OFFICE OF THE HEAD
DEPARTMENT OF ZOOLOGY
Government Degree College Thannamandi Rajouri
(NAAC Accredited Grade C)
email:-zoologygdctm@gmail.com

PROGRAMME/COURSE OUTCOMES OF ZOOLOGY 2021-22

PO1 - Students gain knowledge and skill in the fundamentals of animal sciences, understands the complex interactions among various living organisms.

PO2 – Analyse complex interactions among the various animals of different phyla, their distribution and their relationship with the environment.

PO3 – Apply the knowledge of internal structure of cell, its functions in control of various metabolic functions of organisms.

PO4 – Understands the complex evolutionary processes and behaviour of animals.

PO5 – Correlates the physiological processes of animals and relationship of organ systems.

PO6 – Understanding of environmental conservation processes and its importance, pollution control and biodiversity and protection of endangered species.

PO7 – Gain knowledge of small scale industries like sericulture, fish farming, bee keeping, aquaculture, animal husbandry, poultry farm.

PO8 – Understands about various concepts of genetics and its importance in human health.

PO9 - Apply ethical principles and commit to professional ethics and responsibilities in delivering his duties.

PO10 – Apply the knowledge and understanding of Zoology to one's own life and work.

PO11 – Develops empathy and love towards the animals

SNO	PROGRAM SPECIFIC COURSE	OUTCOMES
1	**Core Course No. : UZOTC 101** **Core Course Title: ANIMAL DIVERSITY** **CREDITS : 4**	Student are able to understand the fundamental principles of systematic in which the animals are how to classify according to their characters and what are the theories which have to followed for classification is studied. International rules of nomenclature and classification is studied. Different groups of invertebrate animals are studied in this course including Protozoa, Porifera, coelenterate, Plathyhelminthes, Aschelminthes, Annelida, Arthropoda, Mollusca and Echinodermata. General characters and classification upto order are studied. Some special features, organs, pathogenecity, life history and significance are studied here.
2	**Core Course No. : UZOTC 201** **Core Course Title comparative anatomy and developmental biology of vertebrates** **CREDITS : 4**	In this segment we teaches about the comparative structures of heart, aortic arches, kidney, balancing organ, hearing organ, thyroid, respiratory organs, brain of different animals which give them a definite idea not only the structure but also the structural development of that organ and how they become modified according to their need and environment. In this part we teach about differentiation and organization of cells and maintenance of tissues. It helps to get a better idea about their structure and function. CO9 Study of different dye and stains help the student to get a practical knowledge of handling the tissues for microtomy studies. It helps them for laboratory preparations and expertise in laboratory techniques.
3	**Core Course No. : UZOTC 301** **Core Course Title: PHYSIOLOGY AND BIOCHEMISTRY** **CREDITS : 4**	Students gain fundamental knowledge of animal physiology Seeks to understand the mechanisms that work to keep the animal body alive and functioning. Interactions and interdependence of physiological and biochemical processes. Students are taught the detailed concepts of digestion, respiration, excretion, the functioning of nerves and muscles, cardiovascular system, endocrine system and reproductive system. Physiological and biochemical understanding through scientific enquiry into the nature of mechanical, physical, and

		biochemical functions of animals, their organs, and the cells of which they are composed. Students learn the concepts of endocrine systems and homeostasis..
4	**Skill Enhancement Course (S.E.C.) No.:UZOTS - 303** **Skill Enhancement Course (S.E.C.) Title: APICULTURE** **CREDITS : 4**	This course enables the students for entrepreneurship in the field of apiculture. Students have the better understanding of rearing of honey bees and extraction of honey which inculcates in them the idea of starting a small scale honey bee culture farm thereby making them financially independent .
5	**Core Course No. : UZOTC- 401** **Core Course Title : Principles of Genetics and Evolutionary Biology** **Credits : 4**	Division aspects of basic unit of life i.e. cell. Mendelian and non-mendelian inheritance. Understanding of basic concepts of genetics and laws of inheritance. Concept behind genetic disorder, gene mutations- various causes associated with inborn errors of metabolism. Theories of evolution and knowledge of evolution of species Knowledge about eras and population genetics.
6	**SkillEnhancement Course No.: UZOTS -403** **Skill Enhancement Course Title: AQUARIUM FISH KEEPING** **CREDITS : 4**	This course makes the students to establish their own fish ponds and start fish culture at their respective areas keeping in view the native fishes relished in the area in order to meet the demand of the consumers as well as meeting their own financial independence. In this course they study the various aspects of aquatic fish rearing.
7	**Discipline Specific Elective Course No. UZOTE - 501** **Discipline Specific Elective Course Title: APPLIED ZOOLOGY** **CREDITS : 4**	Parasitology and the various aspects related to it Animal biotechnology which includes artificial insemination, cloning, embryo transfer technique etc. Understanding about different breeds of dairy and poultry and their management which again gives a partial idea to the student to establish their own dairy and poultry farms thereby encouraging financial independence among them. Understanding the aquaculture techniques.
8	**Skill Enhancement Course No. UZOTS- 503** **Skill Enhancement Course Title: PUBLIC HEALTH AND HYGIENE** **CREDITS : 4**	understanding significance and goals of public health and hygiene. Aspects of nutrition and balanced diet and the effects of the same. Understanding malnutrition Introduction to National Health Policy, National Rural Health Mission (NRHM) and National Urban Health Mission (NUHM)

		Environmental degradation and Pollution: Development & Environmental issues Personal and mental hygiene Addictions and their impact. Life style related non-communicable diseases, their causes and prevention through dietary and lifestyle modifications Mental and social health probles All meant to cub the problems of adolscents and adults related to physical, mental and social well being of any individual.
9	**Discipline Specific Elective Course No. UZOTE-601** **Discipline Specific Elective Course Title: INSECT VECTORS AND DISEASES** **CREDITS : 4**	Morphology of insects and the effects of their population on humans Understanding the vectors and different diseases caused by them in order to deal with any sort of epidemic, endemic or pandemic. Understanding various diseases caused by the insect vectors their life cycle etc. Various stratergies placed in time by some countries to deal with the emerging diseases where insect act as vectors.
10	**Skill Enhancement Course No. UZOTS- 603** **Skill Enhancement Course Title: SERICULTURE** **CREDITS : 4**	Skill course for understanding the life cycle and rearing of the silk worm

RAHEELA MUSHTAQ
HEAD
DEPARTMENT OF ZOOLOGY

Government Degree College Thannamandi

Department of Arabic

Programme/Course Outcomes

SESSION 2021-22

Semester: I

Course Title: Arabic Text & Grammar (CORE COURSE)

Course Outcomes:

The outcomes of this paper is that the students will be able to understand literary works of the language in its right perspective.This paper is aimed at introducing the students to the Arabic language. They would be taught selected texts of the language so that they can enrich themselves with good vocabulary and expressions and develop their speaking, reading, and writing skills .Grammar is an essential part of every language ,the main objective of this paper is to provide a strong base of learning Arabic language.

Semester: II

Course Title: Arabic Text / Grammar/Translation . (Under CBCS Scheme)

Course Outcomes :

The outcomes of this paper is to give students the necessary skillsin reading and using both classical and modern Arabic . This paper is aimed at introducing the students to the Arabic language. They would be taught selected texts of the language so that they can enrich themselves with good vocabulary and expressions and develop their speaking, reading, and writing skills .Grammar is an essential part of every language ,the main objective of this paper is to provide a strong base of learning Arabic language.It will help them to correctly read, write and speak the language.

Semester: III

Course Title: Arabic Text/ Poetry/Grammar/Translation & Quranic Portion.(Core Course)

Course Outcomes :

The outcomes of this paper is that the students will be able to understand modern Arabic culture by studying major Arabic literacy and artistic productions e.g Novels short stories , poetry and music etc.This paper is aimed at introducing the students to the Arabic language. They would be taught selected texts of the language so that they can enrich themselves with good vocabulary and expressions and develop their speaking, reading, and writing skills .Grammar is an essential part of every language ,the main objective of this paper is to provide a strong base of learning Arabic language.The learning outcomes and its learning goals are that the students will be able to understand, speak and write in Arabic at basic level.

Semester: IV

Course Title: Arabic Text/Grammar/History of Arabic Literature & Alhadees. (Core Course CBCS)

Course Outcomes:

This paper is aimed at introducing the students to the Arabic language. They would be taught selected texts of the language so that they can enrich themselves with good vocabulary and expressions and develop their speaking, reading, and writing skills .Grammar is an essential part of every language ,the main objective of this paper is to provide a strong base of learning Arabic language.It also aimed at introducing the students to the major historical developments in the field of Arabic language and literature from pre Islamic period to the Modern period .And to teach students the history of Arabic literature and development of sera and of the hadith.

Semester: V

Course Title: Arabic Text / Grammar. (Discipline Specific Elective :DSE)

Course Outcomes:

The outcomes of this paper This paper is aimed at introducing the students to the Arabic language. They would be taught selected texts of the language so that they can enrich themselves with good vocabulary and expressions and develop their speaking, reading, and writing skills .Grammar is an essential part of every language ,the main objective of this paper is to provide a strong base of learning Arabic language. The learning outcomes

and its learning goals are that the to give students the necessary skills in reading ,writing and using both classical and modern Arabic.

Semester: VI

Course Title: Arabic Text / AlQuran/ AlHadees/ Translation & History of Arabic litrarature. (Discipline Specific Elective : DSE)

Course Outcomes:

The learning outcomes and learning goals of this paper is the students will be able to understand ,speak and write in Arabic at basic level . And the students will becomes familiar with major concerns and challenges in Arabic society and identify how these issues impact modern Arabs.This paper is aimed at introducing the students to the Arabic language. They would be taught selected texts of the language so that they can enrich themselves with good vocabulary and expressions and develop their speaking, reading, and writing skills .Grammar is an essential part of every language ,the main objective of this paper is to provide a strong base of learning Arabic language.Moreover to teach students the basic techniques and responsibilities of acadamics,how to negotiate and evaluate arguments through writing and speaking exercises.To enable students to read the Quran and Quranic commentary (Tafseer) so that they understand how its teaching and educate conscience and behavior.

Head Department of Arabic

Government Degree College Thannamandi

Department of Islamic Studies

Programme/Course Outcomes

Semester: I

Course Title: Islamic Civilization till the Fall of Umayyads (Core)

Course Outcomes:

The objective of the course is to have preliminary knowledge of Islamic doctrine and worship (Ibadah) as propounded in the teachings of Islam and Prophet Muhammad including his role in establishing a welfare society at Madinah. The course also introduces the political and social developments of Umayyad period. The course forms a study of the early development of Islamic civilization.

Semester: II

Course Title: Islamic Ethics (Core)

Course Outcomes:

The objective of the course is to aware the students about the concept of Ethics, Morality, Ethics of Disagreement, Duties towards Parents, Teachers, Neighbors, Relatives etc.

