

Class – XI (Science)(2024-2025)

English

Learning Outcomes

The general objectives at this stage are to:

- listen and comprehend live as well as record in writing oral presentations on a variety of topics
- develop greater confidence and proficiency in the use of language skills necessary for social and academic purpose to participate in group discussions, interviews by making short oral presentation on given topics
- perceive the overall meaning and organisation of the text (i.e., correlation of the vital portions of the text)
- identify the central/main point and supporting details, etc., to build communicative competence in various lexicons of English
- promote advanced language skills with an aim to develop the skills of reasoning, drawing inferences, etc. through meaningful activities
- translate texts from mother tongue(s) into English and vice versa
- develop ability and acquire knowledge required in order to engage in independent reflection and enquiry
- read and comprehend extended texts (prescribed and non-prescribed) in the following genres: science fiction, drama, poetry, biography, autobiography, travel and sports literature, etc.
- text-based writing (i.e., writing in response to questions or tasks based on prescribed or unseen texts) understand and respond to lectures, speeches, etc. write expository / argumentative essays, explaining or developing a topic, arguing a case, etc. write formal/informal letters and applications for different purposes
- make use of contextual clues to infer meanings of unfamiliar vocabulary
- select, compile and collate information for an oral presentation
- produce unified paragraphs with adequate details and support
- use grammatical structures accurately and appropriately
- write items related to the workplace (minutes, memoranda, notices, summaries, reports etc.
- filling up of forms, preparing CV, e-mail messages., making notes from reference materials, recorded talks etc. The core course should draw upon the language items suggested for class IX-X and delve deeper into their usage and functions. Particular attention may, however, be given to the following areas of grammar:
 - The use of passive forms in scientific and innovative writings.
 - Convert one kind of sentence/clause into a different kind of structure as well as other items to exemplify stylistic variations in different discourses modal auxiliaries uses based on semantic considerations.

I Term

(April - September)

April

1. Portrait of a Lady
2. A Photograph
3. Poster Making
4. Speech/Debate

May

1. Note Making
2. Voice of the Rain
3. Discovering Tut

July

1. Summer of The Beautiful White Horse
2. We're Not afraid to Die
3. Laburnum Top
4. The Address

August

1. Childhood
2. Advertisements
3. Letters

September

1. Notice Writing
2. Revision

II Term

(October - February)

October

1. Birth
2. Articles
3. Report Writing

November

1. Mother's Day
2. Tale of Melon City
3. Invitations and Replies

December

1. Tenses
2. Clauses
3. Father to Son

January

1. ALS
2. Revision

February

ANNUAL EXAMINATION

Prescribed Books

1. Hornbill: English Reader published by National Council of Education Research and Training, New Delhi
 - The Portrait of a Lady (Prose)
 - A Photograph (Poem)
 - "We're Not Afraid to Die... if We Can Be Together"
 - Discovering Tut: The Saga Continues

- The Laburnum Top (Poem)
 - The Voice of the Rain (Poem)
 - Childhood (Poem)
 - Father to Son
2. Snapshots: Supplementary Reader published by National Council of Education Research and Training, New Delhi
- The Summer of the Beautiful White Horse (Prose)
 - The Address (Prose)
 - Mother's Day (Play)
 - Birth (Prose)
- The Tale of Melon City

ASSESSMENT PLANNER : SESSON 2024 - 2025

SUBJECT : ENGLISH CORE (301)

CLASS : XI

TEST	MAX. MARKS	SYLLABUS
PERIODIC ASSESSEMENT 1	20	1. The Portrait of a Lady 2. A Photograph 3. Posters 4. Notice Writing
MID TERM EXAMS	80	1. The Portrait of a Lady 2. A Photograph 3. Discovering Tut 4. Voice of rain 5. Summer of Beautiful White Horse 6. The Address 7. We're not Afraid to Die 8. The Laburnum Top 9. Note Making 10. All the Writing Skills done
PERIODIC ASSESSMENT 2	20	1. Advertisements 2. Childhood 3. Birth 4. Speech/Debate

ANNUAL EXAMS	80	<ol style="list-style-type: none"> 1. 1. The Portrait of a Lady 2. A Photograph 3. Discovering Tut 4. Voice of rain 5. Summer of Beautiful White Horse 6. The Address 7. We're not Afraid to Die 8. The Laburnum Top 9. Note Making 10. Mother's Day 11. Birth 12. Tale of Melon City 13. Father to Son 14. All the Writing Skills and Grammar done
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Class XI - Maths(2024-2025)

