPECIFIC OUTCOME

B.Sc. 1st Semester

S. No.	Course /Code	Outcome Semester I
1.	CACULUS I (SCIB1101T)	• To apply notion of derivative in mean value theorem and also in higher order derivatives which arise in all applied sciences. • To study functions in detail which is a fundamental structure in all sciences, and to be able to check continuity of a function
2.	DIFFERENTIAL EQUATIONS (SCIB1102T)	• To be able to solve first order and first degree differential equations. • Learn various techniques of getting exact solution of solvable first order differential equations and linear differential equations of higher order. To learns methods for solving non homogenous equation .
3.	LINEAR ALGEBRA (SCIB1103T)	• To learn to find Eigen values and Eigen vectors of a matrix which is used in the study of vibrations, chemical reactions and geometry. • Understand the concept of vector spaces ,sub spaces, bases, dimension and their properties .

B.Sc. 2nd Semester

S. No.	Course /Code	Outcome Semester II
1.	CACULUS II (SCIB1201T)	• To learn evaluation of double and triple integration and its application to area and volume. • To learn evaluation of double and triple integration and its application to area and volume. • To find extreme values of multivariable functions using derivatives.
2.	PARTIAL DIFFERENTIAL EQUATIONS (SCIB1202T)	• Power series solution method using ordinary and singular points. • To understand the concept of Ordinary differential Equations in more than two variables. • Learn methods to solve first order Partial Differential Equations.
3.	ANAYLTIC GEOMETRY (SCIB1203T)	• Relate matrices and linear transformation; compute Eigen values and Eigen vectors of linear transformation. • To learn analytical geometry of 2 and 3 dimensions which include study of conics, planes, lines, sphere, cone and cylinder.

Department of Mathematics

Hemant Kumar

Kiya Wadhwa

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GOVT. SHIVALIK COLLEGE NAYA NANGAL

Department of Mathematics

COURSE OUTCOME

B.Sc. 3rd Semester

S. No.	Course /Code	Outcome Semester III
1.	ANALYSIS I (SCIB2301T)	• To study concept of sequence and series and hence find sum of infinite terms with different methods. • To study notion of lub and glb which helps to learn integrations which helps to find area under any functions
2.	NUMERICAL METHODS (SCIB2302T)	• Students can find divided difference ,forward , backward formula . • Students study various methods on bisection , regula falsi ,secant methods
3.	MECHANIC S (SCIB2303T)	• Statics: friction, work and energy, virtual work, • Dynamics: conservation of linear momentum, angular momentum and energy, variable mass systems, dynamic equilibrium.

B.Sc. 4th Semester

S. No.	Course / Code	Outcome Semester IV
1.	ANALYSIS II (SCIB2401T)	• To learn Riemann Integral and its properties in detail, leading to fundamental theorem of calculus and Mean value theorems. • To study pointwise and uniform convergence of sequences and series of functions.
2.	LINEAR PROGRAMMING (SCIB2402T)	• Understand the theory of the simplex method. And know about the relationships between the primal and dual problems, and to understand sensitivity analysis. • Learn about the applications to transportation, assignment and two-person zero-sum game problems.
3.	DYNAMICS (SCIB2403T)	• Understand the kinds of motion, absolute and relative velocities and accelerations. • Learn about concurrent forces ,Lami's theorem ,centre of gravity.

Department of Mathematics

Hemanth

Priya Wadhwa

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GOVT. SHIVALIK COLLEGE NAYA NANGAL

Department of Mathematics

COURSE OUTCOME

B.Sc. 5th Semester

S. No.	Course /Code	Outcome Semester V
1.	MATHEMATICAL METHODS I (SCIB3501T)	• To learn to evaluate the Fourier series of various even and odd functions. • To learn the evaluation of Laplace transform of different types of functions, their derivatives and integrations
2.	ALGEBRA I (SCIB3502T)	• Understand the basic concepts of group actions and their applications. • Recognize and use the Sylow theorems to characterize certain finite groups. • Know the fundamental concepts in ring theory such as the concepts of ideals, quotientrings, integral domains, and fields
3.	DISCRETE I (SCIB3503T)	• Learn about partially ordered sets, lattices and their types. • Understand Boolean algebra and Boolean functions, logic gates, switching circuits and their applications

B.Sc. 6th Semester

S. No.	Course /Code	Outcome Semester VI
1.	MATHEMATICAL METHODS II (SCIB3601T)	• To learn the evaluation of Inverse Laplace transform of functions, their derivatives and integrations, and to learn application of Convolution theorem. • To learn to apply Laplace Transform to solve Ordinary Differential equations with constant coefficients.
2.	ALGEBRA II (SCIB3602T)	• Learn in detail about polynomial rings, fundamental • properties of finite field extensions, and classification of finite fields.
3.	DISCRETE II (SCIB3603T)	• Solve real-life problems using finite-state and Turing machines. • Assimilate various graph theoretic concepts and familiarize with their applications.

Department of Mathematics

Hemant Kumar

Riya Wadhwa

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Course Name: B.a 1 (sem 1 &2) | **Course code:**

Sem-1 (Geomorphology)

Outcomes:

1. Students will get a better grasp of the importance of geography in community engagement as well as an appreciation for it.
2. Physical geographic processes and the effect of the physical environment on human populations will all be understood by students.
3. Students will be able to conceptualize in spatial terms to comprehend what has happened in the past, as well as to understand the present and plan for the future, utilizing geographic concepts.
4. Students will have a basic awareness of human influences on the physical environment.
5. Students will have a basic awareness of factors influencing spatial distribution of population and mobility.
6. Students can recognize and evaluate how geographic ideas are used in everyday life to solve real-world challenges.

Practical: (Field work and Practical)

Outcomes:

1. To study the different aspects of map designing.
2. Form an understanding of the various types of thematic mapping techniques.
3. Ability to prepare thematic maps for given socio-economic data.