Semester: III

Course Title: Islamic Civilization under Abbasids and Muslim Spain (Core)

Course Outcomes:

The course aims at the study of Islamic civilization in terms of polity, society, education and sciences under the Abbasids and in Muslim Spain. It will also acquaint the students with the rich intellectual, scientific and architectural heritage of Islam that had an impact on the West as well.

Semester: III

Course Title: Islamic Art and Architecture (SEC)

Course Outcomes:

The course is meant to know the concept and developments in Art and Architecture during the Caliphates of Umayyads, Abbasids, Mughals, Ottomans etc.

Semester: IV

Course Title: Uloom al Quran, Hadith, Fiqh, Kalam and Tasawwuf (Core)

Course Outcomes:

The course aims at the introductory study of religious sciences of Islam- the Qur'an, Hadith Fiqh, Kalam and Tasawwuf in order to know the fundamental significance of Divine knowledge in human life and method of approaching them through the study of principles (Usool) of these sciences.

Semester: IV

Course Title: Islamic Religious Science and Tasawwuf (SEC)

Course Outcomes:

The course aims at the introductory study of religious sciences of Islam- the Qur'an and its sciences, Hadith and its sciences and Fiqh and its sciences in order to know the fundamental significance of Divine knowledge in human life and method of approaching them through the study of principles (Usool) of these sciences.

Semester: V

Course Title: Islam in the Modern World (DSE)

Course Outcomes:

The course aims at the introductory study of Islamic Reformist Movements launches by different Muslim Reformists in the Muslim World including both Arab and Non-Arab Countries like Saudi Arabia, Egypt, India, Afghanistan Iran and Turkey. It also dealt with the Life and Contribution of Muslim Reformists in general and Indian Muslim Reformists in particular.

Semester: V

Course Title: Islam in the Modern World (SEC)

Course Outcomes:

The course is meant to know the concept and developments Art and Architecture, Islamic Heritage of different Muslims dynasties like Shahs of Iran, Ottomans of Turkey and Mughal Emperors in India. It also highlights the over-all Muslim Heritage.

Semester: V

Course Title: Muslim Contribution (Generic)

Course Outcomes:

The course aims at the introductory study of Muslim Contribution in the field of Mathematics, Physics, Medical Science, History, Archeology, Sociology, Anthropology, Economics, Calligraphy, Wood Carving, poetry etc. It also highlights the contribution of prominent Muslim Social scientists of Muslim World.

Semester: VI

Course Title: Islamic civilization and Institutions (DSE)

Course Outcomes:

The course is meant to attain the knowledge of Islamic Belief System ('Aqai'd) like Tawhid, Risalah and Aakhirah, Islamic Social Institutions, Islamic Educational, Economic and Political System and the concepts related to these systems.

Semester: VI

Course Title: Islamic Civilization and Institutions (SEC)

Course Outcomes:

The course aims at the study of Muslim Contribution in the field of Architecture, Calligraphy, Metal Work Physics, Philosophy, Economic, Psychotherapy etc. It also highlights the concept of Human Rights in Islam.

Semester: VI

Course Title: Islamic Civilization and Institutions (Generic)

Course Outcomes:

The course is meant to know the concept of Human Rights in Islam like Justice Liberty, Equality, Tolerance etc. It also dealt with the concept of Peace, Brotherhood and status of women in Islam.

Head-Department of Islamic Studies

Government Degree College Thannamandi

Department of Political Science

Programme/Course Outcomes

Semester: I

Course Title: INTRODUCTION TO POLITICAL SCIENCE

Course Outcomes:

The objective of the course aims to impart knowledge about the fundamentals of political science.It intends to introduce the learners with the subject matter of the discipline ranging from substance to methodology.This course is designed to introduce the learners with the institution of state, the philosophies that shaped it,instrument and bases of its authority and its relations with individuals.It enables the learners to develop understanding about the subject matter of discipline by approaching it through various traditional and modern approaches.

Semester: II

Course Title: INDIAN GOVERNMENT AND POLITICS

Course Outcomes:

The objective of the course is to aware the students about Indian constitution and its evolution.This course is designed to introduce the learners with institution of Government and its structure and functions.It enables the learners to develop an understanding of major political issues in India.

Semester: III

Course Title: WETERN POLITICAL THOUGHT

Course Outcomes:

The course aims to impart knowledge about the western political thought of Plato,Aristotle,Machiavelli,John stuart Mill.The course is designed to introduce the learners about the core political philosophies of these thinkers like Justice ,Liberty,,concept of State.

Semester: IV

Course Title: COMPARATIVE POLITICS

Course Outcomes:

The course aims to introduce a a comprehensive study of comparative politics.It enables the learners to develop understanding about the subject matter of discipline by approaching it through various approaches.This course is designed to introduce the learners with the political dynamics and emerging issues in Comparative .

Semester: V

Course Title: INTERNATIONAL POLITICS

Course Outcomes:

This course aims to impart knowledge about the fundamentals of International Politics.It intends to introduce the learners with the subject matter of the discipline..This course is designed to introduce the learners with the meaning of International Politics and its key concepts.It enables the learners to develop understanding about the subject matter of discipline by approaching it through various approaches and management of power in international politics.

Semester: VI

Course Title: Government and Politics in Jammu and Kashmir

Course Outcomes:

The objective of the course is toaware the students about the historical background of Jammu and Kashmir.Itintends to introduce the learners with the subject matter of the constitutional structure and Governmental structure of the state with the analysis of political parties and their changing nature in the politics of Jammu and Kashmir.

Shazia Aftab

Head Department of Political Science

Government Degree College Thannamandi
Department Of Computer Applications
Programme /Course
Session(2021-2022)

Introduction	
Programme Outcome	Learners will establish themselves as technically proficient human resource and enable them to solve real world problems using the knowledge of computer science. It will also develop the sense of team work, critical thinking and problem solving skills among the learners and makes them employable in the area of computer science and IT.
Programme Specific Outcome	• Preparing learners for a career in an IT oriented business or industry. • Preparing learners for further study in computer science & IT. • Enables them to understand, analyze and develop small computer programs for efficient design of computer- based systems.
Semester:1 **Course Title: Fundamental of computer IT Tools** **Course Outcomes**	
Courses	Outcome
Fundamentalsof Computers/IT	• Makes learners understand the basics of computers like hardware, software, input & output devices and memories. • Ability to understand different operating systems, applications programs and their use. • Ability to comprehend the different number systems and data information concepts.
MS-Office	Introduces learners with word processing,worksheets, presentation graphics and basics of RDBMS.

Semester:2 **Course Title: Problem solving Using C-language** **Course Outcomes**	
Programming with C/C++	• Introduces basic programming constructs of C/C++. • Introduces learners with basics of Object Oriented Programming using C++.
Data Structures	• Introduces learners with conceptual background of elementary and some advanced Data Structures. • Introduces basic searching and sorting techniques.

Semester:3 **Course Title: Object oriented programming using c++** **Course Outcomes**	
Programming with c++	• Introduces basic programming constructs of C/C++. • Introduces learners with basics of Object Oriented Programming using C++.
Implementation of OOP concepts in c++	• Introduction to class,Member of class-Data members,Introduction to array, constructors and types,string,pointers,Inheritance.

Semester:4 Course Title: Database management system and SQL Course Outcomes	
DBMS	• Provides learners with knowledge of Database concepts, data model, Relational Algebra. • Knowledge of basic SQL queries.
SQL	• Knowledge of basic SQL queries

Semester:5 Course Title: Fundamentals of operating system Course Outcomes	
Operating Sytem and its concepts	• Introduces different Operating system concepts. • To learn the fundamentals of Operating Systems. • To learn the mechanisms of OS to handle processes and threads and their communication. • To learn the mechanisms involved in memory management in contemporary OS. • To gain knowledge on distributed operating system concepts that includes architecture, Mutual exclusion
Open Source Tools & Technologies	• Introduces learners with open source tools and software and their pros and cons. • Introduces Linux commands and shell scripts.
Algorithm and Deadlocks	• algorithms, deadlock detection algorithms and agreement protocols.

Semester:6 Course Title: NETWORKING AND INTERNET Course Outcomes	
Data Communication & Computer Networks	• Introduces data communication fundamentals and techniques. • Introduces computer networks and switching techniques and access mechanisms. • Introduces TCP/IP protocol suite and OSI reference model.

E-Commerce	This course familiarizes the learners with the mechanism for conducting business transactions through electronic means.
Skill Enhancement Courses in Computer Application.	• PC Assembly and Installation course for B.A/B.Sc Sem-III Students. • Information Security Course for B.A/B.Sc Sem-IV Students. • Multimedia Computing Course for B.A/B.Sc Sem-V Students. • Website Development Tools for B.A/B.Sc Sem-VI Students.

Attainment of Programme outcome, programme specific outcome, and course outcome

The accomplishment of operative program outcomes, program specific outcomes and course outcomes becomes essential for the productive running of any educational institution. The course outcome helps the various stakeholders to cope the resources effectively to the extreme amount. The department lists the expectations under the Program Outcomes. The learners are expected to acquire skills to design solutions for problems with suitable consideration for the societal, cultural and environmental welfare.

To ensure the same, the institution follows the system of evaluation based on four criterion: Academic Performance, Attendance, Behavior in the campus and class room and Extra-curricular activities.

The program outcomes and program specific outcomes are evaluated by conducting class test after the culmination of each unit and arranging surprise tests and asking spontaneous questions during the lecture. The teacher compiles the marks of assessments of practical examination at the end of each semester. The teacher ensures that the awards of the practical examinations prepared are uploaded on the web portal of the affiliating University by the concerned DEO of the college. The two copies of signed awards are prepared: one for the examination cell of the college and another for the department.

The department follows a process of teaching that urges the teachers to deliver and evaluate with impartiality, zeal and dedication.

The concerned teacher frames lecture plan before the commencement of the semester class work, the copy of which is submitted with the IQAC. The academic monitoring committee of the college ensures that the classes are conducted as per the submitted lecture plan by the concerned teacher in letter and spirit.

Based on the outcomes, the learners grasp goal-setting, problem solving skills and decision making ability.

Head Department of Computer Applications

DEPARTMENT OF PHYSICS
GOVERNMENT DEGREE COLLEGE
THANNAMANDI
(NAAC Accredited)

SUBJECT: PHYSICS

Programme Learning Outcomes in B.Sc (PCM), B.Sc (PMG), B. Sc (PMC)

PO1: To enhance the student's academic abilities, personal qualities and transferable skills which Will give them opportunity to develop as responsible citizens.

PO2: To develop the student's fundamental &systematic understanding of different learning areas and applications in Physics like Mechanics, Thermodynamics, Optics, Nuclear and Particle Physics, Modern Physics, its linkages with related disciplinary areas 7 subjects like Chemistry, Mathematics, Computer science, Information Technology.

PO3: Demonstrate the ability to use skills in Physics and its related areas of technology for formulating and tackling Physics-related problems and identifying and applying appropriate physical principles and methodologies to solve a wide range of problems associated with Physics.