LEARNING OUTCOMES

Higher secondary students are increasingly expected to engage in mathematical practices to help develop mathematical habits of their minds

The learners may be provided with opportunities individually or in groups and encouraged to think holistically. The student will be able to :

- develop the idea of Set from the earlier learnt concepts in number system , geometry etc.
- identify relations between different sets.
- relate earlier learnt concept of trigonometric ratios to functions and evolves the idea of trigonometric functions.
- demonstrate deductive thinking by using technique of mathematical induction for establishing generalized mathematical statements.
- extend the idea of real numbers to a larger system of complex numbers.
- demonstrate strategies for solving systems of linear inequalities.
- apply the ideas of permutations and combinations to daily life situations of arranging and grouping the objects.
- develop the idea of Binomial theorem for a positive integral index from the earlier learnt concepts of finding squares and cubes of binomials.
- extend the ideas related to Arithmetic progressions learnt earlier to new types of sequences and their series.
- construct different forms of a straight line using the earlier learnt concepts of coordinate geometry.
- analyse different curves like circles ellipses, parabolas and hyperbolas based on the ideas developed for straight lines using coordinates.
- develop strategies of locating a point in three dimensions based on the concepts of two dimensional coordinate geometry.
- evolve the concepts of limit and derivative of a function by analyzing the behaviour of functions when the corresponding variable approaches a certain value.
- relate deductive reasoning to the mathematical statements studied so far.
- apply Measures of dispersion to get a better interpretation of data of different daily life situations.
- build up the axiomatic approach to Probability through the terms, random experiment, Sample space, events etc.

MONTH	TOPIC
April	<p>Ch-3 Trigonometric Functions</p> <ul style="list-style-type: none"> • Introduction, Angles • Trigonometric Functions, Trigonometric functions of Sum and Difference of two angles • Trigonometric identities and it's applications.
May	<p>Ch-1 Sets</p> <ul style="list-style-type: none"> • Sets and the Representations • Empty Set, Finite and Infinite Sets, Equal sets • Subsets, Power Set, Universal Set • Venn Diagrams, Operations on Sets, Complement of a Set • Practical problem on Union and Intersection of Two Sets <p>Ch-2 Relations and Functions</p> <ul style="list-style-type: none"> • Introduction, Cartesian Product of Sets <p>Relations, Functions</p>
July	<p>Ch-4 Complex numbers and Quadratic Equations</p> <ul style="list-style-type: none"> • Introduction, Algebra of complex numbers • Modulus and the conjugate of a complex number • Quadratic equations <p>Ch-8 Sequence and Series</p> <ul style="list-style-type: none"> • Introduction to sequences, series • Arithmetic Progression • Geometric Progression • Relation between AM and GM
August	<p>Ch-6 Permutations and Combinations</p> <ul style="list-style-type: none"> • Introduction • Fundamental Principle of Counting • Permutations and combination applications <p>Ch-7 Binomial Theorem</p> <ul style="list-style-type: none"> • Introduction • Binomial theorem for Positive Integral indices
September	<p>Ch-5 Linear inequalities</p> <ul style="list-style-type: none"> • Introduction to inequalities • Algebraic solutions of Linear inequalities in one variable and the graphical representation
October	<p>Ch-9 Straight lines</p> <ul style="list-style-type: none"> • Brief recall of two-dimensional geometry from earlier classes. Slope of a line and angle between two lines. • Various forms of equations of a line: parallel to axis, point-slope form, slope-intercept form, two-point form, intercept form and normal form. General equation of a line. Distance of a point from a line. <p>Ch-10 Conic Sections</p> <ul style="list-style-type: none"> • Sections of a cone: circles, ellipse, parabola, hyperbola, a point, a straight line and a pair of intersecting lines as a degenerated case of a conic section. • Standard equations and simple properties of parabola, ellipse and hyperbola. Standard equation of a circle.