Sem-2 (Climatology & Oceanography)

Outcomes:

1. To learn about evolution of ocean basins through the study of continental Drift and sea floor spreading theory.
2. Introduction to bottom relief of oceans.
3. To get a better understanding of ocean deposits and resources.
4. Recognize the human impact on oceans.
5. To learn about climate, and climatic conditions.

Practical: (Field work and Practical)

Outcomes:

1. To know the method of representation of relief.
2. To learn about techniques of slop analysis.
3. To investigate the morphometry of drainage basins.
4. To study the different aspects of map designing.

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Govt. Shivalik college, Naya Nangal

Course outcomes (sessions 2021-22)

Department of Geography

Course Name: B.a 2 (sem 3& 4)	**Course Code:**

Sem -3 (Geography of resources and environment)

Outcomes:

1. Introduction to various approaches adopted by geographers to study man-environment relationship.
2. Appreciate ecological and physical sciences principles and methods, and their use in environmental studies.
3. Effectively communicate various issues created by humans and how they impact the physical environment.
4. To generate awareness about National and International Environmental Laws.

Practical: (Field work and Practical)

Outcomes:

1. To understand the basics, historical development and significance of cartography.
2. To study the different aspects of map designing.
3. Form an understanding of the various types of thematic mapping techniques.
4. Ability to prepare thematic maps for given socio-economic data.

Sem -4 (Geography of punjab)

Outcomes:

1. The course is of great value for candidates appearing in the competitive exams conducted by the Union and the State Public Service Commissions.
2. It helps to keep pace with ever changing scenario on the geographical horizon of Punjab.
3. It helps to understand process of economic development and also the factors responsible for slow progress in economic and commercial growth of the nation.

Practical: (Field work and Practical)

Outcomes:

1. Recognize the importance of use of data in geography.
2. The students will know how the statistical theories and functions will be applied in geography.
3. Interpret statistical data for a holistic understanding of geographical phenomena.
4. To comprehend correlation and regression among spatio-temporal data.
5. To learn about spatial statistics and mapping attribute data using various spatial statistical techniques

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Course outcomes (sessions 2021-22)

Department of Geography

Course Name: B.a 3 (sem 5&6)	Course Code:

Sem -5 (World regional geography -I)

Outcomes:

1. Students will get a better grasp of the importance of geography in community engagement as well as an appreciation for it.
2. Physical geographic processes and the effect of the physical environment on human populations will all be understood by students.
3. Students will be able to conceptualize in spatial terms to comprehend what has happened in the past, as well as to understand the present and plan for the future, utilizing geographic concepts.
4. Students will have a basic awareness of human influences on the physical environment.
5. Students will have a basic awareness of factors influencing spatial distribution of population and mobility.
6. Students can recognize and evaluate how geographic ideas are used in everyday life to solve real-world challenges.
7. Students will prepare themselves for professional careers in Geography as well as for various competitive examinations.

Practical: (Field work and Practical)

Outcomes:

1. In course of field methods students acquire a greater understanding of socio-economic and cultural dimensions of populations.
2. Understand the basic concept of sample and sampling.
3. Can undertake sample based primary survey for studying socio-economic issues in real world.
4. Identify the nature and strength of relationship among various parameters of socio-economic development.
5. To know about different types of field techniques.

Sem – 6 (World regional geography-2)

Outcomes:

1. Students will get a better grasp of the importance of geography in community engagement as well as an appreciation for it.
2. Physical geographic processes and the effect of the physical environment on human populations will all be understood by students.
3. Students will be able to conceptualize in spatial terms to comprehend what has happened in the past, as well as to understand the present and plan for the future, utilizing geographic concepts.
4. Students will have a basic awareness of human influences on the physical environment.
5. Students will have a basic awareness of factors influencing spatial distribution of population and mobility.
6. Students can recognize and evaluate how geographic ideas are used in everyday life to solve real-world challenges.

Practical (Field work and Practical)

Outcomes:

1. Recognize the importance of use of data in Geography.
2. To comprehend correlations and regression among spatial temporal data.
3. To know about different types of techniques.

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DEPARTMENT OF GEOGRAPHY

B. A. Geography

PROGRAM OUTCOME

After completing B.A. Programme in Geography, students will be able to

1. **Knowledge outcomes:**
    - **Demonstrate knowledge of physical and cultural features of the earth and locate them on a map.**
    - **Know about the basic disciplines of Geography and its sub branches.**
    - **Know the basic concepts and terminologies used in Geography like interior of the earth, plate tectonic, sea floor spreading, population growth, disasters, composition and structure of atmosphere, hydrosphere, etc.**
    - **Differentiate between minerals and rocks, weather and climate, interior of the earth, basic industries, farming etc.**
    - **Get information about the causes and effects of local, national and international problems like global warming, acid rain, ozone depletion, soil degradation, deforestation etc.**

2. **Skill outcomes:**
    - **Carry out surveying and learn the art of map making and prepare maps for the areas with the help of surveying techniques.**
    - **Gain knowledge of quantitative methods and their ability to use statistical and cartographical methods to solve geographical problems.**
    - **Construct various types of projections and scales as per requirement of the study.**
    - **Collect primary and secondary data in the field.**
    - **Apply various statistical formulas to analyse data.**
    - **Use cartographic techniques with the help of simple software techniques like MS Excel.**
    - **Handle topographical and weather maps and interpret them.**
    - **Identify types of rocks.**
    - **Know about Geographical Information System (GIS) and Remote Sensing (RS)**

PROGRAM SPECIFIC OUTCOME

- Students learn about formation of landforms and identify various landforms around them.