PO4: To carry out experiments to understand the laws and concepts of Physics.

PO5: To apply the theories learnt and the skills acquired to solve real time problems.

PO6: To acquire a wide range of problem solving skills, both analytical and computational and to apply them.

PROGRAMMEOBJECTIVE

- *To produce graduates who excel in the competencies and values required for leadership to serve a rapidly evolving global community*
- *To consolidate the Knowledge acquired at +2 level and to motivate and inspire the students to create deep interest in Physics, to develop broad and balanced knowledge and understanding of physical concepts, principles and theories of Physics.*
- *Learn, design and perform experiments in the labs to demonstrate the concepts, principles and theories learned in the classrooms.*
- *To expose the student to the vast scope of Physics as a theoretical and experimental science*
- *develop the ability to apply the knowledge acquired in the classroom and laboratories to specific problems in theoretical and experimental Physics*
- *To motivate the students to pursue PG courses in reputed institutes*
- *To kindle the interest for research in students*
- *To acquire placement in educational institutions, engineering and industrial fimis.*
- *To endow the students with creative and analytical skills; this will equip them to become entrepreneurs.*

H.O.D Physics

DEPARTMENT OF PHYSICS
GOVERNMENT DEGREE COLLEGE THANNAMANDI

Scheme of Examination

(Applicable to Students admitted during the Academic Session 2021-2022 and onwards)

Semester	Subject Code	Title of the Paper	Ins. Hours/ week	Maximum Marks			Credits
				External / Final Exams	Internal Exam	Total	
I	UMJPYT101 UMIPYT102 (Theory)	Mechanics, Kinematics	3	60	15	75	4
	UPHPC—102 (Practical)	Physics (Practical)—I	1		25	25	
II	UMJPYT201 UMIPYT202 (Theory)	Electrostatics and magnetism	3	60	15	75	4
	UPHPC—202 (Practical)	Physics Practical)-ii	1		25	25	
III	UPHTC—301 (Theory)	Electronics, Thermodynamics and Statistical Mechanics	4	80	20	100	6
	UPHPC—302 (Practical)	Physics (Practical)—III	2	25	25	50	
IV	UPHTC—401 (Theory)	Waves and Optics	4	80	20	100	6
	UPHPC—402 (Practical)	Physics (Practical)—IV	2	25	25	50	
V	UPYTE—501 (Theory) **(Discipline Specific Elective)**	Modern Physics	4	80	20	100	6
	UPHPC—502 (Practical)	Lab Course—V	2	25	25	50	
VI	UPYTE—601 (Theory) (Discipline Specific Elective)	Solid State Physics, Quantum Optics & Electronics	4	80	20	100	6
	UPHPC—602 (Practical)	Lab Course—VI	2	25	25	50	

HOD Physics

GDC Thannamandi

CHOICE BASED CREDIT SYSTEM B. Sc. WITH CHEMISTRY

PROGRAMME / COURSE SPECIFIC OUT COMES (PSO)

The curriculum of Choice Based Credit System of B.Sc. program in Chemistry is designed to motivate undergraduate students to achieve the following program specific outcomes:

1. To enable the students to model, simulate and validate the basic concepts related to different branches of Chemistry.
2. To practice and solve numerical problems and also to understand the mechanism of some basic organic reactions.
3. To develop communication and other skills for use in a wide range of industrial areas.
4. To understand the basics of, for example, analytical techniques, detections of elements, gravimetric and volumetric analysis, simple spectroscopic techniques, etc.

SEMESTER-I

Course No.: UCHTC101 Theory: 60 Lectures

Title: ATOMIC STRUCTURE, BONDING, GENERAL ORGANIC CHEMISTRY & ALIPHATIC HYDROCARBONS

Credits: 04 Maximum Marks: 100 Duration: 2½ hours

External Examination: 80 marks Internal Assessment: 20 marks

Course Outcome: This course will help to understand the aspects of atomic structure, bonding involved, molecular structure, etc. The fundamentals of organic chemistry coupled with basic stereochemistry are introduced in this semester.

Course No.: UCHPC102 Title: Laboratory Course; Chemistry-I

Maximum Marks: 50 Credits: 02 Duration: 4 hours

Course Outcome: The students will be trained in volumetric analysis, detection of elements and separation of mixtures by chromatography. Use of paper chromatography as a separation technique will be an additional advantage

SEMESTER-II

Course No.: UCHTC201 Theory: 60 Lectures

Title: CHEMICAL ENERGETICS, EQUILIBRIA & FUNCTIONAL ORGANIC CHEMISTRY

Credits: 04 Maximum Marks: 100 Duration: 2½ hours

External Examination: 80 marks Internal Assessment: 20 marks

Course Outcome: This course covers principles of thermo chemistry, thermodynamics and chemical/ionic equilibrium. The basic fundamentals of organic chemistry and aliphatic as well as aromatic hydrocarbons will help the students in laying the foundation for the advance studies of organic chemistry

Course No.: UCHPC202 Title: Laboratory Course; Chemistry-II

Maximum Marks: 50 Credits: 02 Duration: 4 hours

Course Outcome: The practical component involves some theoretical aspects studied in this semester in the form of practical shape. The experiments on thermochemistry, purification and preparation of organic compounds will create confidence amongst the students.

SEMESTER-III

Course No.: UCHTC301 Theory: 60 Lectures

Title: SOLUTIONS, PHASE EQUILIBRIUM, CONDUCTANCE, ELECTROCHEMISTRY & FUNCTIONAL GROUP ORGANIC CHEMISTRY

Credits: 04 Maximum Marks: 100 Duration: 2½ hours

External Examination: 80 marks Internal Assessment: 20 marks

Course Outcome: The ideas of solutions, phase equilibrium, conductance, electrochemistry from Physical Chemistry and aliphatic/ aromatic acids, amino acids, peptides, proteins, carbohydrates from Organic Chemistry will be dealt in details.

Course No.: UCHPC302 Title: Laboratory Course; Chemistry-III

Maximum Marks: 50 Credits: 02 Duration: 4 hours

Course Outcome: The experiments on distribution, law, conductance, potentiometer, qualitative analysis of organic compounds will be conducted.

Course No.: UCHTS303

Title: COSMETICS, PERFUMES AND MEDICINAL AGENTS FROM NATURAL SOURCES (Skill Enhancement Course)

Credits: 04 Maximum Marks: 100 Duration: 2½ hours External Examination: 80 marks Internal Assessment: 20 marks

Course Outcome: The skill enhancement course in 3rd semester will help the students to know the products used in daily life. The brief practical training regarding preparation of talcum powder, shampoo, enamels, face cream hair remover, etc. will form the highlights of this course.

SEMESTER-IV

Course No.: UCHTC401 Theory: 60 Lectures

Title: COORDINATION CHEMISTRY, STATES OF MATTER & CHEMICAL KINETICS

Credits: 04 Maximum Marks: 100 Duration: 2½ hours

External Examination: 80 marks Internal Assessment: 20 marks

Course Outcome: This course consists of some parts from Inorganic Chemistry and some parts of Physical Chemistry. Good familiarity with transition elements, coordination chemistry and crystal field theory will help the students to develop interest in the advanced areas of this study. The Physical Chemistry section deals with states of matter, namely, solids, liquids and gases. Additionally, basic kinetic studies are introduced in this section.

Course No.: UCHPC402 Title: Laboratory Course; Chemistry-IV

Maximum Marks: 50 Credits: 02 Duration: 4 hours

Course Outcome: The students will be involved in analyzing salts qualitatively along with quantitative estimation. They will also be trained in the experiments in solution chemistry as well as in determining the order of reaction.

Course No.: UCHTS403

Title: PESTICIDE CHEMISTRY (Skill Enhancement Course)

Credits: 04 Maximum Marks: 100 Duration: 2½ hours

External Examination: 80 marks Internal Assessment: 20 marks

Course Outcome: It is a skill enhancement course which deals in pesticide chemistry useful for agricultural purposes.

SEMESTER-V

Course No.: UCHTE501 Theory: 60 Lectures

Title: SPECTROSCOPY, PHOTOCHEMISTRY AND ORGANO METALLICS AND BIOINORGANIC CHEMISTRY Credits: 04 Maximum Marks: 100 Duration: 2½ hours

External Examination: 80 marks Internal Assessment: 20 marks

Course Outcome: The course deals in Chemistry of 3d elements, organometallic compounds and bioinorganic chemistry. The fundamentals of molecular spectroscopy will help in understanding the molecular spectroscopy.

Course No.: UCHPC502 Title: Laboratory Course; Chemistry-V

Maximum Marks: 50 Credits: 02 Duration: 4 hours

Course Outcome: The lab course involves some experiments based on instrumentation.

Course No.: UCHTS503

Title: FUEL CHEMISTRY (Skill Enhancement Course)

Credits: 04 Maximum Marks: 100 Duration: 2½ hours External Examination: 80 marks Internal Assessment: 20 marks

Course Outcome: It is also skill enhancement course which deals in coal, petroleum products, Fuel Chemistry, lubricants, etc.

SEMESTER-VI

Course No.: UCHTE601 Theory: 60 Lectures

Title: INORGANIC MATERIALS OF INDUSTRIAL IMPORTANCE AND ORGANIC SPECTROSCOPY

Credits: 04 Maximum Marks: 100 Duration: 2½ hours

External Examination: 80 marks Internal Assessment: 20 marks

Course Outcome: The study of inorganic materials of industrial importance and study of UV/Visible and NMR Spectroscopy of simple organic compounds forms the foundations of this course.

Course No.: UCHPC602

Title:- Laboratory Course: Chemistry-VI

Maximum Marks: 50 Credits: 02 Duration: 4 hours

Course Outcome: The experiments on analysis of industrial products, including cement, fertilizers, pigments and preparation and spectroscopic study of simple organic compounds will be covered in the course.

Course No.: UCHTS603

Title: GREEN METHODS IN CHEMISTRY (Skill Enhancement Course)

Credits: 04 Maximum Marks: 100 Duration: 2½ hours

External Examination: 80 marks Internal Assessment: 20 marks

Course Outcome: Skill development course in which usefulness of green methods in chemistry will be discussed.

Head
Department of Chemistry

Government Degree College Thannamandi
Department of Education
Programme/Course Outcomes

Semester: I

Course Title: Foundations and Basics of Education (Core)

Course Outcomes:

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

1. Develop the insight about the concept of education from different perspectives, nature and functions of education in the life of an Individual.
2. Acquire the knowledge about the nature of agencies of education, different types of agencies and roles of home and school as agencies of education in the life of the individual.
3. Acquaint themselves with the understanding of new Organizational structure of education at the school stage as per NEP-2020.
4. Develop insight about the modern modes of teaching-learning viz. online, blended and flipped and applications of SWAYAM Courses.
5. Acquire the knowledge about the concept of curriculum, the types of curriculum and develop understanding about the basic Principles that are applied during the curriculum construction.
6. Understand the nature and importance of organizing co-curricular activities in the educational institutions and this will encourage them to participate in these activities.
7. Attain mastery over the basic statistical skills to apply statistical techniques in their future endeavors.