November	Ch- 12 Limits and derivatives <ul style="list-style-type: none"> Derivative introduced as rate of change both as that of distance function and geometrically, intuitive idea of limit, limits of polynomials and rational functions trigonometric, exponential and logarithmic functions, Definition of derivative relate it to the slope of the tangent of the curve, derivative of sum, difference, product and quotient of functions. Derivatives of polynomial and trigonometric functions.
December	Ch-13 Statistics <ul style="list-style-type: none"> Measures of Dispersion: Range, mean deviation, variance and standard deviation of ungrouped/grouped data. Ch-14 Probability <ul style="list-style-type: none"> Events; occurrence of events, 'not', 'and' and 'or' events, exhaustive events, mutually exclusive events. Axiomatic (set theoretic) probability, connections with other theories of earlier classes. Probability of an event, probability of 'not', 'and' and 'or' events.
January	Revision
February	Revision

ASSESSMENT PLANNER : SESSON 2024 - 2025

SUBJECT: Mathematics

CLASS :XI

TEST	MAX. MARKS	SYLLABUS
PERIODIC ASSESSEMENT 1	20	<ul style="list-style-type: none"> Sets Trigonometry
PERIODIC ASSESSEMENT 2		<ul style="list-style-type: none"> Trigonometry Relations and Functions
MID TERM EXAMS	80	<ul style="list-style-type: none"> Sets Relations and Functions Trigonometry Complex numbers Linear inequalities Permutations and combinations Binomial theorem Sequene and series
PERIODIC ASSESSEMENT 3	20	<ul style="list-style-type: none"> Straight lines Conic sections

ANNUAL EXAMS	80	<ul style="list-style-type: none"> • Sets • Relations and Functions • Trigonometry • Complex numbers • Linear inequalities • Permutations and combinations • Binomial theorem • Sequence and series • Straight lines • Conic sections • 3D • Statistics • Limits and Derivatives • Probability
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Class XI - PHYSICS (2024-2025)

LEARNING OUTCOMES

Students will be able to

- ✦ **Develop scientific temper and scientific attitude**
- ✦ **Understand the importance of SI units .**
- ✦ **Understand the importance of dimensional analysis in deriving the physical equations .**
- ✦ **Develop the skill in performing experiments tabulating observations, plotting graphs and inferences from the same .**
- ✦ **Apply the knowledge to their daily life experiences.**
- ✦ **Develop the problem solving skills**

Realize that physics is not an independent subject but is interlinked with Maths and chemistry

Ist Term

(April - September)

APRIL:

- Introduction to vectors
- Integration and differentiation
- Dimensional analysis

MAY:

KINEMATICS

(motion in a straight line Projectile motion)
Equations of motion, graphical representation of motion and interpretation

JULY:

LAWS OF MOTION

Newton's Laws , Force of friction and coefficient of friction, motion on inclined plane

WORK, ENERGY AND POWER

- Type of mechanical energy, conservation of energy, type of collision and velocities of bodies after Elastic collision

AUGUST

GRAVITATION

Newton's law of Gravitation, acceleration due to gravity, variation in g due to height and depth, escape velocity and orbital velocity of a satellite.

SEPTEMBER: CENTRE OF MASS AND ROTATIONAL MOTION

Centre of mass for 2 particle system, moment of inertia, conservation of angular momentum and its applications

Revision

**2nd Term
February)**

(October –

OCTOBER PROPERTIES OF SOLIDS AND FLUIDS

Elasticity, Graphically representation, coefficient of elasticity, viscosity and stoke's theorem, terminal velocity and type of flow of liquids

NOVEMBER: HEAT AND THERMODYNAMIC

Heat energy, flow of heat, various Thermodynamic process, first and Second law of Thermodynamic.

KINETIC THEORY OF GASES

Various gas laws, pressure of an ideal Gas , assumptions in Kinetic theory of gases

DECEMBER: OSCILLATIONS

SHM and its characteristics ,equation of SHM, Energy of body showing SHM

JANUARY: WAVES

Equation of a Waves, progressive and standing Waves, formation of beats , nodes in an organic pipe.

FEBRUARY REVISION and ANNUAL EXAM

ASSESSMENT PLANNER - 2024-25

SUBJECT: ...PHYSICS ...

CLASS:.....XI D.....