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- Students learn about various economic activities of man and their spatial temporal distribution.
- Students acquire knowledge of basic surveying and map making.
- Students know about disasters, their causes and managing disasters.
- Students come to know about geographical, socio-economic and political background of India.
- Students apply geographical knowledge in their day to day life like being alert about disasters, weather and climate data,

COURSE OUTCOME
FYBA

GEOGRAPHY: Gg-110 : Elements of Geomorphology (G1)

- Students would be acquainting with the utility and application of Geomorphology in different regions and environment.
- Understand the fundamental concepts of the earth.
- Describe the interior structure of the earth and discuss various theories behind the drifting of the continents.
- Name various types of rocks and their sub types also understand their characteristics.
- Classify various types of crustal movements and elaborate their effects on the earth's surface.
- Understand work of denudation agents and their associated landforms and know importance and need to protect them.

SYBA 2013 Pattern

Gg 210 Geography of Disaster Managements (G2)

- Students would be aware of concept of disaster and its relationship with Geography.
- Classify various types of disasters.
- Understand terminology and concepts used in Disaster Management.
- Elaborate structural and non-structural measures used in Disaster Management.
- Discuss causes, effects of disasters and locate areas on the map.
- Differentiate global issues and describe their causes, effects and remedies.
- Name case studies of Indian and global disasters and discuss them.

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GOVT. SHIVALIK COLLEGE NAYA NANGAL

DEPARTMENT OF PHYSICS

PROGRAMME B.Sc. PHYSICS

PROGRAMME CODE -SCIB03PUP

PROGRAMME OUT COME:

Course: Physics

At the completion of B. Sc. in Physics, students are able to:

- Demonstrate a rigorous understanding of the core theories & principles of physics, which includes mechanics, electromagnetism, thermodynamics, & quantum mechanics introduced at degree level in order to understand nature at atomic levels.
- Provide knowledge about material properties and its application for developing technology to ease the problems related to the society.
- Understand the set of physical laws, describing the motion of bodies, under the influence of system of forces.
- Understand the relationship between particles & atom, as well as their creation & decay. Relate the structure of atoms & subatomic particles understand physical properties of molecule the chemical bonds between atom as well as molecular dynamics.
- Analyse the applications of mathematics to the problems in physics & develop suitable mathematical method for such application & for formulation of physical theories.

Programme Specific Outcomes

- Students get acquainted with techniques which are useful in industry.
- Students get conceptual knowledge of entrepreneurships through the co-curricular activities.
- Learn the organizational skills and working in group.
- Students will be well versed with use of computers.

Department of Physics

GOVT. SHIVALIK COLLEGE NAYA NANGAL

DEPARTMENT OF PHYSICS

PROGRAMME B.Sc. PHYSICS

PROGRAMME CODE-SCIB03PUP

COURSE SPECIFIC OUTCOME

B.Sc. 1st Semester

S.NO	COURSE/ CODE	OUTCOME
1.	Mechanics-I SCIB1104T	➢ Application of Newton's laws of motion to solve various problems related to day today life. ➢ To learn motion of bodies and to acquire basic knowledge of mechanics, properties of matter and gravitation. ➢ Understand Collisions in one and two dimensions. ➢ Derive Kepler's laws, Coriolis force and its expressions
2.	Vibration and waves-I SCIB1105T	➢ Understand the concepts of mechanics, acoustics and the properties of matter. ➢ Understand physical characteristics of SHM and obtaining solution of the oscillator using differential equations. ➢ Calculate logarithmic decrement relaxation factor and quality factor of a harmonic oscillator.
3.	Electricity and magnetism-I SCIB1106T	➢ Gain Knowledge on the basic concepts of electric and magnetic fields. ➢ Understand the concept of conductors, dielectrics, inductance and capacitance. ➢ Gain knowledge on the nature of magnetic materials. ➢ Understand the concept of static and time varying fields.
4.	Practical SCIB1107L	➢ Will be able to determine Poisson's ratio for rubber. ➢ Understand the working of energy meter and differentiate between AC and DC currents. ➢ Students establish relation between torque and angular acceleration using flywheel and also improve their calculation ability and graphical skill. ➢ By performing the collision experiment students differentiate between 1-D and 2-D.

B.Sc. 2nd Semester

S.NO	COURSE/ CODE	OUTCOME
1.	Mechanics-II SCIB1204T	➢ Understand the relation between scattering cross section and impact parameter. ➢ Understand the properties of materials. ➢ Identify and apply the laws of mechanics along with the necessary mathematics for solving numerical. ➢ Gain knowledge on Central forces – definition and examples, Conservative nature of central forces, Conservative force as a negative gradient of potential energy, Equation of motion under acentral force.
2.	Vibration and waves-II SCIB1205T	➢ Use Lissajous figures to understand simple harmonic vibrations of same frequency and different frequencies. ➢ Solve wave equation and understand significance of transverse waves. ➢ Solve wave equation of a longitudinal vibration in bars free at one end and also fixed at both the ends. ➢ Gain knowledge on applications of transverse and longitudinal waves.
3.	Electricity and magnetism-II	➢ Understand the basic mathematical concepts related to electromagnetic vector fields. ➢ Apply the principles of electrostatics to the solutions of problems relating to electric

	SCIB1206T	field and electric potential, boundary conditions and electric energy density. ➢ Apply the principles of magneto statics to the solutions of problems relating to magnetic field and magnetic potential, boundary conditions and magnetic energy density. ➢ Understand the concepts related to Faraday‘s law, induced emf and Maxwell‘s equations. ➢ Apply Maxwell‘s equations to solutions of problems relating to transmission lines and uniform plane wave propagation.
4.	Practical SCIB1207L	➢ Students know about how to find acceleration due to gravity by different methods. ➢ Students know about capacitance and also understand the use of capacitor in different equipments. ➢ Students differentiate between logarithmic decrement, co-efficient of damping relaxation time and quality factor.