Semester: II

Course Title: Educational Psychology and Statistics (Core)

- To enable the students to understand the meaning of education, Psychology & educational psychology and relationship between education and psychology.
- To enable the students to understand the meaning, biological & Environmental factors and basic principles of growth and Development.
- To acquaint students with basic concept and approaches of learning and elaborate upon the trial & error and gestalt learning theories of learning

- To understand the concept of transfer of learning, its forms and role of teacher in the transfer of learning.
- To enable the students to understand the meaning, components, Types of memory and signs of good memory.
- To enable the students to understand the meaning of forgetting, Its causes and various methods of memorising.

Semester: III

Course Title: Guidance and Counselling (SEC)

Course Outcomes:

- To enable the students to understand the concept of Guidance and Counseling.
- To enable the students to understand the difference between Guidance and Counseling.
- To acquaint the students with types of Guidance and Counseling.
- To enable the students to acquire skills in Counseling.
- To acquaint the students with the Guidance and Counseling services

Semester: IV

Course Title: Psychological Foundations of Education (Core)

Course Outcomes:

- To help the students to understand the concept of educational psychology and its objectives.
- To help the students to understand the methods of studying human behaviour.
- To acquaint the students with various types of special children and educational provisions for these children..
- To enable the students to understand motivation, adjustment and adjustment mechanisms.
- To enable the students to understand personality ad its assessment.
- To develop competence among students about uses and computation of measures of variability.

Semester: V

Course Title: Principles and Issues in Education (DSE)

Course Outcomes:

1. To enable the students to understand the bases of education.

2. To help the students to understand the concept and major philosophies of education.

3. To enable the students to understand the contributions made by educational thinkers.

4. To appraise the students with major issues in education

5. To enable students to understand new trends in education.

6. To enable the students to understand the concept, characteristics and applications of Normal Probability Curve

Semester: VI

Course Title: Development of Educational System in India (DSE)

Course Outcomes:

The learners will be able to to gain knowledge about

1. The system of Indian Education during Vedic, Buddhist and Medieval periods.
2. Britishers influence on Indian Education.
3. Impact of British commission and committees on Indian education.
4. Growth and development of Education in Post Independence Era.
5. New Education Policy and Programme of Action.
6. Role of National organizations in the field of education.

Head
Department of Education

GOVT. DEGREE COLLEGE THANNAMANDI

DEPARTMENT OF ENVIRONMENTAL SCIENCES

CHOICE BASED CREDIT SYSTEM (CBCS)

(For undergraduate courses of B.A and B.Sc)

PROGRAMME / COURSE SPECIFIC OUT COMES (PSO)

The curriculum of Choice Based Credit System of B.A and B.Sc program in Environmental Science is designed to motivate undergraduate students to achieve the following program specific outcomes:

1. Creating the awareness about Environmental problems among students.
2. Imparting basic knowledge about the Environment and its allied problems.
3. Developing an attitude of concern for the environment.
4. Motivating students and public to participate in environment protection and environment improvement.
5. Acquiring skills to help the concerned individuals in identifying and solving environmental problems.
6. Enabling students to contribute at individual level to attain harmony with Nature.

SEMESTER-I

Course No: UESTS 104 **Theory: 45 Lectures**

Title: Environmental Studies -I

Credits: 02 **Duration:**
Maximum Marks: 100
2½ Hr. External Examination: 80 marks
Internal Assessment: 20 marks

Course Outcome: This course will help to articulate the interconnected and multidisciplinary nature of environmental studies, understanding the various component of our environment, status of natural resources reserves and strategies for biodiversity conservation.

SEMESTER-II

Course No: UESTS 204 **Title: Environmental Studies-2**
Credits: 02 **Maximum Marks: 100** **Duration:**
2½ Hr. External Examination: 80 marks
Internal Assessment: 20 marks

Course Outcome: This course covers causes and concern of pollution in different spheres of environment, its ill effects on health and the detailed Laws and Acts mandatory to implement to keep environment clean and green.

SEMESTER-III

SKILL ENHANCEMENT COURSE IN ENVIRONMENTAL SCIENCES

Course No: UESTS 301 **Title: Solid Waste Management** **Credit:02**

Time of Examination: 2.0 hrs Marks:

Semester Examination: 40

Sessional Assessment: 10

LAB COURSE

(Internal Evaluation)

Course No: UESPS 302 Title: Laboratory Course Credit:2

Duration of Examination: 3.0 hrs Marks: 50

Course Outcome: Upon successful completion of this course, students will be able to :

1. To characterize the waste and apply the knowledge of laws for municipal solid waste management, for handling of biomedical wastes and for handling of plastic wastes.
2. To apply the knowledge of mathematics, science, and engineering for effective solid waste collection systems, for waste collection route optimization and for processing of solid waste.
3. To design composting systems, maintain and operate the aerobic and anaerobic composting process for effective organic waste recycling.
4. To manage construction and operations of landfill facilities, energy recovery systems.

SEMESTER-IV

SKILL ENHANCEMENT COURSE IN ENVIRONMENTAL SCIENCES

Detailed Syllabus

Course No: UESTS 401 Title : Environmental Impact Assessment (EIA) Credit:2

Time of Examination: 2.0 hrs Marks:

(a) Semester Examination: 40

(b) Sessional Assessment: 10

LAB COURSE

(Internal Evaluation)

Course No: UESPS 402 Title: Laboratory Course Credit:2

Duration of Examination : 3.0 hrs Marks: 50

Course Outcome: On successful completion of the course students will be able :

1. To critically examine assumptions inherent in impact assessment.

2. To develop skills in identifying and solving problems arises during various developmental projects

3. To provide students with the knowledge and professional skills necessary to enable them to undertake environmental impact assessment.

4. To familiarize students with a variety of professional tools used in predicting environmental impacts.

5. To encourage students to develop their own perspectives on impact assessment and to be able to relate this to other subject areas and to their wider understanding.

SEMESTER-V

SKILL ENHANCEMENT COURSE IN ENVIRONMENTAL SCIENCES

Detailed Syllabus

Course No: UESTS 401 Title : Environmental Pollution and Management Credit:2

Time of Examination: 2.0 hrs Marks:

(a) Semester Examination: 40

(b) Sessional Assessment: 10

LAB COURSE FOR SKILL ENHANCEMENT IN ENVIRONMENTAL SCIENCES

(Internal Evaluation)

Course No: UESPS 402 Title: Laboratory Course Credit:2

Duration of Examination : 3.0 hrs Marks: 50

Course Outcome: After completion of the course students will be able to identify the various sources of air, water, soil and noise pollution. Understand the factors involved in the causes of pollution and control measures.

SEMESTER-VI

SKILL ENHANCEMENT COURSE IN ENVIRONMENTAL SCIENCES

Course No: UESTS 301 Title: Environmental Hazards: concept and management Credit :2

Time of Examination: 2.0 hrs Marks:

Semester Examination: 40

Sessional Assessment: 10

LAB COURSE FOR SKILL ENHANCEMENT IN ENVIRONMENTAL SCIENCES

(Internal Evaluation)

Course No: UESPS 402 Title: Laboratory Course Credit:2

Duration of Examination : 3.0 hrs Marks: 50

Course Outcome: Students will Identify, critically analyse and evaluate the inter-relating factors between the human and physical environments that result in vulnerability to natural environmental processes and understand the various management strategies used to manage environmental hazards and natural and manmade disasters for minimum loss of life and property.

Head

Department of Envtl. Science

Government Degree College Thannamandi

Department of Economics

Programme/Course Outcomes

Semester: I

Course Title: Principles of Microeconomics-I (Core)

Course Outcomes:

The objective of the course is to provide the students a thorough understanding and knowledge about the basic microeconomics and markets forces of demand and supply and their elasticity as well as theories of consumer demand.

Semester: II

Course Title: Principles of Microeconomics-II (Core)

Course Outcomes:

The objective of the course is to aware the students about the theories of production, cost and types of market structure, factors pricing and welfare economics.

Semester: III

Course Title: Principles of Macroeconomics-I (Core)

Course Outcomes:

The course aims to introduce the students to the basic concepts of macroeconomics, including how the economy's total output of goods and services and employment of resources is determined and what causes these totals to fluctuate.

Semester: IV

Course Title: Principles of Macroeconomics-II (Core)

Course Outcomes:

The course analyses the various aspects of macroeconomics in greater detail. It makes the students familiar with the concepts of BOP, BOT, foreign exchange rate and inflation.

Semester: V

Course Title: Money and Banking. (DSE)

Course Outcomes:

The course aims at the introductory study about the different operations of money and banking systems and their interaction with rest of the economy. The focus of the course is how monetary

forces operate through multitude of channels-markets, non-market institutions and among others.

Semester: VI

Course Title: Public Finance (DSE)

Course Outcomes:

The objective of the course is to provide the students a thorough understanding and knowledge of Government finances with special reference to India. The focus of subject is public finance, private finance, principles of maximum social advantage.

Head Department of Economics

Government Degree College Thannamandi

Department of Persian

Programme/Course Outcomes

Semester: I

Course Title: فارسی زبان و دستور

Course Outcomes: At the end of the course the student should be able to:

- Acquire fair command of the vocabulary of Persian language.
- Develop the reading and writing skills in Persian.
- Inculcate moral values through classical literature.
- Comprehend the emphasis on human values and ethics in Persian literature
- Understand the cultural aspects of Persian language.
- Understand the overall value of Persian Literature.

Semester: II

Course Title: Persian Text I, History of Persian Literature

Course Objectives:

- Introduction to Simple Persian Prose Introduction to Iranian Seasons
- Introduction to Iranian Culture Understanding Modern Persian Prose
- Knowing Iranian Culture through Festivals

Course Learning Outcome: The course is designed to introduce the students to Iranian seasons, its culture, some of its important cities and also introduces to some of Iran's great Persian Poets with their poetry. The course contains Persian prose selections from modern writers. It also highlights the life and works of some of the prominent Persian poets. The selection on festivals helps a learner to know Iranian Culture and traditions.

Semester: III

Course Title: Indo-Persian Litrature a Brief History 13th to 16th century (Skill enhancement course)

Course Outcomes:

- Learners are able to become more accurate and efficient when using a language.
- Improves the fluency in the language.
- Able to speak, read and write the language more efficiently.

Course Learning Outcomes Students will have the ability to read & write Persian language.

Semester: III

Course Title:Persian Poetry/Introduction to Genres, Some Selection (Core)

Course Objectives:

- To learn Persian Poetry Genres.
- To study Persian Poetry Selections on Different Subjects.

