

## LESSON PLAN

Session: 2024-25

Class: B.A. B.Ed./B.Sc. B.Ed. 1<sup>st</sup> Sem

Subject: Language skills (English)-I

Paper Code: AEC1(I)

Name of the Faculty: Ms. Riddhima Babbar

Month	Week	Topics to be covered
July	22.07.24-26.07.24	<b>Unit 1:</b> Tenses: Simple Present: Habitual action, General truths, Future time
	27.07.24-31.07.24	Verbs of state, Verbs of perception, Verbs of sensation, Narration
August	1.08.24-05.08.24	Use of simple present for demonstration and commentaries, Present perfect
	06.08.24-12.08.24	Present perfect continuous, Present continuous also indicative of future action
	13.08.24-17.08.24	Past continuous, Past perfect, past Perfect continuous
	20.08.24-24.08.24	Simple past: Past time reference, Present time reference, Future time reference
	27.08.24-31.08.24	<b>Unit 2:</b> Negotiating a point of view – learning to talk persuasively so as to get across one's perspective
September	02.09.24-07.09.24	Debating on an issue – agreeing / disagreeing
	09.09.24-14.09.24	<b>Unit 3:</b> Note making
	16.09.24-21.09.24	Note- taking
	24.09.24-30.09.24	Summary writing
October	01.10.24-05-10.24	Comprehension Skills
	07.10.24-12.10.24	Extracts from literary
	14.10.24-19.10.24	What are Journals
	21.10.24-25.10.24	Scientific and educational journals
	25.10.24-26.10.24	Scientific and educational journal
November	<b>27.10.24-03.11.24</b>	<b>Diwali vacation</b>
	04.11.24-11.11.24	<b>Unit 4:</b> Advanced Writing Skills
	11.11.24-16.11.24	Writing advertisement
	18.11.24-30.11.24	Writing a project proposal and Writing Resume, sending an application.

	20.11.24-25.11.24	Listening effectively; Talking about one self (likes, dislikes, interests, beliefs, personality traits, ambitions); Expressing an opinion about personal belief on a current issue. (Ability to speak fluently for 3-4 minutes. Focus would be on organized, logical, sequential presentation of thought through spontaneous speech)
<b>December</b>	02.12.24-15.12.24	Revision and Test.
	16.12.24 onwards	Final Examination

## LESSON PLAN

Session: 2024-25

Class: B.A. B.Ed./B.Sc. B.Ed. 1<sup>st</sup> Sem

Subject: AEC Hindi

Paper Code: AEC1(I)

Name of the Faculty: Dr. Gurmeet Kaur

Month	Week	Topics to be covered
July	22.07.24- 26.07.24	Hindi sahitya ka kaal vibhajan aur naamkaran
	27.07.24-31.07.24	Aadikaal ka Naamkaran aur Seema Nirdharan
August	01.08.24-05.08.24	Aadikaal ki paristhitiyan,Pravritiyan
	06.08.24-12.08.24	Bhaktikaalin sahitya ka parichay paristhitiyan or Pravritiyan
	13.08.24-17.08.24	Santkavyadhara kavyadhara ka parichay
	20.08.24-25.08.24	Suphykavyadhara kavyadhara ka parichay
	27.08.24-31.08.24	Raamkavyadhara aur krishan kavyadhara ka parichy
September	02.09.24-07.09.24	Krishan kavyadhara ka parichy
	09.09.24-14.09.24	Swatantratapurva Hindi Kahani Ka Vikas Chandradhar Sharma Guleri- Usne Kaha Tha
	17.09.24-21.09.24	Jayshankar Prasad- Puraskar
	23.09.24-30.09.24	Premchand- Panch Parmeshwar Jainendra- Ek Raat
October	01.10.24-05.09.24	Swatantrayottar Hindi Kahani Ka Vikas
	07.10.24-12.10.24	Mohan Rakesh- Uski Roti
	14.10.24-19.10.24	Kamleshwar- Dilli Mein ek Maut
	21.10.24-26.10.24	Phanishwar Nath Renu- Teesari Kasam Chif ki Dawat -Bhisham Sahni
	27.10.24-03.11.24	<b>Diwali Vacations</b>
November	04.11.24-09.11.24	Group Discussion [Samooch Charcha]
	11.11.24-16.11.24	Introduction- Lecture Definition, Characteristics, Types of Discussion
	18.11.24-23.11.24	Round table, Symposium forum etc
	25.11.24-30.11.24	Relevance of Group Discussion

## LESSON PLAN

**Session: 2024-25**

**Class: B.A. B.Ed./B.Sc. B.Ed. 1<sup>st</sup> Sem**

**Subject: ICT IN Education-I**

**Paper Code: AEC2(I)**

**Name of the Faculty: Ms. Madhu Gupta**

Month	Week	Topics to be covered
<b>July</b>	25.07.24-31.07.24	How technology enhance learning: Basic theories of communication, system theory and learning theory, historical account of the development of various educational media (audio, video, print, storage, display, projection)
<b>August</b>	01.08.24-10.08.24	Communication process and role of technology in communication, Information and Communication Technology: Meaning, nature and advantages
	12.08.24-17.08.24	Media literacy and digital literacy-need and importance, Digital divide and enhancing access, National ICT policies, curriculum, Schemes and programmes
	19.08.24-24.08.24	Cyber security: privacy, hacking, Virus, spy ware, misuse, abuse, antivirus, firewall, and safe and ethical practices
	26.08.24-31.08.24	Computer hardware fundamentals (Anatomy, input devices, output devices, Storage devices, display devices)
<b>September</b>	02.09.24-07.09.24	Computer Networks-LAN, WAN, Internet –concept and architecture; Locating internet resources – browsing, navigating, searching, selecting, evaluating, saving and book marking
	09.09.24-14.09.24	Licenses – software license, document license, fare use and privacy; File formats and conversion, utility tools.
	16.09.24-21.09.24	Cloud Computing: meaning, types, and advantages Digitalization, Software- meaning and types
	23.09.24-30.09.24	Source and binary code, Proprietary software, open-source software Shareware and freeware – concept, philosophy, types, and advantages Operating system - meaning, types- Windows, Linux, Macintosh
<b>October</b>	1.10.24-05.10.24	Navigating the desktop, control panel, file manager, explorer, and accessories Software as Service
	7.10.24-17.10.24	Online software tools and applications and their educational use Managing the ICT infrastructure:
	18.10.24-24.10.24	Software installation, troubleshooting of hardware seeking and providing help, storage and backup, updating and upgrading software, Application software- meaning and types

	25.10.24-26.10.24	Word processing, spreadsheet, presentation: Features and educational applications (Unicode) Drawing tools- Diagram, concept maps, timelines, flow
	27.10.24-03.11.24	<b>Diwali Vacations</b>
<b>November</b>	04.11.24-09.11.24	charts: educational applications of these tools Web 2.0 Technology and tools: meaning, characteristics and types
	11.11.24-16.11.24	Social networking and social bookmarking- educational applications
	18.11.24-30.11.24	Blog and micro blog – reflective journaling and other educational applications
<b>December</b>	02.12.24-07.12.24	Web 2.0 tools for creating, sharing
	09.12.24-14.11.24	Wiki- collaborative authoring and projects, Instant messaging and its educational applications.
	15.12.24-31.12.24	Examination

## LESSON PLAN

**Session: 2024-25**

**Class: B.Sc. B.Ed. 1<sup>st</sup> Sem**

**Subject: Relativity, Mechanics, Oscillations & Acoustics    Paper Code: PHY 101**

**Name of the Faculty: Ms. Loveleen**

Month	Week	Topics to be covered
<b>July</b>	22.07.24-26.07.24	Reference systems, inertial and non-inertial frames, Galilean transformation, Galilean invariance and conservation laws, propagation of light.
	27.07.24-31.07.24	Michelson – Morley experiment. Postulates of the special theory of relativity, Lorentz transformations, length contraction.
<b>August</b>	01.08.24-05.08.24	velocity addition theorem, variation of mass with velocity, massenergy equivalence, particle with a zero-rest mass.
	06.08.24-12.08.24	Motion under central force, Kepler’s laws, Gravitational law and field, Potential due to a spherical body, Gauss and Poisson equations for gravitational potential.

	13.08.24-17.08.24	Gravitational self-energy, Rigid body motion, Rotational motion, Moment of inertia and their products.
	20.08.24-24.08.24	Principal moments and axes, Euler’s equations. System of particles, centre of mass, equation of motion, single stage and multistage rocket, energy and momentum conservation, concepts of elastic and inelastic collisions.
	27.08.24-31.08.24	Potential well and periodic oscillations, cases of harmonic oscillations, different equations and its solutions, Kinetic and potential energy.
<b>September</b>	02.09.24-07.09.24	Simple Harmonic oscillations in – Spring and mass system, Simple and compound pendulum, Torsional pendulum.
	09.09.24-14.09.24	Bifilar oscillations, Helmholtz resonator, LC circuits, Vibration of a magnet.
	16.09.24-21.09.24	Oscillation of two masses connected by a spring, Superposition of two mutually perpendicular simple harmonic vibrations of same frequency, Lissajou’s figures.
	24.09.24-30.09.24	Tests
<b>October</b>	01.10.24-05.10.24	Two coupled oscillators, normal modes, N-coupled oscillators, damped harmonic oscillators, Power dissipation.
	07.10.24-12.10.24	Quality factor, Driven harmonic oscillator, Transient and steady state, Power absorption, Resonance in system with many degrees of freedom.