Department of Physics

GOVT. SHIVALIK COLLEGE NAYA NANGAL

DEPARTMENT OF PHYSICS

PROGRAMME B.Sc. PHYSICS

PROGRAMME CODE-SCIB03PUP

B.Sc. 3rd Semester

S.NO	COURSE/ CODE	OUTCOME
1.	Statistical Physics and Thermodynamics-I SCIB2304	➢ Various thermodynamic laws gives the knowledge of Carnot cycle heat engine also explains the various thermodynamic scale of temperature and knowledge of entropy. ➢ Maxwell's thermodynamic relations and their applications also explains about triple point, Joule-Thomson effect and about blackbody radiation. ➢ Study about M.B, B.E, F.D Statistics and their comparison. ➢ Students understand distribution of n-particle into compartments and cells.
2.	Optics SCIB2305	➢ To develop and understanding of Principles of Optics. ➢ Understand the basic concept of Physical Optics and Wave Optics. ➢ To develop an ability to compute basic quantities in Optics. ➢ Observe principles of optics in daily life
3.	Quantum Mechanics-I SCIB2306	➢ Understand the intuitive ideas of the Quantum physics and Nuclear physics. ➢ Derive Schrodinger time dependent and time independent wave equations. ➢ To understand dual nature of matter. ➢ Gain knowledge on classification of various crystal systems.
4.	Practical SCIB2307	➢ Understand the concept of probability. ➢ Student know that how to use spectrometer to find resolving power and refractive index. ➢ Learn to find plank's constant value. ➢ Students will also learn how to use measuring instruments and minimize errors, compare results with standard results

B.Sc. 4th Semester

S.NO	COURSE/ CODE	OUTCOME
1.	Statistical Physics and Thermodynamics-II SCIB2404	➢ Students study thermodynamic potentials, enthalpy, Helmholtz free energy, Gibb's free energy and phase transitions relating to physical systems. ➢ Students study Maxwell relations and its applications, adiabatic demagnetization and low temperature physics. ➢ Students study Maxwell's law of distribution of velocities, mean free path, transport phenomena and learn to solve the problems. ➢ Students study real gasses and behavior of real gases, Vander Waal's equation of state, Low temperature physics and its related applications.
2.	Lasers SCIB2405	➢ In This course the students would gain the knowledge basic principles. ➢ Studied the various types of lasers, Laser spectroscopy and their applications in science and technology. ➢ To know theory of laser, its basic properties. ➢ To learn about resonators, transient effect, many laser systems and practical use of laser.

3.	Quantum Mechanics-II SCIB2406	➢ To know generalized angular momenta, Electron's magnetic moment, Energy of a magnetic dipole, Stern-Gerlach experiment. ➢ To study Fine structure of hydrogen atoms, atoms in presence of electric and magnetic fields- application of Quantum mechanics for atomic systems. ➢ To learn Many electron atoms, identical particles, Pauli principle.
4.	Practical SCIB2407	➢ Understand how to measure height of an building, mountain by new apparatus sextant. ➢ Know about variation of wavelength with frequency. ➢ Difference between galvanometer and voltmeter. ➢ Develop a basis for future learning and work experience.

Department of Physics

GOVT. SHIVALIK COLLEGE NAYA NANGAL

DEPARTMENT OF PHYSICS

PROGRAMME B.Sc. PHYSICS

PROGRAMME CODE-SCIB03PUP

B.Sc. 5th Semester

S.NO	COURSE/ CODE	OUTCOME
1.	Condensed Matter Physics-I SCIB3504	➢ To learn crystal structure, lattice dynamics. ➢ To understand quantum properties of matter like magnetic property, dielectric property. ➢ To understand elementary band theory. ➢ Superconductivity – one of major breakthrough in modern science. ➢ Studied about SC, BCC, FCC and Reciprocal lattice.
2.	Electronics-I SCIB3505	➢ Knowledge about semiconductors since it is a basic materials used in many electronic components like diode, transistors FET, JFET, MOSFET etc. ➢ Characteristics and working of operational amplifiers which are useful in various medical and scientific investigations to amplify the signals. ➢ Generation of high frequency signals using oscillator circuits and transistors and their types CB,CE,CC etc. ➢ Concepts of regulated power supply, rectifiers, filters and regulator.
3.	Nuclear and Radiation Physics SCIB3506	➢ To learn general properties of nuclei, various nuclear models, radioactivity. ➢ To understand nuclear reactions and interaction of nuclear radiation with matter. ➢ To know about the detectors for nuclear radiations and particle accelerators. ➢ To learn and understand fundamentals of particle physics.
4.	Practical SCIB3507	➢ Clear concept of diodes, transistor, FET. ➢ Understand the concept of half wave and full wave rectifier. ➢ Studied about working of thermistor. ➢ Students will learn to do practical's as an application of what they study in theory.

B.Sc. 6thSemester

S.NO	COURSE/ CODE	OUTCOME
1.	Condensed Matter Physics-II SCIB3604	➢ To study about lattice vibrations, Einstein and Debye model of specific heat. ➢ To learn about free electron, Fermi gas and Fermi energy. ➢ Band theory, Kronig-Penney model, Semi conductors. ➢ Superconductivity and BCS theory.
2.	Electronics-II SCIB3605	➢ Understand about topics Thyristor SCR,TRIAC,DIAC and their difference. ➢ Types, construction, characteristics, uses, advantages of thermistor. ➢ IMPATT and TRAPATT Devices. ➢ Understand about Transistor biasing, amplifier, FET, diodes.
3.	Nuclear and ParticlePhysics SCIB3606	➢ To learn about energy loss, cyclotron, betatron, synchrotron. ➢ To understand ionization chamber, Proportional counter, GM counter, scintillation counter. ➢ To learn about detectors and elementary particles. ➢ Quark model and their qualitative discussion.
4.	Practical SCIB3607	➢ Working of GM counter understand by the student while performing the experiment. ➢ Studied about working of thermistor. ➢ Study about characteristics of transistor. ➢ Students will apply various methods of calculations such as graphical etc.