Course Learning Outcome: Persian poetry selections based on different subjects in this course would familiarize a student with modern as well as classical styles of Persian poetry. The students can also learn about the different poetic genres like Ghazal, Qasida, Masnavi, Rubaei, Tarjihband, Misrah, Qafiya, Takhallus, Matla, Maqta, Tashbih,Isteara etc.

Semester: IV

Course Title: Essay and Translation (Core)

Course Objectives:

- To strengthen Persian Grammar of students
- To get command over Persian Translation, writing essays and letters in Persian

Course Learning Outcomes:

The course is specifically designed to enable students to translate and interpret from Persian language into English and vice versa. After completion of this course students will be able to translate and interpret from Persian language into English and vice versa and it will help in creating a niche in the field of translation and interpretation.

Semester: IV

Course Title: Indo-Persian Litrature a Brief History 16th to 19th century (Skill enhancement course)

Course Objectives:

- To introduce to Persian Short Story Writing
- To introduce to Persian Short story writers Understanding Modern Persian literature.
- To familiarize with famous Persian literary works under this period.
- To familiarize with the modern Iranian society through these short stories.

Course Learning Outcome: This course is designed to enable students to get acquainted with Persian Short Story Writing and its writers. It also introduces to the trends of Persian Short Story Writing.

Semester: V

Course Title: Modern Persian Literature (Skill Enhancement Course)

Course Objectives:

- To understand Modern Iranian Society through Persian literature.
- To acquaint with the influence of French literature on Persian literature.
- To acquaint with constitutional Revolution and Islamic revolution of Iran.

Course Learning Outcome: Modern Persian literature consisting prose and poetry is an important source to understand modern Iran. The different literary genres both in prose and poetry like short stories, novels, dramas, Ghazal, Nazm, Rubai, Qasida etc. will help a learner to know modern Persian literature in a better way. The course focusses on the chief characteristics of the writings of some of the prominent modern Persian poets and prose writers and attempts to see Iranian Society through their works.

Semester: V

Course Title: Introduction to Elementary Persian(Generic)

Course Objectives:

- To equip with Elementary Persian grammar.
- To understand simple Persian text and to translate simple Persian text.
- To learn making simple Persian sentences.

Course Learning Outcome: The course would enable students to learn Elementary Persian Grammar. The use of modern technology and latest publications from Iran as well as India will help students to be able to learn Persian grammar enabling them to read, write, understand and speak in Persian language, keeping in view the growing demand for Persian translators.

Semester: VI

Course Title: History of Persian Literatureduring Safavid Period (DSE)

Course Objectives:

1. An outline of socio-cultural history of Safavid period.
2. Some prominent distinguished poets and prose writers of this period will be introduced.
3. To study the art and architecture of this period.

Course Learning Outcome: To equip with the socio-cultural history of Safavid Period. To make familiar with the Safavid order of Sufism. Students will have the ability to apply critical and theoretical approaches to the reading and analysis of Persian literature of Safavid Period.

Semester: VI

Course Title: Ghazal writing in Persian (Skill Enhancement Course)

Course Objectives:

- To acquaint with development of Ghazal through the centuries.
- To feel the essence of Persian poetry by Ghazal.
- To know about the eminent Persian poets of Ghazal.

Course Learning Outcome: Ghazal is an important and interesting genre of Persian poetry. The genre has flourished and enriched Persian poetry since the olden times and many renowned poets like Sadi, Hafez, Rumi, Khusrau, Bedil, Ghalib and others have presented greatest examples of this genre. The course would enable students to learn about some of the prominent Persian poets of Iran as well as India.

Semester: VI

Course Title: Spoken Persian (Generic)

Course Objectives:

- To familiarize students with common Persian sentences
- To enable students to speak in Persian Language to familiarize students with common Persian sentences
- To make learners able to become more accurate and efficient when using Farsi language.

Course Learning Outcomes: This course would enable to students to learn Persian through use of modern technology and latest publication from Iran as well India and will help students to command over Persian grammar, translation and interpretation of Persian language. This course is designed to make students familiarize with common usage Persian sentences and its syntax.

Head Department of Persian

Department of Botany

Government Degree College Thannamandi

Programme/Outcomes

SEMESTER I

Course Title: INTRODUCTION TO MICROBES AND PLANT KINGDOM (Core)

Course Objectives: This paper will give an overview of the plant and microbial world to the students and help them understand the interrelationships and evolutionary pathways among them.

Learning Outcomes: The course will acquaint the students with the diversity of microbial and plant kingdom. General life cycle, reproduction and economic importance of most of the groups will be covered. The knowledge will help the students appreciate and tap the economic significance of the major microbial and plant groups.

SEMESTER I

Course Title: NURSERY AND GARDENING (Skill)

Course Objectives: The course aims to make students understand the theoretical and practical details of nursery and gardening. Knowledge so gained will provide them with the means for their self-employment and also of others.

Learning Outcomes: The students will be able to distinguish and choose the plant species amenable for nursery and gardening. They can develop their own nursery for livelihood and marketing purposes. The course will also equip the students with the basic skill needed to design and lay gardens.

SEMESTER II

Course Title: ECONOMIC BOTANY AND PLANT CONSERVATION (Core)

Course Objectives: This course has been framed for enhancing the knowledge of students about the important plant resources and their sustainable utilization. Understanding the origin and domestication of plants will help the students appreciate the need to conserve.

Learning Outcomes: The course will familiarize students with origin and utilization of plants. The students will be able to understand and appreciate the value of plants as sources of food, fodder, spices and drugs. The students will become aware of the need to conserve, build confidence among them towards sustainable use of plants and enable them to design strategies for their effective conservation.

SEMESTER II

Course Title: BIO FERTILIZERS (Skill)

Course Objectives: The course introduces the students to the world of bio fertilizers which is quite relevant in the face of chemical fertilizers ruining the fertility of our agricultural fields. Bio fertilizers are harmless, replenish the soils and maintain their fertility over long periods of time. Therefore, a course on their types, preparation, and importance is the need of the hour.

Learning Outcomes: The students will learn about different microbial sources of bio fertilizers. They will understand the role of nitrogen fixing organisms in soil fertility and will be practically trained to make Bio fertilizers. This in turn will enable them to start their own enterprise of a bio fertilizer brand.

SEMESTER III

Course Title: Plant Anatomy, Embryology and Ecology (Core)

Course Outcomes: Seed bearing plants represent the most advanced groups of plant kingdom. Proper knowledge about their structure, functions, mechanisms of multiplication and their interactions with the biotic and abiotic components of the ecosystems will assist in manipulating these for better human utility. This course will create awareness among students about proper utilization of important plant parts.

SEMESTER IV

Course Title: Plant Physiology and Metabolism (Core)

Course Outcomes: The course is designed to make students appreciate the various mechanisms underlying the important activities of plants as absorption of water and minerals, solute transport, transpiration, flowering, nitrogen metabolism etc. Another aim is to impart students knowledge regarding the stresses that plants face and methods adopted by them to tackle/overcome these stresses.

SEMESTER V

Course Title : Cell Biology and Genetics (DSE)

Course Outcomes: The course has been devised to acquaint the students with the structural and functional aspects of cell, chromosomes and genes and alterations generally found in these.

SEMESTER V

Title: MUSHROOM CULTIVATION TECHNOLOGY (Skill)

Course Outcomes: To enable the students to identify the edible and poisonous mushrooms. To provide hands-on training for the preparation of bed for mushroom cultivation and its harvesting, pests and diseases control and post harvesting management. To provide the students awareness about the marketing trends of Mushrooms. To give the students exposure to the experiences of experts in the field and to functioning mushroom farms. To help the students to learn a means of self-employment and income generation.

SEMESTER VI

Course Title: Economic Botany and Biotechnology (DSE)

Course Outcomes: The course is designed to make students aware of the conventional use of biological diversity in terms of the proper utilization of plant parts. An attempt is being made to impart students the training of using tissue culture tools and biotechnological techniques in the utilization as well as improvement of crops.

SEMESTER VI

Course Title: BIOFERTILIZERS (Skill)

Course Objectives: The course introduces the students to the world of bio fertilizers which is quite relevant in the face of chemical fertilizers ruining the fertility of our agricultural fields. Bio fertilizers are harmless, replenish the soils and maintain their fertility over long periods of time. Therefore, a course on their types, preparation, and importance is the need of the hour.

Learning outcome: The students will learn about different microbial sources of bio fertilizers. They will understand the role of nitrogen fixing organisms in soil fertility and will be practically trained to make Bio fertilizers. This in turn will enable them to start their own enterprise of a bio fertilizer brand.

Department of Botany

Department of Geography
Govt. Degree College Thannamandi (Rajouri)

Programme/Course Outcomes

B.A/ B. Sc Semester- I

Course Code: UGOTC - 101 (Theory Core) **Title: Physical Geography- I**

Course Outcomes

1. The students will be able to understand the basic knowledge of origin of earth and all the processes responsible for changing the shape of earth.
2. Students will be able to identify various types of rocks and minerals besides having good knowledge of Landslides and Avalanches.
3. Students will understand the theories and fundamental concepts of Geotectonic and Geomorphology.
4. Understand earth's tectonic and structural evolution. Gain knowledge about earth's interior. Develop an idea about concept of plate tectonics, and resultant landforms.
5. Acquire knowledge about types of folds and faults and earthquakes, volcanoes and associated landforms.
6. Understanding crustal mobility and tectonics; with special emphasis on their role in landform development.
7. Overview and critical appraisal of landform development models.
8. Ability to record temperature, pressure, humidity and rainfall. Develop the skills of identification of features and correlation between them.

Course Code: UGOPC- 102 (Practical Core) **Title: Cartography- I**

Course Outcomes

1. Basic Knowledge of Scales
2. Types of Scales
3. Enlargement and reduction of maps and representation of various landform features on flat sheet of paper.
4. Identification of different landforms.

B.A/ B. Sc Semester- II

Course Code: UGOTC - 201 (Theory Core) **Title: Regional Geography of Jammu, Kashmir and Ladakh**

Course Outcomes

The students will be in position to have good knowledge of Geography of Jammu, Kashmir and Ladakh in relation to its Physical and Socio-cultural Setting.

Course Code: UGOPC-202 (Practical Core) **Title: Cartography-II**

Course Outcomes

Students will understand and prepare different kinds of maps. Recognize basic themes of map making besides developing the observation skills.

B.A/ B. Sc Semester- III

Course Code: UGOTC- 301 (Theory Core) **Title: Physical Geography- II**

Course Outcomes

1. Understand the elements of weather and climate, different atmospheric phenomena and climate change.
2. Learn to associate climate with other environmental and human issues.
3. Approaches to climate classification.
4. To analyze the dynamics of the Earth's atmosphere and global climate.
5. Assessing the role of man in global climate change.
6. Prepare various climatic maps and charts and interpret them.
7. Learn to use of various meteorological instruments.
8. Learn the interaction between the atmosphere and the earth's surface.
9. Understand the importance of the atmospheric pressure and winds.
10. Understand how atmospheric moisture works.
11. Analyse the concepts of Hydrology and Oceanography.
12. Identify oceans resources and characteristics of ocean waters with respect to salinity, currents, waves and tides.