	14.10.24-19.10.24	Noise and Music, The human ear and its responses, limits of human audibility, intensity and loudness.
	21.10.24 -25.10.24	Bel and decibel, the musical scale, temperament and musical instruments, Production and detection of ultrasonic and infrasonic waves and applications.
	27.10.24 -03.11.24	<b>Diwali vacations</b>
<b>November</b>	04.11.24 – 09.11.24	Waveforms
	11.11.24 – 16.11.24	Transducers and their characteristics, recording and reproduction of sounds, various systems, measurements of frequency.
	18.11.24 – 23.11.24	Ultrasonic waves intensity and velocity acoustics of halls.
	25.11.24 – 30.11.24	Test & Reverberation period
<b>December</b>	02.12.24 –15.12.24	Revision and Tests.
	16.12.24 -31.12.24	Examination

## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed. 1<sup>st</sup> Sem

Subject: Botany- Diversity of Microbes & Lower Plants Paper Code: 101

Name of the Faculty: Ms. Sakshi

Month	Week	Topics
<b>July</b>	22.07.24-27.07.24	<b>Unit I- Viruses and Bacteria:</b> Introduction to viruses and bacteria
	29.07.24- 31.07.24	Structure, multiplication of viruses
<b>August</b>	1.08.24- 3.08.24	Transmission and disease symptoms of viruses Structure and economic importance of Mycoplasma
	5.08.24-10.08.24	Bacteria: Structure, Nutrition, Reproduction
	12.08.24- 17.08.24	Economic Importance of Bacteria and Gram's staining, Revision
	19.08.24-24.08.24	General account and economic importance of Cyanobacteria.
	26.08.24-31.08.24	Study of Spirulina, Nostoc
<b>September</b>	02.09.24-07.09.24	Study of Oscillatoria
	09.09.24-14.09.24	Revision, Oral Testing of Unit- I <b>Unit II- Algae:</b> General account of occurrence, structure, thallus organisation, reproduction, economic importance and classification
	16.09.24-21.09.24	Study of the structure, reproduction and life- cycle of: Chlorophyceae: Chlamydomonas, Volvox
	23.09.24- 30.09.24	Oedogonium Phaeophyceae: Sargassum Rhodophyceae: Polysiphonia, Batrachospermum
<b>October</b>	01.10.24- 05.10.24	Bacillariophyceae: General account, structure and reproduction of diatom, economic importance.
	07.10.24-12.10.24	<b>Unit III- Fungi:</b> General account of occurrence, structure, thallus organisation, reproduction, economic importance and classification, Plant pathology
	14.10.24- 19.10.24	Study of the structure, reproduction and life- cycle of: Phycomycetes- Albugo, <i>Phytophthora</i>
	21.10.24- 26.10.24	Ascomycetes- Yeast and Penicillium Myxomycetes- Stemonitis
	28.10.24-03.11.24	<b>Diwali Vacation</b>
<b>November</b>	04.11.24- 09.11.24	<b>Unit IV- Lichens:</b> Basidiomycetes: Puccinia
	11.11.24-16.11.24	Agaricus
	18.11.24- 23.11.24	Alternaria Revision



	25.11.24-30.11.24	Oral or written test Revision Deuteromycetes: Cercospora, Colletotrichum
		Lichens- General account, characters, distribution, types
		Structure, reproduction and economic importance of Lichens.
<b>December</b>	02.12.24-07.12.24	Revision
	09.12.24-14.12.24	Revision
	16.12.24-31.12.24	Examination

## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed. 1<sup>st</sup> Sem

Subject: Inorganic Chemistry

Paper Code: 101

Name of the Faculty: Ms. Ramandeep Kaur

Month	Week	Topics to be covered
July	22.07.24-26.07.24	Atomic structure: Idea of de-Broglie matter waves. Heisenberg uncertainty principle.
August	5.08.24-07.08.24	Quantum numbers, radial and wave functions and probability distribution curves shapes of s, p, d and f
	12.08.24-14.08.24	Aufbau and pauli exclusion principles hund's multiplicity, effective nuclear charge, Periodic properties.
	19.08.24-21.08.24	Atomic and ionic radii, Ionisation energy, electron affinity and trends in periodic table.
September	02.09.24-04.09.24	Chemical bonding and ionic solids <b>Structure and bonding:</b> Covalent bond –Valence bond theory and its limitations
	09.09.24-11.09.24	(VSEPR) theory and Ionic solids – structures and radius ratio effect
	16.09.24-18.09.24	Coordination number limitation of radius ratio rule, lattice defects.
October	01.10.24-03.10.24	Acids and bases and solvent system Theories of acids and bases: Arrhenius, Bronsted
	06.10.24-09.10.24	Lowery, Lux –flood, solvent system and lewis concept of acids and bases
	10.10.24-12.10.24	Concept of hard bases and soft bases (HSAB) solvent system and solvent system and chemistry of s-block.
November	<b>27.10.24-03.11.24</b>	<b>Diwali vacation</b>
	11.11.24-13.11.24	Chemistry of p-block Physical properties of p-block elements.
	14.11.24-18.11.24	Hydrides of p-block
	18.11.24-24.11.24	Noble gases
	25.11.24-27.11.24	Previous questions discussion
December	02.12.24-15.12.24	Revision and Test.
	16.12.24 onwards	Final Examination

## LESSON PLAN

**Session: 2024-25**

**Class: B.Sc. B.Ed. 1<sup>st</sup> Sem**

**Subject: Basics in Education**

**Paper Code: PEBE 101**

**Name of the Faculty: Mrs. Karamjit Kaur**

Month	Week	Topics to be covered
<b>July</b>	22.07.24-26.07.24	Meaning, Nature, Purpose and Importance of Education
	27.07.24-31.07.24	Education as a purpose of development (individual, social and harmonious). Education as an intentional (intellectual and self- critical) and unintentional.
<b>August</b>	01.08.24-05.08.24	Agencies of education: Family, Society and Institute
	06.08.24-12.08.24	Processes and Modes of Education: Education is a natural and social process.
	13.08.24-17.08.24	Education as an ability to question and imagine alternatives. Education in schools and its linkage with outside school experience
	20.08.24-25.08.24	Knowledge and Knowing Concept, Meaning and Nature of Knowledge and Knowing.
	27.08.24-31.08.24	Differentiate between information, knowledge, belief and truth. Limitation of knowing culture Test
<b>September</b>	02.09.24-07.09.24	Differentiate between information, knowledge, belief and truth.

		Knowledge construction, Process of Construction of Knowledge
	09.09.24-14.09.24	Knowing Process: Different ways of knowing. Relative roles of knower and known in knowledge transmission Test
	17.09.24-21.09.24	Facets of knowledge: Different facets of knowledge and relationship, local and universal, concrete and abstract, theoretical and practical, contextual and textual, Education and Values Concept and nature of values- Relative and absolute.
	25.09.24-30.09.24	School and out of school with an emphasis on understanding special attributes of school knowledge

<b>October</b>	01.10.24-05-10.24	Education and Values Concept and nature of values- Relative and absolute. Education with reference to human rights and values. Values prevalent in Indian Constitution and society
	07.10.24-12.10.24	Reflection on knowledge in the form of curriculum, syllabus and textbooks.
	14.10.24-19.10.24	Difference between autonomy and freedom. Teacher's autonomy and its importance in enriching learning environment. Autonomy of learner- why, what and to what extent, Restrains on learners in schools.
	21.10.24-26.10.24	Relationship between autonomy and accountability. Autonomy of learner- why, what and to what extent, Restrains on learners in schools. Learning without burden And Joyful, Collaborative and cooperative learning. Individual autonomy and collective responsibility of teacher and learner Test
	27.10.24-03.11.24	Diwali Vacations
	06.10.24-10.11.24	Education is a normative endeavour. Process of value formations in schools and out of schools and its impact on learners' value perspective.
<b>November</b>	4.11.24-9.11.24	School and out of school with an emphasis on understanding special attributes of school knowledge. Revision And Test
	11.11.24-16.11.24	Hindering factors that affect teacher's autonomy.
	18.11.24-23.11.24	Revision And Test
	25.11.24-30.11.24	Autonomy of Teacher and Learner Autonomy of teacher- why, what and to what extent
<b>December</b>	02.12.24-9.12.24	Revision And Test Knowledge construction, Process of Construction of Knowledge
	11.12.24-15.12.24	Difference between autonomy and freedom. Teacher's autonomy and its importance in enriching learning environment.