Department of Physics

GOVERNMENT SHIVALIK COLLEGE NAYA NANGAL

DEPARTMENT OF BOTANY

B.Sc (Botany) Part -1I (semester III)

SR. NO	COURSE CODE	PAPER NAME	COURSE OBJECTIVES	COURSE OUTCOME
1	SCIB2318	DIVERSITY AND SYSTEMATIC OF GYMNOSPERMS	• This course aims to add to understanding of the students about the diversity of plants, their Description, Identification, Nomenclature and their classification including recent advances in the field	• The students will know about the systematic position of Genera, Species and Families. • The students develop knowledge about plant nomenclature
2	SCIB2319	DIVERSITY AND SYSTEMATIC OF ANGIOSPERMS	• This course aims to add to understanding of the students about the diversity of plants, their Description, Identification, Nomenclature and their classification including recent advances in the field.	• The students will know about the systematic position of Genera, Species and Families. • The students develop knowledge about plant nomenclature
3	SCIB2320	Lab	• Microscopic and charts/slides Study of T.S and L.S shoot root leaf and reproductive structures of Gymnosperms and Angiosperms	• Understand the status of plant kingdom • Understand the families emphasizing their morphology, their technical description of

GOVERNMENT SHIVALIK COLLEGE NAYA NANGAL

DEPARTMENT OF BOTANY

B.Sc (Botany) Part -1I (semester IV)

SR. NO	COURSE CFODE	PAPER NAME	COURSE OBJECTIVES	COURSE OUTCOME
1	SCIB2418	PLANT ANATOMY	• The paper contains tissue system, growth and secondary and anomalous secondary growth	• They will be understand the internal organization of plants and comes to know about their modifications and their role in different function
2	SCIB2419	DEVELOPMENT AND REPRODUCTION IN FLOWERING PLANTS	• The paper contains structure and function of reproductive organs and their significance in plant reproduction. Pollination, Fertilization, Embryogenesis,	• Students will able to differentiate • Reproductive organs at • Morphological, Anatomical level • This knowledge will be help to • Apply in Agriculture, • Floriculture and Horticulture for of hybrids
3	SCIB2420	Lab	• Microscopic study of dicot and monocot root, • Shoot, leaves from locally available material • Study of pollen viability • Microscopic study of anomalous secondary growth • To study vegetative propagation • To study structure of ovule and embryo sac • Study of placenta ion, fruit and seed type	• They will be understand the internal organization of plants and comes to know about their modifications and their role in different function

GOVERNMENT SHIVALIK COLLEGE NAYA NANGAL

DEPARTMENT OF BOTANY

B.Sc (Botany) Part -1II (Semester V)

SR NO	COURSE CODE	PAPER NAME	COURSE OBJECTIVES	COURSE OUTCOME
1	SCIB3517	PLANT PHYSIOLOGY	Mechanism and physiology life processes in plants. It focuses on the plant nutrient uptake and translocation, photosynthesis, respiration and fat and nitrogen metabolism.	Students will be able to understand the various physiological life processes in plants They will also gain about the various uptake and transport mechanisms in plants and are able to coordinate the various processes. They understand the role of various hormones, signaling compounds, thermodynamics and enzyme kinetics. During the course students will gain knowledge about various mechanisms such as channel or transport proteins involved in nutrient uptake in plants.
2	SCIB3518	PLANT GROWTH, DEVELOPMENT AND BIOTECHNOLOGY	This course would provide students with an understanding of principles and techniques of plant tissue culture, concepts and methods associated with development and analysis and to provide a contextual and inquiry based learning of modern day advances in the field of recombinant DNA technology	Concepts, tools and techniques related to in vitro propagation of plants. Different methods used for genetic transformation of plants, use of Agro bacterium as a vector for plant transformation, components of a Various case studies related to basic and applied research in plant Sciences using transgenic technology. Principles and methods used for phenotypic, genetic and molecular analysis of transgenic plants
3	SCIB3519	Lab	Determine the DPD by using the potato tuber To determine the rate of photosynthesis of phototropism and geotropism and ascent of sap by eosin method Explanation Micro chemical tests of reducing sugars, fats and proteins in plant tissues Demonstration of necessity of light, CO_2 and chlorophyll for photosynthesisDemonstration of the technique of micro propagation	It assist the students in understanding the physiological processes and learn about the biotechnology technique like recombinant DNA

GOVERNMENT SHIVALIK COLLEGE NAYA NANGAL

DEPARTMENT OF BOTANY

B.Sc (Botany) Part -III (Semester VI)

SR.NO	PAPER	PAPER NAME	COURSE OBJECTIVE	COURSE OUTCOME
1	SCIB3617	PLANT ECOLOGY	This course aims to introduce the concepts and principles of ecology, biological diversity, conservation, sustainable development, population, community and ecosystem structure and function, application of these concepts to solve environmental problems. Environmental and conservation strategies with sustainable management.	They will understand the factors leading to Environmental degradation, their reasons and their impact on the Environment. This knowledge can help to form strategies for conservation and sustainable management under the given legislative measures.
2	SCIB3618	PLANT UTILITY	This course aims to introduce the various types of plant products such as fibers, food, medicinal, beverages and narcotics, their cultivation practices and uses	They understand the pattern origin, diversification and cultivation of plants in nature. They are able to design the strategies for conservation of these natural r resources
3	SCIB3619	Lab	Plot of quadrrats to study of grasslands Estimation of bulk Density, porosity, moisture content and water holding capacity Estimation of pH, temperature, DO in water Study of cotton flower, Section cutting of mustard ground nut, Micro chemical test Field visit to study timber yielding, bamboos, medicinal plants	Understand the pattern of origin, diversification and cultivation of plants in nature Able to design the strategies for conservation of these natural resources

Govt. Shivalik College, Naya Nangal

DEPARTMENT OF CHEMISTRY

The Outcomes of UG Course, B. Sc. in Chemistry

At the completion of B.Sc. in Chemistry the students are able to:

After completion of degree, students gained the theoretical as well as practical knowledge of handling chemicals. Also they expand the knowledge available opportunities related to chemistry in the government services through public service commission particularly in the field of food safety, health inspector, pharmacist etc. Afford a broad foundation in chemistry that stresses scientific reasoning and analytical problem solving with a molecular perspective. Achieve the skills required to succeed in graduate school, professional school and the chemical industry like cement industries, agro product, Paint industries, Rubber industries, Petrochemical industries, Food processing industries, Fertilizer industries etc. Got exposures of a breadth of experimental techniques using modern instrumentation. Understand the importance of the elements in the periodic table including their physical and chemical nature and role in the daily life.