Course Code: UGOPC- 302 (Practical Core) **Title: Map Projections - 1**

Course Outcomes

1. Meaning and Importance.
2. Classification and Choice of Map Projection

3. Concept of Gratitude, International Date Line, Determination of Time and Date over the Globe.
4. Knowledge of various types of map projections

Course Code: UGOPS- 303 (Skill Enhancement) **Title: Cartography**

Course Outcomes

1. Basic Knowledge of Scales
2. Types of Scales
3. Enlargement and reduction of maps and representation of various landform features on flat sheet of paper.
4. Identification of different landforms.
5. Students will understand and prepare different kinds of maps.
6. Recognize basic themes of map making besides developing the observation skills.

B.A/ B. Sc Semester - IV

Course Code: UGOTC- 401 (Theory Core) **Title: Geography of India**

Course Outcomes

1. Students will get an introduction to the main regions of the India in terms of both their uniqueness and similarities.
2. Students will be exposed to historical, economic, cultural, social and physical characteristics of India.
3. Students will learn the relationships between the global, the regional and the local, particularly how places are inserted in regional and global processes.
4. In addition to the ability of understanding and reading maps, students will develop cartography skills and will be able to create maps on their own.
5. Students will be introduced to demographic, social and cultural attributes such as migration, social relations and cultural identity. Identifying and explaining the Indian Geographical Environment, from global to local scales.
6. Applying geographical knowledge to everyday living.
7. Applying knowledge of global issues to a unique scientific problem.
8. Showing an awareness and responsibility for the environment and India.
9. Evaluating the impacts of human activities on natural environments special reference to India

Course Code: UGOPC- 402 (Practical Core)

Title: Title: Map Principles and Map Projection II

Course Outcomes

1. Advance knowledge of transformation of gratitude on flat sheet of paper.
2. Effective map making.
3. Methods of Field Survey
4. Knowledge of Instruments for Plain Table Survey.
5. Identification of Problems
6. Preparation of Questionnaire.
7. Collection of Data and Report Writing.

Course Code: UGOPS- 403 (Skill Enhancement)
Title: Skilful Planning for Regional Development

Course Outcomes

The objective of this paper is to train students in Skillful Planning for Regional Development.

B.A/ B. Sc Semester- V

Course Code: UGOTC- 501 (Theory Core) **Title: Human Geography**

Course Outcomes

1. Students will acquire an understanding of and appreciation for the relationship between geography and culture.
2. Students will read, interpret, and generate maps and other geographic representations as well as extract, analyze, and present information from a spatial perspective.
3. Students will have a general understanding of global human population patterns, factors influencing the distribution and mobility of human populations including settlement and economic activities and networks, and human impacts on the physical environment.
4. Students will be able to think in spatial terms to explain what has occurred in the past as well as using geographic principles to understand the present and plan for the future.
5. Students will have a general understanding of how the physical environment, human societies, and local and global economic systems are integral to the principles of sustainable development.
6. Students will have a general understanding of the various theoretical and methodological approaches in both physical and human geography and be able to

develop research questions and critically analyze both qualitative and quantitative data to answer those questions.

7. Students will be able to present completed research, including an explanation of methodology and scholarly discussion, both orally and in written form and, wherever possible, utilize cartographic tools and other visual formats.

Course Code: UGOPC- 502 (Practical Core) **Title: Statistical Techniques**

Course Outcomes

1. Learn the significance of statistics in geography.
2. Understand the importance of use of data in geography
3. Recognize the importance and application of Statistics in Geography.
4. Interpret statistical data for a holistic understanding of geographical phenomena.
5. Know about different types of sampling.
6. Develop an idea about theoretical distribution.
7. Learn to use tabulation of data.
8. Gain knowledge about association and correlation.

Course Code: UGOPS- 503 (Skill Enhancement) **Title: Geography of Tourism**

Course Outcomes

1. Learn Scope and Nature: Concepts and issues, tourism, recreation and leisure inter-relations; Factors influencing tourism, Types of Tourism: Ecotourism, cultural tourism, adventure tourism, medical ourism, pilgrimage, international, national.
2. Use of information on factors (Historical, natural, socio-cultural and economic; motivating factors for pilgrimages) to plan destination marketing; tourism products; niche tourism planning.
3. Tourism impact assessment, Sustainable tourism, Information Technology and Tourism, Tour operations planning and guiding.
4. Increasing Global tourism; Tourism in India: Tourism infrastructure, access, planning for different budgets for case study sites of Western Himalayas, Jammu, Kashmir and Ladakh

Course Code: UGOPS- 504 **Title: Physical Geography**

Course Outcomes

1. The broad outcome of the course is to introduce to the students the origin & Evolution of the Earth and fundamentals of atmospheric phenomena.

2. The atmosphere and climate are a critical part of the earth system, and climatic variability and change are central to the issue of current and future global environmental change.
3. Identification of Minerals and Rocks
4. Basic knowledge of plants and animals distribution.
5. Acquire knowledge about types of folds and faults and earthquakes, volcanoes and associated landforms.
6. Understanding crustal mobility and tectonics; with special emphasis on their role in landform development.
7. Ability to record temperature, pressure, humidity and rainfall.
8. Develop the skills of identification of features and correlation between them

B.A/ B. Sc Semester- VI

Course Code: UGOTC- 601 (Theory Core) **Title: Geography of Asia**

Course Outcomes

1. The outcome of the course is to introduce the Geography of Asia and latest changes being experience in the Asia.
2. Knowledge of Climate, drainage, vegetation and soils of Asia.
3. Potential of resources in Asia
4. Relationship of Asia with other countries of the world.
5. Human Recourses of Asia.
6. Major trading organization like ASEAN, SAARC, SAFTA and OPEC.

Course Code: UGOPC- 602 (Practical Core)

Title: Advance Quantitative Techniques & Surveying

Course Outcomes

1. Learn the advance Quantitative Techniques of statistics in geography.
2. Gain knowledge about association and correlation by Karl Pearson Product Moment Method and Spearman Rank Difference Method.
3. Methods and Principles of Prismatic Compass Survey by Open Traverse Method and Closed Traverse Method.
4. To learn the techniques of Field Study/Survey and Writing of Report for Physical assesment.

Course Code: UGOPS- 603 (Skill Enhancement)

Title: Disaster Management

Course Outcomes

1. Understand the nature of hazards and disasters.
2. Assess risk, perception and vulnerability with respect to hazards.
3. Prepare hazard zonation maps.
4. Assessing the nature, impact and management of major natural and man-made hazards affecting the Indian subcontinent especially in J&K.

Course Code: UGOPS- 603 (Skill Enhancement) **Title: Remote Sensing and GPS**

Course Outcomes

1. Have knowledge of the principles of remote sensing, sensor resolutions and image referencing schemes.
2. Knowledge of GPS. Overview of GPS, GPS segments, Current GPS Satellite Constellation, GPS Signals and GPS Application.
3. Aerial Photography and Photogrammetry.
4. Application of Remote Sensing: Agriculture, Natural Resource Management and Urban and Rural Planning.

Course Code: UGOTC- 605 **Title: Human Geography**

Course Outcomes

The Course Outcomes of this course to give an over view of different aspects of Human Geography with detail analysis of burning issues of the subject at global level.

Dr Chandra Rayar
HOD

Government Degree College Thannamandi

Department of Kashmiri

Programme/Course Outcomes

Semester: I

Course Title: Zaban Te Adab – i (Core)

Course Outcomes:

The objective of this course will enable our students to understand means of communication and self expression and also to familiarize with the relationship between language and the society. The other objectives of this course is to identify the influences of foreign languages on kashmiri

Semester: II

Course Title: Zaban te Adab ii (Core)

Course Outcomes:

The main objectives of this course is to familiarize the students about kashmiri sentences and its types and also to understand them about different genres of kashmiri poetry which was used in the 19th century .

Semester: III

Course Title: Zaban te Bavath i (core)

Course Outcomes:

The objectives of this course is to make learners understand about the selected texts of the language so that they can enrich themselves with good vocabulary and expressions and also develop their speaking, reading and writing skills.

Semester: IV

Course Title: Zaban te Bavath ii (core)

Course outcome:

The outcomes of this paper is to make learners understand the selected short stories and kashmiri prose and poetry section .This will enable the learners to enrich themselves with good vocabulary and make interest in reading any literature.

Semester: V

Course Title:Zaban te Bavath iii (DSE)

Course Outcomes:

The main outcome of this course is to familiarize the students about the art of writing essays and give them the knowledge about some prose lessons mentioned in the paper and also help them to understand the critical analysis is being done to any art of literature. This will help them to understand about the criticism.

Semester: VI

Course Title: Zaban te Bavath iv (DSE)

Course Outcomes:

The main outcome of this course is to familiarize the students about the history of kashmir mentioned in the kashmiri literature and understand them about the art of translation and its importance in literature .The students will be familiarize about Sufism and its poetry.

Head Department of Kashmiri

DEPARTMENTOFMATHEMATICS/ APPLIED MATHEMATICS

GOVERNMENT DEGREE COLLEGE, THANNAMANDI

(NAAC Accredited- "C" Grade)

Programme Outcome of B.A./B.Sc. Mathematics.

- Create deep interest in learning mathematics.
- Develop broad and balanced knowledge and understanding of definitions, concepts, principles and theorems.
- Enabling students to develop a positive attitude towards mathematics as an interesting and valuable subject of study.
- A student should get a relational understanding of mathematical concepts and concerned structures, and shoul be able to follow the patterns involved, mathematical reasoning.
- Ability to analyze a problem, identify and define the computing requirements, which may be appropriate to its solution.
- Introduction to various courses like group theory, ring theory, field theory, metric spaces, number theory.
- Enhancing students' overall development and to equip them with mathematical modeling abilities, problem solving skills, creative talent and power of communication necessary for various kinds of employment.
- Ability to pursue advanced studies and research in pure and applied mathematical sciences.

Programme Specific Outcomes of B.A./B.Sc. Mathematics.

- Think in a critical manner.
- Know when there is a need for information.
- Evaluate, and effectively use that information for the issue or problem at hand.
- Formulate and develop mathematical arguments in a logical manner.
- Students undergoing this programme learn to logically question assertions, to recognize patterns and to distinguish between essential and irrelevant aspects of problems. They also share ideas and insights while seeking and benefitting from knowledge and insight of others. This helps them to learn behave responsibly in a

rapidly changing interdependent society.

- Completion of this programme will also enable the learners to join teaching profession in primary and secondary schools
- This programme will also help students to enhance their employability for government jobs, jobs in banking, insurance and investment sectors, data analyst jobs and jobs in various other public and private enterprises.
- Understand, formulate and use quantitative models arising in social science, Business and other contexts.