## LESSON PLAN

**Session: 2024-25**

**Class: B.Sc. B.Ed. 1<sup>st</sup> Sem**

**Subject: Work Education (Agriculture Practice)**

**Paper Code: WEAP 101**

**Name of the Faculty: Mrs. Mitu Nagpal**

Month	Week	Topics
<b>July</b>	22.07.24-27.07.24	<b>Unit-1 Agriculture:</b> Meaning, Definition, Scope of Agriculture
	29.07.24-31.07.24	History of Agriculture
<b>August</b>	1.08.24- 3.08.24	Branches of Agriculture
	5.08.24-10.08.24	Objectives of Agriculture
	12.08.24-17.08.24	Revision of Unit
	19.08.24-24.08.24	<b>Unit-2 Soil Science:</b> Definition of Paedology
	26.08.24-31.08.24	Soil Management, Soil Erosion
<b>September</b>	02.09.24-07.09.24	Soil Conservation
	09.09.24-14.09.24	Practices Structure of Soil
	16.09.24-21.09.24	Soil Profile; Soil Fertility and Productivity
	23.09.24- 30.09.24	Essential Plant Nutrients
<b>October</b>	01.10.24- 05.10.24	Fertilizers And Manures Including Bio fertilizers. Identification of Manures and Fertilizers
	07.10.24-12.10.24	Revision of Unit
	14.10.24- 19.10.24	<b>Unit 3: Irrigation:</b> Definition
	21.10.24- 26.10.24	Method of Irrigation
	28.10.24-03.11.24	<b>Diwali Vacations</b>
<b>November</b>	04.11.24- 09.11.24	<b>Horticulture:</b> Definition, Branches of Horticulture
	11.11.24-16.11.24	Layout of Orchards, Propagation by Seeds And by Vegetative Means
	18.11.24- 23.11.24	Pot Filling Technique; Planning, Planting and Maintaining, Lawn; Practice Related to Landscaping
	25.11.24-30.11.24	<b>Unit 4: Agricultural Practices:</b> Preparation of Land, Selection of Seeds, Watering, Thinning
<b>December</b>	02.12.24-07.12.24	Hoeing And Weeding, Harvesting of Crop
	09.12.24-14.12.24	Identification of Important Agricultural Tools, Trees and Crop Plants. Minor Project Preparation on Agriculture
	16.12.24-31.12.24	<b>Examination</b>

## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed./B.A. B.Ed. 3<sup>rd</sup> Sem

Subject: Env Edu. & Sustainable Development      Paper Code: GCEE 201

Name of the Faculty: Dr. Manju Yadav

Month	Week	Topics
<b>July</b>	22.07.24-27.07.24	Importance need and scope of Environmental Conservation and Regeneration
	29.07.24-31.07.24	Structure and functions of different ecosystems
<b>August</b>	1.08.24- 3.08.24	India as a mega biodiversity nation
	5.08.24-10.08.24	Role of individual in conservation of natural resources: water, energy
	12.08.24- 17.08.24	Role of individual in conservation of natural resources: food,
	19.08.24-24.08.24	Equitable uses of resources for sustainable livelihoods
	26.08.24-31.08.24	Environmental legislation: awareness and issues involved in enforcement.
<b>September</b>	02.09.24-07.09.24	Community participation in natural resource management- water, forests
	09.09.24-14.09.24	Environmental conservation, Deforestation in the context of tribal life, Sustainable land use management
	16.09.24-21.09.24	Traditional knowledge and biodiversity conservation
	23.09.24- 30.09.24	Biodiversity conservation, Test, Developmental projects including Government initiatives and their impact on biodiversity conservation
<b>October</b>	01.10.24- 05.10.24	Practices in Environment Management, Consumerism and waste generation and its management
	07.10.24-12.10.24	Sustainable Environment in Globalworld , Environmental conservation in the globalised world.
	14.10.24- 19.10.24	Alternative sources of energy, Impact of industry/mining/transpo on environment, Sustainable use of forest produces
	21.10.24- 26.10.24	Impact of natural disaster/man-made disaster on environment,
	28.10.24-03.11.24	<b>Diwali Vacation</b>
<b>November</b>	04.11.24- 09.11.24	Biological control for sustainable agriculture, Heat production and greenhouse gas emission
	11.11.24-16.11.24	Environmental degradation and its impact on the health of people, how degradation affect our environment
	25.11.24-30.11.24	Biomedical waste management, health types of wastes, how biomedical waste affect our environment and human
<b>December</b>	02.12.24-07.12.24	Revision
	09.12.24-14.12.24	Revision

## LESSON PLAN

**Session: 2024-25**

**Class: B.Sc. B.Ed./B.A. B.Ed. 3<sup>rd</sup> Sem**

**Subject: Yoga, Health & Well Being**

**Paper Code:**

**Name of the Faculty: Ms. Priyanka**

Month	Week	Topics to be covered
<b>July</b>	22.07.24-26.07.24	Concept of health, importance, dimensions and determinants of health
	27.07.24-31.07.24	Needs of children and adolescents including differently abled children.
<b>August</b>	1.08.24-05.08.24	Understanding of the body system – skeleton, muscular
	06.08.24-12.08.24	Respiratory circulatory and digestive in relation to health.
	13.08.24-17.08.24	Common health problems
	20.08.24-24.08.24	Diseases- causes, prevention and cure, Immunization
	27.08.24-31.08.24	First aid
<b>September</b>	02.09.24-07.09.24	Food - habits, hygiene, diseases and their prevention, Safety, security and physical fitness
	09.09.24-14.09.24	Food and nutrition, food habits, nutrients and their functions
	16.09.24-21.09.24	Preservation of food value during cooking, indigenous
	24.09.24-30.09.24	Modern ways of preserving food
<b>October</b>	01.10.24-05-10.24	Practices related to food hygiene
	07.10.24-12.10.24	Malnutrition, obesity, food and waterborne diseases
	14.10.24-19.10.24	Deficiency diseases and prevention
	21.10.24-25.10.24	Safety from snake and dog bites, animal attacks, prevention and treatment
	25.10.24-26.10.24	Physical fitness, strength, endurance and flexibility, its components, sports skills and self- defence activities
<b>November</b>	<b>27.10.24-03.11.24</b>	<b>DIWALI VACATION</b>
	04.11.24-11.11.24	Athletics and Games
	11.11.24-16.11.24	Athletics – general physical fitness exercises
	18.11.24-30.11.24	Games – lead up games, relays and major games Health services, policies and health and physical education related programmes, blood banks and role of media Revision and Test

	20.11.24-25.11.24	Rhythmic activities, gymnastics and their impact on health. Revision and Test Yogic practices – importance of yoga, yogasanas and pranayamas. Role of institutions in developing healthy individuals- family, school and sports Revision and Test
<b>December</b>	02.12.24-15.12.24	Safety and security – disasters in and outside schools, ways of prevention
	16.12.24 onwards	Examination



## LESSON PLAN

**Session: 2024-25**

**Class: B.Sc. B.Ed. 3<sup>rd</sup> Sem**

**Subject: Electrodynamics**

**Paper Code: PHY 201**

**Name of the Faculty: Ms. Loveleen**

Month	Week	Topics to be covered
<b>July</b>	22.07.24- 26.07.24	Coulomb's law, calculations of E for simple distributions of charges at rest, dipole and quadrupole fields, Conservative nature of the electrostatic field, Electric potential, Relation between electric field and electric potential
	27.07.24-31.07.24	Torque on a dipole in a uniform electric field and its energy , Work done on a charge in an electrostatic field
<b>August</b>	01.08.24-05.08.24	Flux of the electric field, Stoke's law, Electrostatic field, Gauss's law and its application for finding E for symmetric charge distributions, Gaussian pillbox, Fields at the surface of conductor, Screening of E field by a conductor, capacitors, electrostatic field energy

	06.08.24-12.08.24	Force per unit area of the surface of conductor in an electric field, conducting sphere in a uniform electric field, Polarization, Point charge in front of a grounded infinite conductor, Dielectrics, Parallel plate capacitor with a dielectric
	13.08.24-17.08.24	Boundary conditions satisfied by E and D at the interface between two homogenous dielectrics, illustration through simple example
	20.08.24-24.08.24	Steady current, current-density J, non-steady currents and continuity equation
	27.08.24-31.08.24	Kirchoff's law and analysis of multi loop circuits, rise and decay of current in LR and CR circuits, Decay constants, Dielectric constant, Transients in LCR circuits
<b>September</b>	02.09.24-07.09.24	AC circuits, complex numbers and its application in solving AC circuit problems, Complex impedance and reactance,
	09.09.24-14.09.24	Measurement of capacitance using impedance at different frequencies, series and parallel resonance, Q factor, Power consumed by an AC circuit, Power factor, Y and $\pi$ networks and transmission of electric power. Q factor, Power consumed by an AC circuit
	16.09.24-21.09.24	Magneto statics, Force on a moving charge: Lorentz force, equation and definition of B

	24.09.24-30.09.24	Force on a straight conductor carrying current in a uniform magnetic field, Torque on a current loop
<b>October</b>	01.10.24-05.09.24	Velocity selector, its resolution Response curve for LCR circuit and resonance frequency, quality factor , Magnetic Fields in Matter
	07.10.24-12.10.24	Biot-Savart law, Calculation of H in simple geometrical situations
	14.10.24-19.10.24	Ampere's Law, the divergence and curl of B field due to a magnetic dipole, magnetization current, magnetization vector, magnetic permeability (linear cases)
	21.10.24-25.10.24	Interpretation of a bar magnet as a surface distribution of solenoidal current, the field of a magnetized object, Reflection and Refraction by the ionosphere, Wave in conducting medium.
	27.10.24-03.11.24	<b>Diwali vacations</b>
<b>November</b>	04.11.24-09.11.24	Tests
	11.11.24-16.11.24	Plane electromagnetic wave in vacuum, Wave equation for E and B of linearly, Circularly and elliptically polarized electromagnetic waves, Poynting vector
	18.11.24-23.11.24	Tests (AC Circuits)
	25.11.24-30.11.24	Reflection and Refraction at a plane boundary of dielectrics, Polarization by Reflection and total internal Reflection, Faraday effect
<b>December</b>	02.12.24-15.12.24	Revision and Test
	16.12.24– 31.12.24	Examination

## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed. 3<sup>rd</sup> Sem

Name of the Faculty: Ms. Shashi

Paper Code: 201

Subject: Gymnosperms & Reproductive Biology in flowering plants

Month	Week	Topics to be covered
<b>July</b>	22.07.24-27.07.24	Unit I: Morphology and Anatomy of Gymnosperms: General characters of Gymnosperms, Affinities, Economic Importance, Classification of Gymnosperms
	29.07.24- 31.07.24	Cycadopsida - Cycas- Morphology and Anatomy
<b>August</b>	1.08.24- 3.08.24	Cycas- Reproduction
	5.08.24-10.08.24	Coniferopsida- Pinus- Morphology Pinus – Anatomy
	12.08.24- 17.08.24	Pinus- Anatomy and Reproduction
	19.08.24-24.08.24	Gnetopsida- Ephedra – Morphology and Anatomy
	26.08.24-31.08.24	Ephedra- Reproduction and Revision
<b>September</b>	02.09.24-07.09.24	Unit II: Flower-Structure,morphology, embryological perspective
	09.09.24-14.09.24	Microsporangium – Development of wall layers, tapetum types, microsporogenesis, tetrad types
	16.09.24-21.09.24	Male gametophyte – Development and structure; vegetative and generative cells; male gametes
	23.09.24- 30.09.24	Mega sporangium (ovule): Development, types, mega sporogenesis and tetrad types.
<b>October</b>	01.10.24- 05.10.24	Female gametophyte: Development, ultra structure, mono, bi and tetrasporic embryo sacs
	07.10.24-12.10.24	Unit III: Reproduction in Gymnosperms Pollination and fertilization: Definitions, types of pollination
	14.10.24- 19.10.24	Pollen-pistil interaction, self-incompatibility double fertilization
	21.10.24- 26.10.24	Endosperm: Definition, types – cellular, nuclear and helobial; endo spermhaustoria Embryo: Classification, types, development of Crucifertype
	28.10.24-03.11.24	Diwali Vacations
<b>November</b>	04.11.24- 09.11.24	Unit IV- <b>Angiosperm Embryology-</b> Fruit and seed: Development, structure of monocot and dicot seeds, dispersal mechanisms, importance
	11.11.24-16.11.24	Fruits- Types, classification with examples
	18.11.24- 23.11.24	Origin and evolution of Angiosperms, Fossil Angiosperms

	25.11.24-30.11.24	Brief account of anther/ pollen culture, endosperm, embryo and protoplast culture, Applications of tissue culture
<b>December</b>	02.12.24-07.12.24	Revision
	09.12.24-14.12.24	Revision
	16.12.24-31.12.24	Examination

## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed. 3<sup>rd</sup> Sem

Subject: Organic Chemistry

Paper Code: CHM 201

Name of the Faculty: Mrs. Ramandeep Kaur

Month	Week	Topics to be covered
July	22.07.24-24.07.24	Stereochemistry of organic compounds, types of isomerism
	27.07.24-29.07.24	Chirality, Enantiomers, Geometric Isomerism, Steriogeniccentre, Conformational Isomerism
August	01.08.24-03.08.24	Newman projection and sawhorse formula
	08.08.24-10.08.24	Fischer and flying wedge formula
	14.08.24-16.08.24	Difference between configuration and conformation
	20.08.24-22.08.24	Mechanism of organic reaction – Inductive effect
	26.08.24-29.08.24	Types of organic reaction
September	02.09.24-03.09.24	Hyper conjugation, Carbocations
	06.09.24-10.09.24	Carbanions
	12.09.24-14.09.24	Free radicals
	19.09.24-21.09.24	Isotopic effects
	26.09.24-28.09.24	Naming reactions
October	10.10.24-12.10.24	Chemistry of cycloalkanes
	17.10.24-19.10.24	Cycloalkenes and Cycloalkadienes
	25.10.24-26.10.24	Arenes and Aromaticity
November	<b>27.10.24-03.11.24</b>	<b>Diwali vacation</b>
	07.11.24-09.11.24	Nomenclature and classification of alkyl halides
	11.11.24-16.11.24	Methods of formation
	21.11.24-23.11.24	Chemical reactions, Elimination reactions
December	0.12.24-08.12.24	Previous questions discussion

## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed. 3<sup>rd</sup> Sem

Subject: Animal Cell biology & Genetics

Paper Code: 201

Name of the Faculty: Ms. Saloni

Month	Week	Topics
<b>July</b>	22.07.24-27.07.24	<b>UNIT 1: CELL</b> -Introduction to cell: Discovery, Characteristics of prokaryotic (Bacterial) and eukaryotic cells (plant and animal cells), cell theory, viruses and viroids.
	29.07.24- 31.07.24	Cell membrane, Ultra structure, chemical composition, models, unit membrane concept, fluidity, glycocalyx, and functions of the cell membrane.
<b>August</b>	1.08.24- 3.08.24	Transport across cell membrane, Passive transport (osmosis, diffusion), facilitated diffusion; active transport (primary and secondary) and endocytosis and exocytosis.
	5.08.24-10.08.24	Mitochondria, ultra structure, chemical composition, function , origin.
	12.08.24- 17.08.24	Electron transport chain and generation of ATP molecule
	19.08.24-24.08.24	Nucleus occurrence, number, shape, size and structure (nuclear envelopes, nuclear matrix and nucleolus)
	26.08.24-31.08.24	<b>UNIT 2: CELL ORGANELLE</b> -Ultra structure, types, chemical composition and functions of a) ER and Golgi complex b) Lysosomes, Ribosomes c) Centrioles d) Cilia and Flagella
<b>September</b>	02.09.24-07.09.24	Chromosomes: Introduction, structure, types, chemical composition and function. Chromosomal organisations, Nucleosomes concepts, Euchromatin, heterochromatin.
	09.09.24-14.09.24	<b>UNIT 3: CELL CYCLE AND DIVISION</b> -Cell reproduction: cell cycle and significance of mitosis and meiosis. Regulation of cell cycle.
	16.09.24-21.09.24	Mendelian principles of inheritance: monohybrid and dihybrid cross, back cross and test cross and deviation of Mendelism- incomplete dominance, co-dominance with example.
	23.09.24- 30.09.24	Gene interactions: Epistasis, complementary, supplementary, duplicate genes. Multiple alleles: Characters, examples pseudoalleles, inheritance of A, B, AB, O and Rh blood groups (antibody reaction)

<b>October</b>	01.10.24- 05.10.24	<b>UNIT 4: GENETICS-</b> Chromosomal mutation-chromosomal number variation, structural changes, Sex determination: Genetic (sex chromosomes, genetic balance and haplo-diploidy mechanism)
	07.10.24-12.10.24	Hormonal and environmental control of sex determination with examples.
	14.10.24- 19.10.24	Linkage: Definition, difference between linkage and independent assortment.
	21.10.24- 26.10.24	Chromosomal theory of linkage, kinds, linkage groups and significance.
	28.10.24-03.11.24	<b>Diwali Vacation</b>
<b>November</b>	04.11.24- 09.11.24	Sex linked inheritance: White eyes colour in <i>Drosophila</i> .
	11.11.24-16.11.24	Colour blindness and haemophilia in man.
	18.11.24- 23.11.24	Crossing over: Definition, mechanism, theories, kinds, frequency, factors affecting crossing over and significance.
	25.11.24-30.11.24	Theories, kinds, frequency of crossing over.
		Factors affecting crossing over and significance
	Test	
<b>December</b>	02.12.24-07.12.24	Revision
	09.12.24-14.12.24	Revision
	16.12.24-31.12.24	Examination

## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed. 3<sup>rd</sup> Sem

Subject: Linear Algebra

Paper Code: MTH 201

Name of the Faculty: Ms. Deepshikha Jain

Month	Week	Topics to be covered
<b>July</b>	22.07.24-27.07.24	<b>Unit-1</b> Matrices determinants, Basic properties of determinants, Co-factor expansion
	29.07.24- 31.07.24	Elementary matrices, invertible matrices
<b>August</b>	1.08.24- 3.08.24	System of linear equations
	5.08.24-10.08.24	Gauss elimination method, Gauss-Jordan method for finding inverse of a matrix
	12.08.24- 17.08.24	Vector spaces & Subspaces
	19.08.24-24.08.24	Linear dependence and Linear independence of vectors
	26.08.24-31.08.24	Basis and Dimension, Finite dimensional vector space- some properties
<b>September</b>	02.09.24-07.09.24	Quotient spaces, Homomorphism of vector spaces
	09.09.24-14.09.24	Isomorphism of vector spaces, Direct sum
	16.09.24-21.09.24	Inner product spaces
	23.09.24- 30.09.24	Euclidean vector spaces, Distance, Length, Properties
<b>October</b>	01.10.24- 05.10.24	Orthogonal vectors, Gramm Schmidt Orthogonalisation Process
	07.10.24-12.10.24	Orthogonal Complement.
	14.10.24- 19.10.24	Matrices of linear transformations, Change of basis and the effect of associated matrices
	21.10.24- 26.10.24	Kernal and Image of a Linear transformation Rank Nullity theorem
	28.10.24-03.11.24	<b>Diwali Vacations</b>
<b>November</b>	04.11.24- 09.11.24	Singular and Nonsingular linear transformations Elementary matrices and transformations
	11.11.24-16.11.24	Similarity, Eigen values, Eigen Vectors Diagonalisation
	18.11.24- 23.11.24	Characteristic polynomial, Cayley-Hamilton theorem, Minimal polynomial.
<b>December</b>	25.11.24-30.11.24	Quadratic curves, Surfaces, Spheres, Cylinder
	09.12.24-14.12.24	Hyperboloid, Paraboloid
	16.12.24-31.12.24	<b>Examination</b>



## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed./B.A. B.Ed. 3<sup>rd</sup> Sem