- ***To achieve the skills required to succeed in graduate school, professional school and the chemical industry like cement industries, agro product, Paint industries, Rubber industries, Petrochemical industries, Food processing industries, Fertilizer industries etc.***
- ***To understand the concept of chemistry to inter relate and interact to the other subject like mathematics, physics, biological science etc.***
- ***To learn the laboratory skills and safely to transfer and interpret knowledge entirely in the working environment.***

Deptt. Of Chemistry :

GOVERNMENT SHIVALIK COLLEGE NAYA NANGAL

DEPARTMENT OF BOTANY

B.Sc (Botany) Part -1 (semester I)

SR NO	Course code	PAPER	COURSE OBJECTIVES	COURSE OUTCOME
1	SCIB1117T	DIVERSITY OF MICROBES	This course aims to increase the understanding of the students about the diversity of lower plants, their classification, structure and growth.	The students will develop understanding about the diversity, identification, classification, life cycles and economic importance of lower plants.
2	SCIB1118T	DIVERSITY OF CRYPTOGAMS	The course focuses on morphology, anatomy, reproduction and life cycles and economic importance and bryophytes and pteriodophytes.	The students develop the basic understanding of important characteristics, anatomy, reproduction and along with economic importance of these groups
3	SCIB1119L	LAB	Gram staining of bacteria Study of bacterial disease w.r.t. Causal organisms and symptoms Study of viral disease w.r.t. Cause organisms and symptoms Study of algae, fungi, bryophytes and pteriodophyte	The students will develop understanding about the diversity, identification, classification, life cycles and economic and importance of lower plants.

GOVERNMENT SHIVALIK COLLEGE NAYA NANGAL

DEPARTMENT OF BOTANY

B.Sc (Botany) Part -1 (semester II)

SR NO	Course code	PAPER	COURSE OBJECTIVES	COURSE OUTCOME
1	SCIB1217T	CELL BIOLOGY	The objective of the present course content is to provide a foundation and background in cellular entities of plants, cell structure and its organelles in relation to functions, Chromosome organization, morphology, alteration	About the cellular entities including infective particles comprised the observations which challenge the established dogmas, such as, cell being the basic unit of life or higher plants are multicellular rather than cellular, and current state of knowledge about the plant cell structure and their turn over, starting from cell wall to chromatin, in relation to their functions. Students will understand the role of plasma membrane in microbes and plants Student will focus on various components of the eukaryotic nuclear and organelle genome, with special reference to plastids and mitochondria
2	SCIB1218T	GENETICS AND EVOLUTION	The paper deals with Mendelian and non-Mendelian inheritance, quantitative genetics, molecular markers and linkage mapping, prokaryotic and eukaryotic genome-structure, gene function and regulation, cytogenetic and crop evolution.	They understand the pattern of inheritance in various life forms. They develop a strong fundaments basics for further molecular studies
3	SCIB1219L	Lab	To gain knowledge about 'cell science' Understand the cell organelles Understand the biochemical nature of nucleic acids, experimental evidence to prove DNA as a genetic material	Learn the scope and importance and their role in living system cell and biology and genetics

Government Shivalik College, NayaNangal

Department of Sociology

PROGRAM OUTCOME 2021-22 ARTB03PUP

PROGRAM OUTCOME

Sociology learning provides initial knowledge about society, social life and social interactions. It prepares an individual to social life by inculcating values, morals, and manners. It gives knowledge about communities in which he interacts like rural and urban communities.

PROGRAMME SPECIFIC OUTCOMES:

Sociology seeks to understand all aspects of human social behavior, including the behavior of individuals as well as the social dynamics of small groups, large organizations, communities, institutions, and entire societies. Sociologists are typically motivated both by the desire to better understand the principles of social life and by the conviction that understanding these principles may aid in the formulation of enlightened and effective social policy. Sociology provides an intellectual background for students considering careers in the professions or business. A general Arts Graduate and Honours student of Sociology should able to develop.

- **Critical Thinking:** The programme seeks to develop in students the sociological knowledge and skills that will enable them to think critically and imaginatively about society and social issues.
- **Sociological Understanding:** The ability to demonstrate sociological understandings of phenomena, for example, how individual biographies are shaped by social structures, social institutions, cultural practices, and multiple axes of difference and inequality.
- **Written and Oral Communication:** The ability to formulate effective and convincing written and oral arguments. Develop communication skills and Social interaction power.
- **Better Understanding Of Real Life Situation:** The ability to apply sociological concepts and theories to the real world and ultimately their everyday lives.
- **Analytical Thinking:** Analytical thinking is developed with qualitative and quantitative analytical skills are enhanced.
- **Observation Power:** A sensible observation power is necessary to identify the research problems in field study. So a perception about human society slowly grows up.
- **Ethical and Social Responsibility:** Students have to learn about institutions, folkways, mores, culture, social control, social inequality, population composition, population policy, society and culture of India. All these help to communicate among the students of sociology a sense of ethical and social responsibility.
- **Professional and Career Opportunities:** Students will have the opportunity to join professional careers in Sociology and allied fields. Sociology provides an intellectual background for students considering careers in business, social services, public policy, and government service. Nongovernmental organizations (NGOs), foundations, or academia. This programme lays foundation for further study in Sociology, Social work, Women Studies, Rural Development, Social Welfare and in other allied subjects.

Government Shivalik College, NayaNangal

Department of Sociology.