S.No.	Semester	Course Tittle	Course Code	Credits	Nature of the Course	Remarks, if any
1	I	Differential Calculus	UMTTC-101	04	Major Course	-----
2	II	Differential Equation	UMTTC-101	04	Major Course	------
3	III	Real Analysis	UMTTC-301	06	Compulsory Core Course	------
4	III	Logic and Sets	UMTTS-302	04	Skill Enhancement Course (SEC)	College opted to teach this course out of three optional Skill courses
5	IV	Algebra	UMTTC-401	06	Compulsory Core Course	-------
6	IV	Vector Calculus	UMTTS-402	04	Skill Enhancement Course (SEC)	College opted to teach this course out of three optional Skill courses
7	V	Matrices	UMTTE-501	06	Discipline Specific Elective (DSE)	College opted to teach one of these courses out of three Optional DSE courses
8	V	Linear Algebra	UMTTE-503	06	Discipline Specific Elective(DSE)	
9	V	Probability and Statistics	UMTTS-504	04		College opted to teach this course out of Three optional skill courses
10	VI	Numerical Methods	UMTTE-601	06	Discipline Specific Elective(DSE)	College opted to teach one of these courses out of three optional DSE courses
11	VI	Complex Analysis	UMTTE-602	06	Discipline Specific Elective(DSE)	
12	VI	Boolean Algebra	UMTTS-604	04	Skill Enhancement Course (SEC)	College opted to teach this course out of three optional Skill courses

Title of the Course/ Course Number:-Differential Calculus (UMTTC-101)

Course Outcomes:

After completion of course the students will be able to understand and discuss the concept of:-

- Limit and Continuity of functions on R (ϵ–δ definition).
- Algebra of limits. Discontinuity and its types.
- Rolle's Theorem, The Mean Value Theorems,
- Indeterminate forms
- Functions of several variables. Continuity of functions in two real variables.
- Partial differentiation, Euler's theorem for homogeneous functions.
- Maxima and Minima of functions of two variables. Concavity of functions.
- Asymptotes, Double points, Curvature, Envelope, Curve Tracing in Cartesian Co-Ordinates
- Polar Coordinates. Angle between radius vector and tangent to the curve. Graphic Techniques in Polar forms.

Title of the Course/ Course Number: Differential Equation (UMTTC-102)

Course Outcomes

After completion of course the students will be able to understand and discuss the concept of:-

- Basic concept of differential equations.
- Application of differential equations.
- First order, higher degree differential equations solvable for x , y , p. Clairaut's equation. Exact and Non-Exact differential equations, Integrating factors and rules to find the integrating factor of a non-exact differential equation.
- Basic Theory of linear differential equations. Wronskian and its properties. Solving a differential equation by reducing its order. Linear homogeneous differential equations with constant coefficients.
- Linear non homogeneous differential equations. The method of variation of parameters and the Cauchy-Euler equation.
- Introduction to partial differential equations, order and degree of a partial differential equation. Formation of partial differential equations. Types of partial differential equations. Lagranges method of solving linear partial differential equations of order one. Non-linear partial differential equations of degree one: Complete integral, Singular integral, General integral. Charpits method.
- Homogeneous and Non-homogeneous linear partial differential equations of second and third order with constant coefficients of different types.

Title of the Course/Course Number: RealAnalysis (UMTTC-301)

Course Outcomes

After completion of course the students will be able to understand and discuss the concept of:-

- Finite and infinite sets, countable and uncountable sets.
- Absolute value, triangle inequality and its applications, bounded and unbounded sets, suprema and infima, axiomatic definition of real number system as a complete ordered field,least upper bound and greatest upper bound properties of reals, the field of rational numbers is not complete, characterization of suprema and infima of sets, Archimedean property, existence of rationals and irrationals between reals, concept of cluster points and statement of Bolzano-Weierstrass theorem.
- Real sequences and their boundedness, convergence and divergence, uniqueness of limit, algebra of limits, Cauchy convergence criterion, Cauchy's first and second theorem on limits, squeeze theorem,monotone convergence theorem, Nested-interval property of real numbers.
- Infinite series and their convergence and divergence, Cauchy's general principle of convergence, criterion for convergence of a series of positive terms, geometric series, p-series, comparison tests, D'Alembert's ratio test, Cauchy's root test, Raabe's test Gauss's test.
- Cauchy's condensation test and convergence of alternating series, absolute and conditional Convergence.
- Leibnitz's test, problems and exercises based on these topics. Some theorems on continuity and uniform continuity viz. every continuous function attains its bounds on closed and bounded interval, intermediate value theorem, continuity implies uniform continuity on closed intervals, relations between continuity and uniform continuity.
- Sequences and series of functions, pointwise and uniform convergence, M_n-test, M-test, statements of the results about uniform convergence and integrability and differentiability of functions, power series and radius of convergence, problems and exercise based on these concepts.

Title of the Course/Course Number:- Logic and Sets(UMTTS-302)

Course Outcomes

After completion of course the students will be able to understand and discuss the concept of:-

- Introduction, propositions, truth table, negation, conjunction and disjunction.
- Implications, biconditional propositions, converse contrapositive and inverse propositions and precedence of logical operators.
- Propositional equivalence: Logical equivalences. Predicates and quantifiers: Introduction, Quantifiers.

- Sets, subsets, Set operations, the laws of set theory and Venn diagrams. Examples of finite and infinite sets.
- Finite sets and counting principle. Emptyset, properties of empty set. Standard set operations.
- Classes of sets. Power set of a set.
- Difference and Symmetric difference of two sets. Set identities, Generalized union and intersections.
- Relation: Product set, Composition of relations, Types of relations, Partitions, Equivalence Relations with example of congruence modulo relation.

Title of the Course/Course Number:-Algebra(UMTTC-401).

Course Outcomes:-

After completion of course the students will be able to understand and discuss the concept of:-

- Binary operations, semi-groups and groups with plenty of examples from number system, matrices, functions, groups of symmetries of triangle, square etc.
- Abelian and non-abelian groups, finite groups, definition of group based on left and right axioms, order of an element of a group and results based on order of an element, permutation groups, even and odd permutations.
- Subgroups, their characterization, intersection, union and product of groups, subgroup generated by a subset, examples of subgroups including centre of a group. commutator subgroup of a group.
- Characterization of an abelian group in terms of commutator subgroup.
- Cyclic groups, their generators and properties.
- Cosets, their examples and properties, index of a subgroup, Langrange's theorem and its applications including Euler's theorem and Fermat's theorem, normal subgroups, their examples and characterization, quotient groups, results related to quotient groups.
- Homomorphism and isomorphism of groups and their examples, kernel of a group homomorphism, ofautomorphisms,fundamentaltheoremofhomomorphismincluding2ndand3rdlawsofisomorphism,thesetI(G)ofallinnerautomorphismsisnormalsubgroupofA(G)thegroupof all automorphisms of group G and where C(G) is the centre of G, transformation groupsand Cayley's theorem, cyclic groups upto isomorphism, examples and exercises based ontheseconcepts.
- Concepts of Rings, integral domains and fields with plenty of examples, subrings, ideals and results based on these concepts, quotient ring, ring homomorphism and isomorphism, fundamental theorem of ring homomorphism.

Title of the Course/Course Number:-Vector Calculus(UMTTS-402)

Course Outcomes:-

After completion of course, the students will be able to understand and discuss the concept of:-

- Differentiation and partial differentiation of a vector function.
- Derivative of sum, dot product and cross product of two vectors.
- Gradient, divergence and curl.

Title of the Course/Course Number:-Matrices(UMTTE-501)

Course Outcomes:-

After completion of course, the students will be able to understand and discuss the concept of:-

- Matrices: Symmetric, Skew- Symmetric, Hermitian, Skew- Hermitian, Unitary and Orthogonal. Rank of a matrix, characteristic polynomial of a matrix, eigen values, eigenvectors.
- Cayley– Hamilton theorem and its applications to find inverse of a matrix.
- Vector space. Concept of linear dependence and independence.
- Subspaces, different basis and dimension of these vector spaces. Exercises and results based on these concepts.
- Criterion for columns of a matrix to be linearly dependent or linearly Independent.
- Rank of a matrix and its applications and results.
- .Linear, homogenous and non-homogenous equations.
- Translation, dilation, rotation, reflection in a point, line and plane. Matrix form of basic geometric transformations. Interpretation of eigen values and eigen vectors for such transformations and eigen spaces as invariant subspaces.
- Diagonal form of matrices, reduction to diagonal form up to matrices of order 3. Solution of system of linear equations using matrices.

TitleoftheCourse/CourseNumber:-LinearAlgebra (UMTTE-503)

Course Outcomes:-

After completion of course the students will be able to understand and discuss the concept of:-

- Definition and examples of vector spaces.
- Subspaces of a vector space and quotient space.
- Linear combination of vectors,linearspan, lineardependence and linear independence of vectors.
- Basis and dimension.
- Finite dimensional vector space.

- Existence theorem, Extension theorem, Dimension theorem.
- Homomorphism and Isomorphism of vector spaces. Fundamental theorem of Homomorphism.
- Dualspacesofafinitedimensionalvectorspace–Definitionsandexamples.BasisanddimensionofDualspace
- Double dual of a vector space
- Isomorphism between vector spaces and their double dual.
- Linear transformation on vector space and their examples, algebra of linear transformation on a vector space, Null space and range of linear transformation. Rank - Nullity theorem. Inverse of a linear transformation on finite dimensional vector space.
- Matrix representation of linear transformation.

Title of the Course/Course Number:- Complex Analysis (UMTTE-602)

Course Outcomes:-

After completion of course,the students will be able to understand and discuss the concept of:-

- The complex plane, properties of complex numbers, polar representation.
- De- Moivre's theorem and its applications in finding the roots of complex numbers and in expressing powers of sine and cosine in terms of series of sine or cosine of multiples of θ and vice-versa.
- Functions of complex variables, exponential function.
- Logarithmic functions.
- Circular and hyperbolic functions of complex variables, relation between them and their properties.
- Summation of series of circular functions.
- Limits, Limits involving the point at infinity,continuity,regions in the complex plane, mapping and differentiability.
- Cauchy Riemann equations, sufficient condition for diffrentiability.
- Analytic functions, examples of analytic function.
- Definite integral of functions.
- Contours.
- Contour integral and its examples.
- Maximum Modulus Principle.
- Cauchy-Goursat theorem.
- Cauchy Integral Formula.
- Liouville's theorem and the fundamental theorem of algebra.
- Convergence of sequences and series.
- Taylor Series.
- Absolute and uniform convergence of power series.

Title of the Course/Course Number:- Boolean Algebra(UMTTS-604)

Course Outcomes:-

After completion of course, the students will be able to understand and discuss the concept of:-

- Definition, examples and basic properties of ordered sets,maps between ordered sets, duality principle.
- Maximal and minimal elements, lattices as ordered sets, complete lattices, lattices as algebraic structures,
- Sublattices, products and homomorphisms.
- Definition, examples and properties of modular and distributive lattices,
- Boolean algebras.
- Boolean polynomials, minimal forms of Boolean polynomials.