Subject: Schooling, Socialization & Identity      Paper Code: PESS 201

Name of the Faculty: Dr. Gurmeet Kaur

Month	Week	Topics
<b>July</b>	22.07.24-26.07.24	Understanding the nature and processes of socialization
	27.07.24-31.07.24	<b>At home:</b> family as a social institution; impact of parenting style
<b>August</b>	01.08.24-05.08.24	Child rearing practices; transmission of parental expectations and values
	06.08.24-12.08.24	In the community: neighbourhood, extended family, religious group and their socialization functions
	13.08.24- 17.08.24	<b>At school:</b> impact of entry to school; school as a social institution; value-formation in the context of schooling
	20.08.24-24.08.24	Gender and religion
	27.08.24-31.08.24	Determinants of identity formation in individuals and groups: such as caste, class
<b>September</b>	02.09.24-07.09.24	The influence of peer group, media messages, technology
	09.09.24-14.09.24	Globalization on identity formation in contemporary Indian society
	17.09.24-21.09.24	Schooling as a process of identity formation: ascribed, acquired and evolving
	24.09.24- 30.09.24	Potential role of school in developing national identity
<b>October</b>	01.10.24- 05.10.24	Potential role of school in developing secular and humanistic identities
	07.10.24-12.10.24	Expanding human activities and relations
	14.10.24- 19.10.24	Decreasing unhealthy competition, uncertainty and insecurities and the resultant identity conflicts
	21.10.24- 25.10.24	Indian concept of ‘vasudhaiva kutumbakam’
	28.10.24-03.11.24	<b>Diwali Vacation</b>
<b>November</b>	04.11.24- 09.11.24	Indian concept of ‘sarvadharm sambhava’
	11.11.24-16.11.24	Reflections on one’s own aspirations and efforts in becoming a ‘teacher’
	18.11.24-23.11.24	Evolving an identity as a teacher, which is progressive and open to re-construction
	25.11.24-30.11.24	Teachers’ professional identity and Teachers’ professional ethics
<b>December</b>	02.12.24-14.12.24	Revision and Test

## LESSON PLAN

**Session: 2024-25**

**Class: B.Sc. B.Ed. 3<sup>rd</sup> Sem**

**Subject: Guidance & Counselling in School**

**Paper Code: CBCED-I-201**

**Name of the Faculty: Ms. Karamjit Kaur**

Month	Week	Topics to be covered
<b>July</b>	22.07.24-26.07.24	Guidance: Meaning, Nature & Functions, Principles
	27.07.24-31.07.24	Vocational Guidance – Meaning and need at Secondary level. Personal Guidance – Meaning and need at Secondary level
<b>August</b>	01.08.24-05.08.24	Meaning, Nature and Functions of Counseling, Theories of Counselling
	06.08.24-12.08.24	Theory of Self Rogers, Rational Emotive Behaviour
	13.08.24-17.08.24	Types of Counselling: Directive, Non directive, Eclectic.
	20.08.24-25.08.24	Tests: Aptitude, Attitude,
	27.08.24-31.08.24	Interest
<b>September</b>	02.09.24-07.09.24	Achievement tests
	09.09.24-14.09.24	Personality, IQ and Emotional,
	17.09.24-21.09.24	Techniques used in guidance: Questionnaire
	23.09.24-30.09.24	Dealing with depression and academic stress (with regard to their identification and intervention). Guidance Implication in (Current Indian scenario
<b>October</b>	01.10.24-05.10.24	Skills in Counselling (Listening, Questioning, Responding, Communicating
	07.10.24-14.10.24	Role of Teacher as a counsellor and professional ethics associated with it.
	14.10.24-19.10.24	Career Counselling and Dissemination of Occupational Information
	21.10.24-26.10.24	Need of Guidance at various stages of life
	27.10.24- 3.11.24	Diwali Vacations
<b>November</b>	04.11.24-9.11.24	Types of Guidance: Educational Guidance – Meaning and need at Secondary level
	11.11.24-16.11.24	Process of Counselling (Initial disclosure, in depth exploration and commitment to action).
	18.11.24-23.11.24	Mental ability, Intelligence etc.
	25.11.24-30.11.24	Interview schedule, Case study, Diary & Autobiography. Professional efficacy and interest
<b>December</b>	01.12.24-02.12.24	Education and Guidance
	04.12.24-10.12.24	Revision test

## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed. 5<sup>th</sup> Sem

Subject: Kinetic Theory & Thermodynamics

Paper Code: PHY 301

Name of the Faculty: Dr. Darshan Lal

Month	Week	Topics to be covered
July	22.07.24-26.07.24	<b>Unit I: Ideal and real gas</b> <b>Ideal gas:</b> kinetic model, deduction of boyle's law, interpretation of temperature, estimation of rms speeds of molecules.
	27.07.24 -31.07.24	Brownian motion, estimate of the Avogadro number, equipartition of energy, specific heat of monoatomic gas, extension to di- and triatomic gases.
August	01.08.24-05.08.24	Behavior at low temperatures, adiabatic expansion of an ideal gas, applications to atmospheric physics
	06.08.24-12.08.24	<b>Real gas:</b> Van der Waals' equation of state, nature of Van der Waals' forces, comparison with experimental P-V curves, the critical constants, gas and vapour.
	13.08.24-17.08.24	Joule expansion of ideal gas and of a Van der Waals' gas, Joule coefficient, Joule-Thomson effect.
	20.08.24-24.08.24	<b>Unit II: Liquefaction of gases</b> Boyle temperature and inversion temperature, principle of regenerative cooling and of cascade cooling, liquefaction of hydrogen and helium, refrigeration cycles, meaning of efficiency.
	27.08.24-31.08.24	<b>Transport phenomena in gases:</b> molecular collisions, mean free path and collision cross sections, estimates of molecular diameter and mean free path
September	02.09.24 -07.09.24	Transport of mass, momentum and energy and interrelationship, dependence on temperature and pressure. Revision and test
	09.09.24-14.09.24	<b>Unit III: Thermodynamics</b> <b>The laws of thermodynamics:</b> The zero <sup>th</sup> law, various indicator diagrams, work done by and on the system, First law of thermodynamics, internal energy as a state function, reversible and irreversible changes,
	16.09.24 -21.09.24	Carnot cycle and its efficiency, Carnot theorem and the second law of thermodynamics, different versions of the

		second law, practical cycles used in internal combustion engines, Entropy, principle of increase of entropy
	24.09.24 -30.09.24	Tests
<b>October</b>	01.10.24-05.10.24	The thermodynamic scale of temperature, its identity with the perfect gas scale, impossibility of attaining the absolute zero temperature, third law of thermodynamics.
	07.10.24 -12.10.24	<b>Unit IV: Thermodynamic relationships</b> Thermodynamic variables- extensive and intensive, Maxwell's general relationships.
	14.10.24-19.10.24	Application to Joule–Thomson expansion and adiabatic coolingn a general system, Van der Waals' gas, Clausius-Clapeyron heat equation.
	21.10.24-25.10.24	Thermodynamic potentials and equilibrium of thermodynamical systems, relation with thermodynamical variables.
	27.10.24 -03.11.24	<b>Diwali vacations</b>
<b>November</b>	04.11.24 – 09.11.24	Cooling due to adiabatic demagnetization, production and measurement of very low temperatures.
	11.11.24 – 16.11.24	<b>Blackbody radiation:</b> pure temperature dependence, Stefan Boltzmann law, pressure of radiation.
	18.11.24 – 23.11.24	Spectral distribution of blackbody radiation, Wein's displacement law, Rayleigh-Jean's law.
	25.11.24 – 30.11.24	Planck's quantum postulates, Planck's law, complete fit with experiment, interpretation of behaviour of specific heats of gases at low temperature.
<b>December</b>	02.12.24-15.12.24	Revision and Tests.
	16.12.24-31.12.24	Examinations.

## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed. 5<sup>th</sup> Sem

Subject: Cell Biology & Genetics

Paper Code: 301

Name of the Faculty: Ms. Shashi

Month	Week	Topics
July	22.07.24-27.07.24	<b>Unit I: Cell Biology-</b> Basic principles of microscopy, Light, fluorescent
	29.07.24- 31.07.24	Phase contrast, UV and electron microscope
August	1.08.24- 3.08.24	Ultrastructure of prokaryotic and eukaryotic cell
	5.08.24-10.08.24	Ultrastructure and function of Cell wall
	12.08.24- 17.08.24	Cell membrane
	19.08.24-24.08.24	Golgi complex, Endoplasmic reticulum
	26.08.24-31.08.24	Mitochondria
September	02.09.24-07.09.24	<b>Unit II:</b> Ultrastructure and function of Chloroplast
	09.09.24-14.09.24	Ribosome, Lysosome and microbodies
	16.09.24-21.09.24	Ultrastructure and function of Nucleus
	23.09.24- 30.09.24	Brief account of morphology and organisation of prokaryotic and eukaryotic chromosome, Nucleosome model, concept of karyotype and ideogram
October	01.10.24- 05.10.24	<b>Unit III- Chromosomal alterations:</b> <b>Structural variations-</b> Deletion, Duplication, Inversion and Translocation
	07.10.24-12.10.24	<b>Numerical variations-</b> Aneuploidy and euploidy
	14.10.24- 19.10.24	Cell division- Cell cycle, events of cell division, karyokinesis, cytokinesis, Mitosis, meiosis and their significance
	21.10.24- 26.10.24	<b>Mutations-</b> Types, Transposable genetic elements
	28.10.24-03.11.24	<b>Diwali Vacations</b>
November	04.11.24- 09.11.24	<b>Unit-IV- Genetics-</b> Mendelism- Review of Mendel's law of inheritance, solving problems related to Mendel's law and Revision Inheritance of genes: Incomplete dominance, complementary genes action (flower colour in sweet pea)
	11.11.24-16.11.24	Supplementary gene action (coat colour in mice), epistasis