Course objectives and Outcomes 2021-22

BACHELOR OF ARTS- Ist YEAR

SEMESTER - I		
Paper	**Objectives**	**Outcome**
Fundamentals of Sociology - I ARTB1107T	After studying the paper, the student can Get to know the convergence and divergence of Sociology with other social science disciplines in terms of the subject matter, nature and scope of the discipline and its approach. Develop knowledge about its historicity. Can get acquainted with the basic concepts used in the subject. Course will provide basic understanding of the social structure of Society, the process of socialization, culture and civilization.	The course is intended to introduce the students to a sociological way of thinking. It provides an understanding of the discipline of Sociology and sociological perspective. It also provides foundation for other more detailed and specialized courses in sociology Students understood discipline and basic concept in sociology, process and factors of socialization and social structure.
SEMESTER – II		
Paper	**Objectives**	**Outcome**
Fundamentals of Sociology - II ARTB1207T	Can generate ideas about the social processes and social institutions man encounters as a member of the society, To familiarize students with the differentsocial processes. To Provide basic understanding of the social groups of Society. To make them understand about various social institutions, religion, social control and to introduce them to the concept of social deviance.	Sociology seeks to understand all aspects of human social life the social dynamics of small groups, large organizations, communities, institutions, and entire societies Students understood the discipline, social processes, social institutions, religion, social control and social deviance in sociology.

Government Shivalik College, NayaNangal

Department of Sociology.

Course objectives and Outcomes 2021-22

BACHELOR OF ARTS-2nd YEAR

SEMESTER – III

Paper	Objectives	Outcome
SOCIAL STRUCTURE OF INDIAN SOCIETY. ARTB 1307T	Get an impression about the basic composition of Indian society, its historical moorings, basic philosophical foundations of the society and the institutions. Learn about the changing institutions, the processes, the agents and the interventions that bring about change in the Indian society. To familiarize the student to the stratification in India. Its theories. To Enable them to acquire sociological understanding of caste and class in India. To empower them to deal with the knowledge of gender and family in India. Gender discrimination and urban and rural organisation in Indian society.	The aim of this course is to make the students learn about basic institutions of Indian society. Students learned more about other Basic Institutions of Indian Society like Religion -Hindu, Muslim, and Christian, caste, Class and changing dimension. Explored substantive basic institutions of Indian society like Family, Kinship, Marriage-Hindu, Muslim, Christian and changing dimension, stratification in society, caste and class in India. Gender studies and rural urban structure in Indian social structure..

SEMESTER- IV		
Paper	**Objectives**	**Outcome**
SOCIAL CHANGE IN INDIA ARTB 1407T	To familiarize the students with the Social Change, like evolution, progress, development and revolution. To make them understand the factors of social change, various processes of social change like Sanskritization, westernization, secularization globalisation and modernisation. To Understand the planned social changes like ICDS, MNREGA, swaranjayanti gram swarojgar yojana and Panchayati Raj Institution.	After the completion of course students are able to understand Social Change and processes of social change. Students are familiarized with planned social changes like ICDS, MNREGA, swaranjayanti gram swarojgar yojana and Panchayati Raj Institution.

Government Shivalik College, NayaNangal

Department of Sociology.

Course objectives and Outcomes 2021-22

BACHELOR OF ARTS-3rd YEAR

SEMESTER V Paper	Objectives	Outcome
SOCIOLOGICAL THOUGHT ARTB1507T	This course provides an understanding of the different sociological thinkers and the students will be able to learn about Auguste Comte and his contributions in sociology. . Herbert Spencer and his organic analogy, Karl Marx's materialistic concept of history. Max Weber's social action, ideal types and the concept of authority. Emile Durkheim's social facts, division of labour, and suicide. Mahatma Gandhi's concept of non violence satyagrah, swaraj and sarvodya.	Understood the founding father of sociology like Auguste Comte and his different contributions on thoughts like law of three stages, social statics, social dynamics, cybernetic hierarchy of sciences, positivism. Herbert Spencer different contributions on sociological thought like biological Analogy, Evolutionism, social types, simple and compound, militant and industrial, non-intervention and survival of fittest. Karl Marx contributions infrastructure and superstructure, historical materialism, class conflict, alienation Learned about Emile Durkheim different thoughts on sociology like social facts, division of labor, suicide. Max Weber's social action, ideal types, power and authority for the development of sociology as an independent science

SEMESTER VI Paper	Objectives	Outcome
SOCIAL SCIENCE RESEARCH METHODS ARTB1607T	The course aims to provide knowledge on sociological research and student will able to understand meaning, objectives and steps in social research processes. Students will demonstrate knowledge of scientific method, its definition and characteristics, hypothesis, techniques of data collection, sampling, and analysis of data. To make them understand about uses of statistics, and measures of central tendency.	After the completion of course students are able to understand meaning, scope, types and significance of Social Research, its scientific methods and the research processes. - Understand conceptualization and formulation of hypothesis, role of theory and fact, problems in formulation of hypothesis, type and characteristics of hypothesis, testing of hypothesis - Learn the Importance of research design in Social Research and how to formulate it. - Know how to collect, analyze data, presentation and interpretation of data also able to write a qualitative and quantitative field report writing with different statistical analysis, classification and tabulation of data.