Head
Department of Mathematics/Applied Mathematics
Govt. Degree College Thannamandi

Source:-

1. Official website of University of Jammu, Jammu.
2. Google Search Engine.
3. UGC official website.

Government Degree College Thannamandi

Department of History

Programme/Course Outcomes

Semester: I

Course Title: Pre and proto-History of India

Course Outcomes:

The objective of the course is to have preliminary knowledge of pre and proto history. After completing this course students are expected to have a fair knowledge about the prehistory, protohistory and sources of ancient Indian history.

Semester: I

Course Title: Understanding India (Value Added)

Course Outcomes: The student become aware of the historical and cultural development of India and the making of unity in diversity. The student learnt the major forms and phase of freedom struggle. The student became familiar with the process of constitutional developments and its emergence as one of the largest democratic country in the world.

Semester: II

Course Title: Towards early medieval India

Course Outcomes: To know the administrative and social changes carried out in India and to develop the national spirit among the students.

Semester: III

Course Title: Modern India

Course Outcomes: After completion of the course, students came to know the chronology of India's independence struggle and dedications and scarifies of the India national statesman during Indian independence struggle. the societal and constitutional changes from ancient to modern times to will be notified by them.

Semester: IV

Course Title: History of Jammu and Kashmir

Course Outcomes: To provide an understanding of the major aspects of Jammu and Kashmir and to provide the students with an understanding of various factors leading to creation of the modern state of Jammu and Kashmir as also the evolution of various socio-economic and administrative.

Semester: V

Course Title: History of Modern Europe till 1870

Course Outcomes: Acquired knowledge of European history and awareness of the transnational dimension of national histories. A clear understanding of Europe as a historical construct and its place in global context. The ability to apply factual knowledge and critical perspectives to reflect national and European narratives and current developments in Europe.

Semester: VI

Course Title: Modern world 1860 to 1945

Course Outcomes: To sensitize students as to how important events left its impact on the world history. The students became familiarize with the major events of the world history which shape the modern world.

Head Department of History

Government Degree College, Thannamandi (Rajouri, J and K)

Department of English

Programme/Course Outcomes for Session 2021-2022

Semester: I

Course Title: General English (Core Course)

Objectives & Course Outcomes: The objective of the course is to develop the capability of reading and comprehending the literature by analyzing and understanding prescribed texts of English poetry, short stories, essays and drama. The section on grammar aims to acquaint them with the basics of applied grammar.

Semester: I

Course Title: Communication Skills-I

Objectives & Course Outcomes: The course focuses to instill four basic communication skills (listening, speaking, reading, and writing) into the students which would in turn enhance their competency in Interpersonal communication as well as academic and professional communication. The section on grammar aims to refine the verbal and written capability of the students. At the completion of the course the student will be able to speak the word with right pronunciation, improve their listening, speaking, reading and writing skills and develop good vocabulary.

Semester: II

Course Title: General English (Core)

Objectives & Course Outcomes:

The objective of the course is to develop the capability of reading and comprehension in understanding, and analyzing literature in its different forms i.e. poetry, short stories, one act plays and prose essays.The section based on writing skills and grammar focuses on improving their skill in writing and efficiency in grammatical usage.

Semester: II

Course Title: Communication Skills II

Objectives & Course Outcomes: To provide the students with an ability to build and enrich their communication skills by making them familiar with different types of communication and to help the students attain a high level of proficiency in all four language skills.

Semester: III

Course Title: General English (Core)

Course Outcomes:

The course aims to develop reading and comprehension skills of the students through study of the selected texts. It also develops the familiarization of the students with basics of language and literature, to equip them with its variety of genres and nuances of language and grammar.

Semester: III

Course Title: Ability Enhancement I (AECC)

Course Outcomes:

The course is meant to make students aware with the skill of reading and analyzing of the prescribed texts. At the end the students would be able to understand and appreciate the literary texts along with their themes, literary devices, plot and characters etc. The sections on writing skills and grammar would familiarize them with techniques in writing, the structural format and features of report writing, writing business letters and acquaint them with basics of grammar.

Semester: IV

Course Title: General English (Core)

Course Outcomes:

The course aims to develop reading and comprehension skills of the students through study of the selected texts. It also familiarizes the students with basics of language and literature, equip them with its variety of genres and nuances of language and grammar. At the end the student would be capable of understanding and differentiating between various genres of literature poetry, short story, drama, prose essays, its features and literary devices as well as would be capable of appreciating its themes. The section on writing skills and grammar would help in enhancing their writing skills and language proficiency.

Semester: IV

Course Title: Ability Enhancement II (AECC)

Course Outcomes: The course is designed to inculcate into the students the skill of reading, comprehending and analyzing the prescribed texts. At the end the students would be able to understand and appreciate the literary texts along with their themes, literary devices, plot and characters etc. The sections on writing skills and grammar would familiarize them and make them proficient in writing and grammatical usage.

Semester: V

Course Title: Ability Enhancement III (AECC)

Course Outcomes:

The course is designed to garner the skill of reading, comprehending, interpreting and analyzing the prescribed texts i.e "The Power of Prayer", "The World as I See it", "The Social Costs of Economic Globalization", "On the Ignorance of the learned". At the end the students would be able to understand and appreciate the literary texts. The sections on writing skills and grammar would make them capable and proficient in writing skills(précis writing, its structural format, its features) and be able to differentiate between (modifiers, premodifiers and post modifiers) and their correct usage.

Semester: VI

Course Title: Ability Enhancement IV (AECC)

Course Outcomes:

The course is designed to make the students capable of reading, interpreting, and analyzing the prescribed texts; "The Highwayman", "Sounds I like to Hear", "Why Germans Work Fewer Hours but produce More:A Study" and "The Tell Tale Heart". At the end the students would be able to understand and appreciate the literary texts along with their themes, literary devices, plot and characters etc. The sections on writing skills would enrich and hone their ability in writing by making them able to prepare academic reports and prepare notes. The section on speaking skills in turn enhances their proficiency in communication. The section of grammar would help them in increasing their linguistic proficiency.

Head

Department of English

Government Degree College Thannamandi

Department of Urdu

Course Outcomes

Semester: I

Course Title: A study of Urdu Poetry.

Course Outcomes:

- To develop an understanding of poetic forms.
- The students would gain a brief understanding of the socio-political issues of the times in which the poems were written.

Semester: I

Course Title: Urdu Linguistics Grammar and Creative Art

Course Outcome:

- To create interest of students in Urdu literature.
- To provide basic and essential knowledge in Urdu Grammar, History of Literature and Social and Cultural History of Urdu Speaking Community.
- To develop awareness about life through the study of literature.

Semester: II

Course Title: A Study of Urdu Prose

Course Outcomes:

- To know the Famous Dastaans of Urdu Literature and art and Style of Urdu Dastaan.
- To enable the students to know and understand the Origin, development and Importance of Urdu fictional Genres Like Dastan, Novel, afsana and Drama.
- Know about Urdu Drama, Dramatists and their contribution in Urdu Drama.

Semester: II

Course Title:A Study of Urdu Language and Grammar.

Course Outcome:

- Through Urdu they also learn about other languages in form of comparison.
- The aim of this program is the development of communication skill in Urdu.
- Students understand the literary meaning and rhetorical uses of Urdu language.

Semester: III

Course Title: Study of Qasida, Marsiya,and Drama

Course Outcomes:

- To understand the pre-requisites for a literary genre to be called a classical one.
- To acquire knowledge, the form and content of various classical genres of Urdu Literature viz. Qasida, Marsiya.
- To understand the distinctive features of works of some important poets of classical genres of urdu-Sauda, Ghalib, Meer Anees.
- To understand the art of Drama.
- To know about Origin & development of Urdu Drama.
- To analyze some master pieces of Various Urdu Dramatists.
- To aware the students about the skills of writing Drama Scripts and enable them for creating writing.

Semester: III

Course Title: Translation and Language Skill

- To translate Urdu Scripts in English Language.
- To translate English Script in Urdu Language.
- And have become professional well trained translators.
- Have become acquainted with the various methods for coining of terms in the process of translation.

Semester: IV

Course Title: Study of Masnavi and Inshaiya

Course Outcome:

- To understand the original development of Masnavi and art of Masnavi.
- To know the reason of rise and fall of Urdu Masnavi and Inshaiya.
- To understand the culture and history of the era.
-

Semester: IV

Course Title: Skill Enhancement Course.

Course Outcome:

- To enable the students to understand the various Techniques and Language skills.
- To enable the students for creative writing.

Semester: V

Course Title: Ghazal, Nazam, and Novel.

Course Outcome:

To understand the form of Urdu Ghazal,Nazam, and Novel.

- To know about the distinctive features of Urdu Ghazal, Nazam, and Novel.
- To know about the various techniques involved in crafting of Urdu Ghazal,Nazam, and Novel.
- To know about the poetic of Urdu Wali, Meer, Aatish, Ghalib. Iqbal, and Novel of KrishanChander.

Semester: V

Course Title: Urdu Language and Afsana.

Course Outcome:

- To make students aware about the important historical events of Urdu language.
- To make students understand the linguistic feature of Urdu.
- To know about the most important thought about the origin of Urdu.
- To know about the various techniques involved in crafting of Urdu Afsana.

Semester: V

Course Title: Learning and Reading of Urdu Language.

Course Outcomes:

- This course would enable the students to learn Urdu through use of modern technology.
- This course is designed to make students familiarize with common usage of Urdu sentences.
- This course would enable the students to read and write the Urdu Language.

Semester: V

Course Title: Journalism

Course Outcomes:

- Defining News and Understanding its elements, News sources and different types of news.
- Describing the role of editor functions and responsibilities and also editorial freedom and role of the editor in recent perspective.
- Analyzing crime & legal reporting, Science and financial reporting.
- Defining column, its importance and different types.

Semester: VI

Course Title: Literature and Criticism.

Course Outcomes:

- To understand the basic of literary criticism.
- To know about the various schools of literary criticism.
- To critically some literary samples using various methods/tools of literary criticism.

Semester: VI

Course Title: Fort William College Urdu Ghazal and Translation.

Course Outcomes:

- To understand the history and purpose of Fort William college
- To understand the techniques and importance of translation.
- To know the history and techniques of Urdu ghazal.

Semester: VI

Course Title: Grammar Prose and Poetry.

Course Outcomes:

- Learn about the art and both forms, their technique and kinds.
- Know about their history and development of theses Genres over the years.
- To know about the basic principles of Urdu language.

Semester: VI

Course Title: Creative Writing and Rhetoric.

Course Outcomes:

- The students will be able to write and speak Urdu fluently and consciously
- The student will be able to develop their pronunciation.
- The student will be well acquainted with the Urdu grammar.
- They will know the nuances of the writing and speaking.

Head Department of Urdu