		(fruit colour in summer squash), multiple factor inheritance (ear size in maize), Linkage and crossing over
	18.11.24- 23.11.24	Sex determination in Plants, Cytoplasmic inheritance- presence and functioning of mitochondrial and plastid DNA
	25.11.24-30.11.24	Cytoplasmic male sterility
<b>December</b>	02.12.24-07.12.24	Revision
	09.12.24-14.12.24	Revision
	16.12.24-31.12.24	Examination

## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed. 5<sup>th</sup> Sem

Subject: Physical Chemistry

Paper Code: CHM 301

Name of the Faculty: Mrs. Ramandeep Kaur

Month	Week	Topics to be covered
July	22.07.24-26.07.24	Electrochemistry – electrical transport –conduction in metals
	27.07.24-31.07.24	Specific conduction, Kohlrausch law, Arrhenius theory, transport number, determination of degree of dissociation
August	01.08.24-05.08.24	Debye- Huckel- Onsager's equation, types of electrodes
	06.08.24-12.08.24	Nernst equation, derivation of cell E.M.F. & Chemical kinetics
	13.08.24-17.08.24	Zero order, first order reaction, theories of chemical kinetics
	20.08.24-24.08.24	Methods of integration
	27.08.24-31.08.24	Method of half-life period. Experimental methods of chemical kinetics
September	09.09.24-14.09.24	Conductometric, Potentiometric, Optical methods, Polarimetry
	16.09.24-21.09.24	Spectrophotometry
	24.09.24-30.09.24	Effect of temperature on rate of reaction
October	01.10.24-05.10.24	Elementary of quantum mechanics – de Broglie
	07.10.24-12.10.24	Hypothesis, Heisenberg, Uncertainty principle sinusoidal
	14.10.24-19.10.24	Wave equation, Hamiltonian operator, Schrodinger Wave
	21.10.24-25.10.24	Schrodinger wave Equation
November	<b>27.10.24-03.11.24</b>	<b>Diwali Vacations</b>
	04.11.24-09.11.24	Chemical equilibrium, reaction isotherm
	11.11.24-16.11.24	Claapeyron equation, application, degree of freedom
	18.11.24-23.11.24	Derivation of Gibbs phase rule, Raoult's and Henry's law
	25.11.24-30.11.24	Nernst distribution law, non-ideal system – azeotropes HCl partially miscible liquids
December	02.12.24-15.12.24	<b>Test</b>
	16.12.24-31.12.24	<b>Examinations</b>

## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed. 5<sup>th</sup> Sem

Subject: Development Biology

Paper Code: 301

Name of the Faculty: Ms. Saloni

Month	Week	Topics
July	22.07.24-27.07.24	<b>UNIT 1: DEVELOPMENTAL BIOLOGY</b> -Concepts and scope of developmental biology Gametogenesis: a) structure and types of spermatozoa, spermatogenesis, b) structure and types of eggs, oogenesis.
	29.07.24-31.07.24	Fertilization: Types, mechanism and significance Cleavage: types and patterns of cleavage, fatemap.
August	01.08.24-03.08.24	Gastrulation: Morphogenetic movements and significance.
	05.08.24-10.08.24	<b>UNIT 2: METAMORPHOSIS AND EMBRYOGENESIS</b> - Development up to the of neurulation.
	12.08.24- 17.08.24	Metamorphosis of tadpole larva, hormonal control of metamorphosis.
	19.08.24-24.08.24	Development of frog up to formation of advance tadpole.
	26.08.24-31.08.24	Embryogenesis of chick: Development up to neurulation.
September	02.09.24-07.09.24	Tabulation.
	09.09.24-14.09.24	Development of chick according to hours of incubation- 18 hours, 21 hours, 24 hours, 33 hours, 48 hours.
	16.09.24-21.09.24	56 hours, 72 hours and 96 hours.
	23.09.24-30.09.24	Extra embryonic membrane of chick- development and function
October	01.10.24- 05.10.24	<b>UNIT 3: PARTHENOGENESIS</b> -Placenta and placentation in mammals.
	07.10.24-12.10.24	Parthenogenesis: natural and artificial.
	14.10.24-19.10.24	Regeneration mechanism in animals, steps of limbs regeneration in amphibians.
	21.10.24-26.10.24	Stem cells and their significance
	28.10.24-03.11.24	<b>Diwali Vacation</b>
November	04.11.24- 09.11.24	<b>UNIT 4: TERATOGENESIS</b> -Elementary idea of the following developmental process: a) Embryonic induction
	11.11.24-16.11.24	b) Organizer concept c) Differentiation
	18.11.24- 23.11.24	Teratogenesis: Genetic and envrionmental teratogenesis.
	25.11.24-30.11.24	Ageing Senescence
December	02.12.24-07.12.24	Test
	09.12.24-14.12.24	Revision
	16.12.24-31.12.24	Examination



## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed. 5<sup>th</sup> Sem

Subject: Real Analysis

Paper Code: MTH 301

Name of the Faculty: Mrs. Deepshikha Jain

Month	Week	Topics to be covered
July	22.07.24-27.07.24	<b>Real number system:</b> Completeness axiom
	29.07.24-31.07.24	Densities of rational/irrational
August	01.08.24-03.08.24	Properties of real numbers
	05.08.24-10.08.24	Least upper bound axiom of a function
	12.08.24-17.08.24	<b>Sequence &amp; series</b> Real sequence, definition
	19.08.24-24.08.24	Theorem on limits of sequence
	26.08.24-31.08.24	Bounded & monotonic sequences, Sequential continuity
September	02.09.24-07.09.24	Cauchy's convergence criterion, Infinite series of non-negative terms
	09.09.24-14.09.24	Comparison tests ratio test, Raabe's test
	16.09.24-21.09.24	Logarithmic test, Demorgan & Bertrand's tests class test of first half of unit 1
	23.09.24-30.09.24	Cauchy's integral test, Alternating tests, Leibnitz test
October	01.10.24-05-10.24	Absolute and conditional convergence
	07.10.24-12.10.24	Uniform convergence of series of function
	14.10.24-19.10.24	<b>Continuous functions:</b> Basic properties of limits
	21.10.24-26.10.24	Continuous functions, Classification of discontinuities
	28.10.24-03.11.24	<b>Diwali vacations</b>
November	04.11.24-09.11.24	Properties of continuous functions Class test of unit 4
	11.11.24-16.11.24	Boundedness of a continuous function on $[a,b]$ Uniform continuity Differentiability, chain rule, mean value theorems and their Geometrical interpretations
	18.11.24-23.11.24	Darboux's intermediate value Theorem for derivatives Taylor's theorem with various forms of remainder
	25.11.24-30.11.24	<b>Integral calculus:</b> Riemann integral Integrability of continuous and monotonic functions The fundamental theorem of integral calculus Mean value theorems of integral calculus
December	02.12.24-7.12.24	Class test of unit 1 Class test of unit 2
	9.12.24-14.12.24	Class test of unit 3 Class test of unit 4
	16.12.24-31.12.24	<b>Examinations</b>

## LESSON PLAN

**Session: 2024-25**

**Class: B.Sc. B.Ed. 5<sup>th</sup> Sem**

**Subject: Pedagogy of Physical science**

**Paper Code: CPSPS 301**

**Name of the Faculty: Mrs. Deepshikha Jain**

Month	Week	Topics to be covered
<b>July</b>	22.07.24-27.07.24	<p><b>NATURE OF SCIENCE:</b> History, philosophy and nature of science, its role and importance in daily life Science as interdisciplinary area of learning, development of science and Technology, their interdependence and impact on society development of scientific attitude and values through science education.</p> <p><b>CURRICULUM DEVELOPMENT</b> Need and salient features of Curriculum, strategy and principle of Curriculum construction trends in science curriculum Development of science curriculum in India Basic criteria of validity of a science Curriculum in the light of ncf-2005</p>
	29.07.24-31.07.24	<p>Curriculum for secondary level Objectives of teaching science at upper primary level and secondary level</p>
		<p>Analysis of syllabus and textbooks of science at upper primary and secondary level</p>
<b>August</b>	01.08.24-03.08.24	<p><b>LESSON PLANNING:</b> Instructional objectives, Identification of teaching Points, Organising the contents, Designing learning experiences Class test of first half of unit 1</p>
	05.08.24-10.08.24	<p>Pedagogical shift from science as fixed body of knowledge to process of constructing knowledge <b>SCIENTIFIC METHOD:</b> Observation, Enquiry, Hypothesis, Experimentation, Data Collection, Generalization</p>
	12.08.24-17.08.24	<p><b>UNIT AND LESSON PLANNING:</b> Using constructivist approach, Taking examples from specific Contents of science such as electric Circuit, magnetic effects of current, Physical and chemical changes, animal and plant kingdom Class test of second half of unit 1</p>

	19.08.24-24.08.24	Experiential learning in science, Facilitating learners for self-study in science
	26.08.24-31.08.24	<b>LEARNING RESOURCES</b> Identification and use of learning resources in science from immediate Environment such as natural pH indicators, common salts, fruits, lenses, mirrors Inter-conversion of one form of energy to other Exploring alternatives sources of energy, Audio-visual materials, Multimedia selection and designing use of ICT in learning science
<b>September</b>	02.09.24-07.09.24	<b>INSTRUCTIONAL RESOURCES</b> Multimedia, Computer, charts, models improvised apparatus and their roles and functions
	09.09.24-14.09.24	<b>STRENGTHENING OF LEARNING SCIENCE</b> Organisation of practicals in laboratory, Use of science kits, Investigatory Project, Field trips, Science Clubs, Science fairs, Use of Worksheets