Govt Shivalik College, Naya Nangal			
Course Outcome (Session 2021-2022)			
Punjabi Department			
Sr No	Class	Course	Outcome
1.	B Com 3rd Sem 5th	Novel Eho Hamara Jeevna + Nav Vakansh and Kriya Vakansh + Sahitik Vishleshan	Student will learn from this novel about condition of women in society Novel helps the students to identify Plot, Character, theme significance of the period, Background history, meaning of Novel, relate to real life and other novels + Nav and kriya Vakansh tells about expression that use in phrase.
2.	B Com 3rd Sem 6th	Nibanah Sangreh Lokdhara di Bhoomika + Vaak+ Upvaak + Translation English to Punjabi	It helps students study about our culture, customs, Traditions, Folk, Dress, Dance, Song etc and Translation helps students to increase their vocabulary, Grammar and Different meanings

Govt Shivalik College, Naya Nangal			
Course Outcome (Session 2021-2022)			
Punjabi Department			
Sr No	Class	Course	Outcome
1.	B Sc 2nd Sem 3rd	Novel Khetaan da Rudan + Lok Chikitsa Lok Vishwas, Taveet Toona, Hath Hola Mano Vigyaan + Punjabi Bhasha + Gurmukhi lipi da itihas + Arthography, Punjabi Dhuni Vyont	From this Novel Students learn about Poor condition of Village farmer. Novel helps the students to identify Plot, language, significance History, background of the theme + History of Gurmukhi lipi It origin Punjabi Dhuni, Vyont tells the students that How to dhuni/voice come from throat in different way
2.	B Sc 2nd Sem 4th	Vigyaan Vaartak di Kitab Ugg Pataal + Gurmukhi font, Font Converter, Unicode Parnaali + Sabad Shreniyan+ Gurmukhi Vyakran	This vaartak tells the students about science and universe and galaxy and under earth its origin and Men. Punjabi computer font helps students that how to type in Punjabi and how to change font and font size in gurmukhi and gurbaani viaakaran tells about shabads in gurbaani

Govt Shivalik College, Naya Nangal			
Course Outcome (Session 2021-2022)			
Punjabi Department			
Sr No	Class	Course	Outcome
1.	BA 2nd Sem 3rd	Novel, Rohi Beeavaan, Punjabi Patarkari, Punjabi Bhasha + Gurmukhi Arthography + Punjabi Dhuni vyont	From this novel student will learn about poor village family their kids and farmers Novel helps the students to identify Plot, Character, theme significance of the period, Background history, meaning of Novel, relate to real life and other novels + Punjabi Bhasha's History. Namkarn significance, writing and its varnmala
2	BA 2nd Sem 4th	Kav Sangreh, Kav Lehraan, Punjabi Computer, Sikhlaai, Gurmukhi Font, Font Converter, Unicode Parnaali, Gurbani Vyakran, Sabad Shrenia	From this poetry best student will learn about different types of poets and this ideas and imagines and themes Reading of poetry helps students about voice, pitch, volume and speech patterns It provides freedom of expressions + Punjabi Computer font helps students that how to type in Punjabi and how to change font and size in Gurmukhi + Pure Punjabi Sabad in Gurbani and study about Nave, Parnave ling, Vachan, visheshan

PROGRAM OUTCOME for PG Diploma of Computer Applications

PO1: It will equip the students with skills required for designing, developing applications in Information Technology.

PO2: Students will able to learn the latest trends in various subjects of computers & information technology.

PO3:The PG Diploma is aimed at graduates with a computing background and provides a detailed coverage of the key concepts and challenges in data and resource protection and computer software security.

PO4: To give hands on to students while developing real life IT application as part of the study.

PO5: To train graduate students in basic computer technology concepts and information technology applications. PO6: Design and develop applications to analyze and solve all computer science related problems.

Course Outcome of PGDCA(2021-22)

PGDCA-101 Fundamental of Information Technology :-

- Describes the computer and its general features
- Understand basic concepts and terminology of information technology
- Will be to able express basic computer hardwares
- Distinguish computer types and basic copcepts
- Know and use different number systems and the basics of programming.
- Have a basic understanding of personal computers and their operations
- Be able to identify issues related to information security.

PGDCA-102 Operating Systems

1. Students will learn how Operating System is Important for Computer System.
2. To make aware of different types of Operating System and their services.
3. To learn different process scheduling algorithms and synchronization techniques
4. To achieve better performance of a computer system.
5. To know virtual memory concepts.
6. To learn secondary memory management .
7. Understands the different services provided by Operating System at different level. They learn real life applications of Operating System in every field.
8. Understands the use of different process scheduling algorithm and synchronization techniques to.

Course code: PGDCA-103 Programming with C language

- Develop a C program
- Control the sequence of the program and give logical outputs
- Implement strings in C program
- Store different data types in the same memory
- Manage I/O operations in your C program
- Repeat the sequence of instructions and points for a memory location
- Apply code reusability with functions and pointers

Course code : PGDCA-104 Lab OAS

- to perform documentation
- to perform accounting operations
- to perform presentation skills

Course code : Pgdca-105 c language practical

- Understanding a functional hierarchical code organization.
- Ability to define and manage data structures based on problem subject domain.
- Ability to work with textual information, characters and strings.
- Ability to work with arrays of complex objects.

PGDCA-203 C++

- Describe OOPs concepts
- Use functions and pointers in your C++ program
- Understand tokens, expressions, and control structures
- Explain arrays and strings and create programs using them
- Describe and use constructors and destructors
- Understand and employ file management
- Demonstrate how to control errors with exception handling.

Course code: PGDCA-201 DBMS

Sem-II

- Understand the basic principles of database management systems.
- Draw Entity-Relationship diagrams to represent simple database application
- scenarios
- Discuss normalization techniques with simple examples.
- Describe transaction processing and concurrency control concepts.\
- creating relational database, analysis of table design.

PGDCA-202 Introduction to Computer Network, Internet & E-commerce

1 To provide students with an overview of the concepts and fundamentals of data communication and computer networks

2. To familiarize with the basic taxonomy and terminology of computer networking area.

3 To provide adequate knowledge and understanding about Internet, Web browsers, search engines, E-commerce Technology, Business models and Electronic payment System.

Course code: PGDCA- 204 **DBMS Lab**

- Understanding a concept of object thinking within the framework of functional model.
- Understanding a concept of functional hierarchical code organization.
- Understanding a defensive programming concept. Ability to handle possible errors during
- program execution

course Code: PGDCA-203 C++ Programming lab

- Describe OOPs concepts
- Use functions and pointers in your C++ program
- Understand tokens, expressions, and control structures
- Explain arrays and strings and create programs using them
- Describe and use constructors and destructors
- Understand and employ file management