	16.09.24-21.09.24	Class test of first half of unit-2
	23.09.24-30.09.24	<b>LESSON PLANNING AND LEARNING CONCEPTS OF SCIENCE SUCH AS</b> Newton's laws of motion, Universal law of gravitation, Heat as energy temperature
<b>October</b>	01.10.24-05-10.24	Transfer of heat, Reflection, Refraction and total internal Reflection of light, Mole concept and Avogadro's number, Periodicity of elements, Acid, base & salt & PH scale
	07.10.24-12.10.24	Carbon & its compounds, Nutrition in amoeba and hopper, Digestive and respiratory system in animals, Control and coordination in animals, Reproduction in animals, Photosynthesis, Factor affecting the process of photosynthesis, Respiration in plants, Transportation in plants
	14.10.24-19.10.24	Class test of second half of unit -2 Asexual and sexual production, Pollination, Fertilization and partheno-genesis in plants, Heredity and variations, Structure of chromosome RNA & DNA <b>EXPLORING LEARNING OF SCIENCE</b> Electric circuits, series and parallel combination of circuits, Electric current, measurement of current and potential difference, Ohm's law, resistance, Factors Effecting resistance, electrical energy, Elementary ideas about A.C. and D.C. Motors
	21.10.24-26.10.24	Communicable and non-communicable Diseases
	28.10.24-03.11.24	<b>Diwali Vacations</b>

<b>November</b>		Modes of evaluation: oral, observation and written, objective and essay type Questions, Types of objective test items, Short answer type, Multiple choice type, Fill-in-blank type, True False, Matching type
	11.11.24-16.11.24	Construction of test items: Achievement test, diagnostic test and their construction, Preparation of blue print: taking Examples of concepts of science Mentioned in unit iii and iv, Continuous and comprehensive evaluation for overall development of child. <b>TOOLS AND TECHNIQUES OF ASSESSMENT:</b> Learning indicators, Performance-based assessment, Learners' records of observations, field diary
	18.11.24-23.11.24	Oral presentation of learner's work, Portfolio, Assessment of project work, Assessment of learning based on Content mentioned in unit iii and iv
	25.11.24-30.11.24	<b>MODES OF LEARNING ENGAGEMENT:</b> <b>CONSTRUCTIVIST APPROACH:</b> Activity Based learning experimentation, Interactive learning, group work, Demonstration method, peer learning, Project work, Assignments followed by Presentation, discussion, inquiry approach, Concept mapping etc
<b>December</b>	02.12.24-7.12.24	Revision & Test
	9.12.24-14.12.24	Revision & Test
	16.12.24-31.12.24	<b>Examination</b>

## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed. 5<sup>th</sup> Sem

Subject: Pedagogy of Mathematics I

Paper Code: CPSPM 301

Name of the Faculty: Mrs. Mitu Nagpal

Month	Week	Topics to be covered
<b>July</b>	22.07.24-24.07.24	Unit I Human needs as a Basis of Growth in Mathematics
	25.08.24-28.07.24	Mathematical Statements are Unambiguous, Truth Criteria, Use of Symbols
	29.07.24- 31.07.24	The Role of Intuition and Logic in Mathematical Thinking
<b>August</b>	1.08.24- 3.08.24	Axiomatic Framework of Mathematics: Axioms, Postulates, Undefined Terms, Defined Terms
	5.08.24-10.08.24	Reasoning, Type of Reasoning, Proofs - Types of Proofs
	12.08.24- 17.08.24	Language of Mathematics
	19.08.24-24.08.24	Cultivating Learner's Sensitivity Like Listening, Encouraging Learner for Probing
	26.08.24-31.08.24	Raising Queries, Appreciating Dialogue Among Peer Group, Promoting the Student's Confidence Mathematical Thinking,
<b>September</b>	02.09.24-07.09.24	<b>Unit-2</b> Exploring Ways of Learning Engagements
	09.09.24-14.09.24	Providing Opportunities for Group Activities, Group/Individual Presentation, Providing Opportunity for Sharing Ideas, Exposing to Exemplar Constructivist Learning Situations in Mathematics
	16.09.24-21.09.24	Visit to District, State and National Level Science Exhibition/ Field Visit
	23.09.24- 30.09.24	Audio Visual Presentation Followed by its Analysis and Discussion, Reflective Written Assignments, Case Studies
<b>October</b>	01.10.24- 05.10.24	<b>Unit 3:</b> Need And Importance of Mathematics in School Curriculum
	07.10.24-12.10.24	Social Aspects, Mathematical Aspects
	14.10.24- 19.10.24	Applications of Mathematics, Aims, Objectives and Scope of Mathematics at the Secondary Stage
	21.10.24- 26.10.24	Writing of Objectives for Each Stage (Primary, Secondary and Sr. Secondary), Writing Objectives In Behavioural Terms for Each Stage. Piaget 's Operational Thinking, Emphasis on the Use of Mathematics in Daily Life Situations
	28.10.24-03.11.24	<b>Diwali Vacations</b>
<b>November</b>	04.11.24- 09.11.24	Role of Mathematics in Other Subject Areas – Interdisciplinary Approaches, Developing Skills in Learners - Problem Solving, Logical Thinking, Drawing Inferences, Handling Abstraction, Visualising Etc. in Learner's Personality

	18.11.24- 23.11.24	<b>Unit 4:</b> Designing And Setting up Models, Teaching Aids And Activities/ Laboratory Work -Using Open Source Software in Mathematics Lesson (Expressive Way- To Create their Own From Scratch, As they Express Themselves With Contentment by Means of a More Open Application or Resource)
	25.11.24-30.11.24	Identifying Activity in Several Content Areas at Secondary Level Conducive to the Comprehension Level of Learner, Inculcating Skills in Designing, Demonstrating, Interpreting and Drawing Inference of Digital Applets/Concrete Models
		Providing Opportunities for Group Activities, Hands on Experimentation within Digital Environment, Group/ Individual Presentation. Providing Opportunity for Sharing Ideas, Exposing to Exemplar Constructivist Learning Situations in Mathematics.
<b>December</b>	02.12.24-07.12.24	Designing And Setting up Models, Teaching Aids And Activities/ Laboratory Work, Visit to District, State And National Level Science Exhibition.
	09.12.24-14.12.24	Digital Presentation Followed by Its Analysis and Discussion, Reflective Written Assignments, Case Studies, Audio Visual Presentation Followed by its Analysis And Discussion.
	16.12.24-31.12.24	<b>Examination</b>

## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed. 7<sup>th</sup> Sem

Subject: Quantum Mechanics & Statistical Physics

Paper Code: PHY 401

Name of the Faculty: Dr. Darshan Lal

Month	Week	Topics to be covered
<b>July</b>	22.07.24-26.07.24	<b>Unit I:</b> Origin of the quantum theory – Failure of classical physics to explain the phenomena such as black – body spectrum, photoelectric effect, Ritz combination principle in spectra, stability of an atom, Planck’s radiation law, Einstein’s explanation of photoelectric effect, Bohr’s quantization of angular momentum and its application to hydrogen atom, limitations of Bohr’s theory.
	27.07.24 -31.07.24	<b>Unit II:</b> Wave-particle duality and uncertainty principle, de Broglie’s hypothesis for matter waves, the concept of wave and group velocities, evidence for diffraction and interference of ‘particles’
<b>August</b>	01.08.24-05.08.24	Experimental demonstration of matter waves, Consequence of de Broglie’s concepts, quantisation in hydrogen atom, energies of a particle in a box, wave packets, Heisenberg’s uncertainty relation for p and x, its extension to energy and time.
	06.08.24 – 12.08.24	Consequence of the uncertainty relation: gamma ray microscope, diffraction at a slit, particle in a box, position of electron in a Bohr orbit.
	13.08.24 – 17.08.24	Revision and test.
	20.08.24 – 24.08.24	<b>Quantum Mechanics:</b> Schrodinger’s equation, Postulates of quantum mechanics, operators, expectation values, transition probabilities.
	27.08.24 – 31.08.24	<b>Unit III:</b> Applications of quantum mechanics to particle in one dimensional and three-dimensional box, harmonic oscillator
<b>September</b>	02.09.24 – 07.09.24	Reflection at a step potential, transmission across a potential barrier.
	09.09.24 – 14.09.24	Hydrogen atom: natural occurrence of n, l and m quantum numbers, the related physical quantities, comparison with Bohr’s theory, Wave functions, Probabilistic interpretation
	16.09.24 – 21.09.24	<b>Unit IV: Statistical Physics-</b> The statistical basis of thermodynamics: Probability and thermodynamic probability.
	24.09.24 – 30.09.24	Tests
<b>October</b>	01.10.24 – 05.10.24	Principle of equal a-priori probabilities, probability distribution and its narrowing with increase in number of particles.
	07.10.24 – 12.10.24	The expressions for average properties, Constraints, accessible and inaccessible states, distribution of particles with a given total energy into a discrete set of energy states
	14.10.24 – 19.10.24	<b>Some universal laws:</b> The mu space representation, division of mu

		space into energy sheets and into phase cells of arbitrary size, application to one-dimensional harmonic oscillator and free particles, Equilibrium between two systems in thermal contact, bridge with macroscopic physics
	21.10.24 – 25.10.24	Probability and entropy, Boltzmann entropy relation, Statistical interpretation of second law of thermodynamics, Boltzmann canonical distribution law and its applications, rigorous form of equipartition of energy
	27.10.24 – 03.11.24	<b>Diwali Vacations</b>
<b>November</b>	04.11.24 – 09.11.24	Partition function and its applications, Saha's ionization formula. Maxwell distribution of speeds in an ideal gas, Distribution of speeds and velocities, experimental verification, distinction between mean, RMS and most probable speed values
	11.11.24 – 16.11.24	Doppler broadening of spectral lines. Transition to quantum statistics: 'h' as a natural constant and its implications, cases of particle in a one-dimensional box and one-dimensional harmonic oscillator
	18.11.24 – 23.11.24	Indistinguishability of particles and its consequences, Bose-Einstein and Fermi-Dirac conditions
	25.11.24 – 30.11.24	Applications to liquid helium, free electrons in a metal and photons in blackbody chamber, Fermi level and Fermi energy.
<b>December</b>	02.12.24 – 15.12.24	Revision and Tests.
	16.12.24 – 31.12.24	Examination



## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed. 7<sup>th</sup> Sem

Subject: Advance Chemistry

Paper Code: CHM 401

Name of the Faculty: Mrs. Ramandeep Kaur

Month	Week	Topics to be covered
July	22.07.24-26.07.24	Rotational spectrum
	27.07.24- 31.07.24	Diatomic molecules
August	1.08.24 - 05.08.24	<b>Raman spectrum</b>
	06.08.24-12.08.24	Selection rules
	13.08.24-17.08.24	Energy levels of rigid rotor.
	20.08.24-24.08.24	Maxwell distribution
	27.08.24-31.08.24	Isotope effect.
September	02.09.24 -07.09.24	(Teaching practice for one month)
	09.09.24 -14.09.24	Vibrational spectrum
	16.09.24-21.09.24	<b>Concept of polarizability</b>
	24.09.24 –30.09.24	Bond energies
October	01.10.24 - 05.10.24	Idea of vibrational
	07.10.24 –12.10.24	Frequencies of different functional groups.
	14.10.24 –19.10.24	Photochemistry – laws of photochemistry, Grothus
	21.10.24 –25.10.24	Draper law
	27.10.24 –03.11.24	<b>Diwali break</b>
November	04.11.24 –09.11.24	Description of fluorescence
	11.11.24 –16.11.24	Non radiative process
	18.11.24 –23.11.24	Electronic spectrum.
	25.11.24- 30.11.24	Separation techniques
December	02.12.24 – 15.12.24	Vibrational spectrum and Raman spectrum.
	16.12.24 – 31.12.24	<b>Examination.</b>

## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed. 7<sup>th</sup> Sem

Subject: Evolution & Palaeontology

Paper Code: 401

Name of the Faculty: Ms. Saloni

Month	Week	Topics
July	22.07.24-27.07.24	<b>UNIT 1-Origin of life and its theories-</b> a) origin of life- Evidences in favour of evolution: morphology, comparative anatomy, embryology and palaeontology. b) Molecular basis of evolution
	29.07.24- 31.07.24	Theories of evolution: a) Lamarckism, inheritance of acquired characters and Neo Lamarckism. B) Darwinism, theory of natural selection and Neo Darwinism. C) Mutation theory of Hugo de Vries d) Weisman theory of germplasm e) Recapitulation theory
August	1.08.24- 3.08.24	<b>UNIT 2- Evolution-</b> A) Variation: kinds, sources, origin of new mutations.
	5.08.24-10.08.24	Isolation: Definition, mechanism and role of isolation in evolution.
	12.08.24- 17.08.24	Adaptation: Introduction, kinds of associations.
	19.08.24-24.08.24	Divergent, convergent evolution.
	26.08.24-31.08.24	Evolutionary significance of adaptation.
September	02.09.24-07.09.24	<b>UNIT 3-Evolution changes-</b> Origin of species- concept of species.
	09.09.24-14.09.24	Subspecies, sibling species.
	16.09.24-21.09.24	Factors causing genetic divergence in the population of species.
	23.09.24- 30.09.24	Genetic drift, bottle neck effect.
October	01.10.24- 05.10.24	Founder's effect.
	07.10.24-12.10.24	Mimicry and protective coloration- Definition and kinds.
	14.10.24- 19.10.24	Conditions necessary for mimicry and significance.
	21.10.24- 26.10.24	Zoogeographical distribution of animals, geological time scale, origin and evolution of amphibians.
	28.10.24-03.11.24	<b>Diwali Vacation</b>
November	04.11.24- 09.11.24	Origin and evolution of reptiles, birds and mammals.
	11.11.24-16.11.24	<b>UNIT 4-</b> Introduction, formation, kinds, determination of age of fossils and its significance.
	18.11.24- 23.11.24	Dinosaur, fossils evidence and reasons for extinction of dinosaurs
	25.11.24-30.11.24	Evolution of man: Time of origin, compelling causes, ancestor of man. Evolution from apes and evolutionary trends. Test
December	02.12.24-07.12.24	Revision
	09.12.24-14.12.24	Revision
	16.12.24-31.12.24	<b>Examination</b>

## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed. 7<sup>th</sup> Sem

Subject: Plant Anatomy & Ecology

Paper Code: 401

Name of the Faculty: Ms. Shashi

Month	Week	Topics
July	22.07.24-27.07.24	<b>Unit 1: Tissue and Tissue system: Root and Shoot Organisation-</b> Type of tissue and tissue system, basic body plan of a flowering plant
	29.07.24- 31.07.24	The Root system- The root apical meristem and its organisation,
August	1.08.24- 3.08.24	Differentiation of primary and secondary tissues and their roles,
	5.08.24-10.08.24	Structural modifications for storage, respiration, reproduction and for interaction with microbes
	12.08.24- 17.08.24	The Shoot system- The shoot apical meristem and its histological organisation
	19.08.24-24.08.24	Vascularisation of primary shoot in monocotyledons and dicotyledons,
	26.08.24-31.08.24	Formation of internodes, branching pattern Monopodial and Sympodial growth, canopy architecture and Revision, tests
September	02.09.24-07.09.24	<b>Unit II- Organization of Xylem and Phloem tissues:</b> Cambium and its function, formation of secondary xylem, a general account of wood structure in relation to conduction of water and minerals,
	09.09.24-14.09.24	Characterisation of growth rings, sapwood and heartwood
	16.09.24-21.09.24	Secondary phloem- structure, function relationship, periderm. Leaf origin, development.
	23.09.24- 30.09.24	Arrangement and diversity in size and shape, internal structure in relation to photosynthesis and water loss,
October	01.10.24- 05.10.24	Adaptation to water stress, stomatal types and trichomes, senescence and abscission
	07.10.24-12.10.24	<b>Unit III- Ecology and Environment:</b> Ecological Factors: Brief account of edaphic, climate, physiological and biotic factors and ecological importance
	14.10.24- 19.10.24	Ecosystem: structure, abiotic and biotic components, bio-energetic approach, Food chain, Food web
	21.10.24- 26.10.24	Ecological pyramids, biogeochemical cycles of carbon, nitrogen and phosphorus,
	28.10.24-03.11.24	<b>Diwali Vacation</b>

<b>November</b>	04.11.24- 09.11.24	Community ecology: Community characteristics, frequency, density, cover, life forms:
	11.11.24-16.11.24	Plant succession: General features, events in succession, brief account of xerarch succession
	18.11.24- 23.11.24	<b>Unit IV- Ecological Adaptations:</b> Morphological, anatomical and physiological adaptations of plants to environment- hydrophytes, halophytes, xerophytes
	25.11.24-30.11.24	Biodiversity: General account, types and characteristics, biodiversity conservation efforts
		WCU, Red data book, brief account of IPR and patent laws
	Revision	
<b>December</b>	02.12.24-07.12.24	Revision
	09.12.24-14.12.24	Revision
	16.12.24-31.12.24	Examination

## LESSON PLAN

Session: 2024-25

Class: B.Sc. B.Ed. 7<sup>th</sup> Sem

Subject: Number Theory & Theory of equations

Paper Code: MTH 401

Name of the Faculty: Mrs. Deepshikha Jain

Month	Week	Topics to be covered
<b>July</b>	22.07.24-27.07.24	Division Algorithm, Prime and Composite numbers
	29.07.24-31.07.24	Proving the existence and uniqueness of GCD, The Euclidean Algorithm
<b>August</b>	01.08.24-03.08.24	Fundamental theorem of Arithmetic, The least common multiple
	05.08.24-10.08.24	Congruence's, Linear congruence's
	12.08.24-17.08.24	Sigma function, Tau function, Phi function
	19.08.24-24.08.24	Wilson's theorem Class test of first half of unit-1
	26.08.24-31.08.24	Simultaneous congruence's,
<b>September</b>	02.09.24-07.09.24	Euler-Fermat theorem Class test of second half of unit-1
	09.09.24-14.09.24	Lagrange theorem
	16.09.24-21.09.24	Continued fractions,
	23.09.24-30.09.24	Relation between roots and coefficients
<b>October</b>	01.10.24-05-10.24	Symmetric functions Class test of unit-2
	07.10.24-12.10.24	Transformations
	14.10.24-19.10.24	Reciprocal equations, Descartes' rule of signs
	21.10.24-26.10.24	Multiple roots
	28.10.24-03.11.24	<b>Diwali Vacation</b>
<b>November</b>	04.11.24-09.11.24	Solving cubic equation by Cardon's method
	11.11.24-16.11.24	Solving quadratic Equations by Descarte's method
	18.11.24-23.11.24	Solving quadratic Equations by Ferrari's method.
	25.11.24-30.11.24	Class test of second half of unit-3
<b>December</b>	02.12.24-7.12.24	Class test of first half of unit -4 Class test of unit -1 Class test of unit -2
	9.12.24-14.12.24	Class test of unit -3 Class test of unit -4
	16.12.24-31.12.24	<b>Examination</b>