Periodic test 1 (Marks 20)	Vectors Integration Differentiation
Periodic test 2 (Marks 20)	Kinematics Laws of Motion
Mid term exam (Marks 70)	Vectors Kinematics

	Laws of Motion Work , Energy and Power Gravitation
Periodic test 3 (Marks 20)	Centre of mass and rotational motion Properties of solids
Annual Exam	Full portion

Class XI - Chemistry(2024-2025)

LEARNING OUTCOMES

A study of chemistry will inculcate among the pupils a few skills and thus, at the end of the session the students will be:

- Develop a basic conceptual knowledge and understanding of content and acquire a clear understanding of the laws, principles basic facts, and key concepts.
- Apply the knowledge gained to define and differentiate between terms and key concepts.
- Develop a better insight into the subject and thus encourage them to do further reference reading.
- Develop aesthetic sensibilities, process skills, creative and critical thinking, decision – making, communication, analytical, problem solving and drawing skills.
- Develop investigatory skills, the skills in performing experiments, tabulating observations, plotting graphs, and drawing inferences.
- Develop a scientific temperament and appreciation of scientific facts, a spirit of enquiry, a systematic, creative, ethical, and meticulous approach towards problem solving.
- Apply the knowledge gained to daily life situation and problems, thus making chemistry learning more relevant, meaning, and interesting.
- Apply the knowledge gained to integrate physical principles with music, dance, art, sports, tricks, and magic.
- Be able to collaborate, innovate, organize, brainstorm, and communicate new ideas and technology.
- Contribute significantly in, the improvement of the quality of life

Theory Paper Marks: 70

Units	Topics	Marks
I	Some Basic Concepts of Chemistry	7
II	Structure of Atom	9
III	Classification of Elements and Periodicity in Properties	6
IV	Chemical Bonding and Molecular Structure	7
VIII	Organic Chemistry	11
IX	Hydrocarbons	10
VII	Redox Reactions	4
V	Chemical Thermodynamics	9
VI	Equilibrium	7
	TOTAL	70

		<p>bond (ethene), geometrical isomerism, physical properties, methods of preparation, chemical reactions: addition of hydrogen, halogen, water, hydrogen halides (Markovnikov's addition and peroxide effect), ozonolysis, oxidation, mechanism of electrophilic addition. Alkynes - Nomenclature, the structure of triple bond (ethyne), physical properties, methods of preparation, chemical reactions: acidic character of alkynes, addition reaction of - hydrogen, halogens, hydrogen halides and water</p> <p>Aromatic Hydrocarbons: Introduction, IUPAC nomenclature, benzene: resonance, aromaticity, chemical properties: mechanism of electrophilic substitution. Nitration, sulphonation, halogenation, Friedel Craft's alkylation and acylation, directive influence of the functional group in monosubstituted benzene. Carcinogenicity and toxicity.</p>
December	Unit VII	<p>Redox Reactions The topics in this unit are: Concept of oxidation and reduction, redox reactions, oxidation number, balancing redox reactions, in terms of loss and gain of electrons and change in oxidation number, applications of redox reactions.</p>
January	Unit V	<p>Chemical Thermodynamics The topics in this unit are: Concepts of System and types of systems, surroundings, work, heat, energy, extensive and intensive properties, state functions. First law of thermodynamics -internal energy and enthalpy, heat capacity and specific heat, measurement of ΔU and ΔH, Hess's law of constant heat summation, enthalpy of bond dissociation, combustion, formation, atomization, sublimation, phase transition, ionization, solution and dilution. Second law of Thermodynamics (brief introduction) Introduction of entropy as a state function, Gibb's energy change for spontaneous and non- spontaneous processes, criteria for equilibrium. Third law of thermodynamics (brief introduction).</p>
January	Unit VI	<p>Equilibrium The topics in this unit are: Equilibrium in physical and chemical processes, dynamic nature of equilibrium, law of mass action, equilibrium constant, factors affecting equilibrium - Le Chatelier's principle, ionic equilibrium- ionization of acids and bases, strong and weak electrolytes, degree of ionization, ionization of poly basic acids, acid strength, concept of pH, hydrolysis of salts (elementary idea), solubility product, common ion effect (with illustrative examples).</p>
February	Unit I to IX	Revision and Annual exam

ASSESSMENT PLANNER - 2024-2025
SUBJECT- CHEMISTRY **CLASS -XI D**

TEST	SYLLABUS
First periodic Test	1. Some basic concepts of chemistry
Class Test	2. Structure of atom
Mid term exam	1. Some basic concepts of chemistry 2. Structure of atom 3. Classification of elements and periodic properties
Second periodic test	4. Chemical bonding and molecular structures
Class Test	5. Organic chemistry
Annual Exam	6. Hydrocarbon 7. REDOX REACTION 8. Thermodynamics 9. Equilibrium (Including other chapters) Full syllabus

Class XI -BIOLOGY

Botany(2024-2025)

LEARNING OUTCOME:

A study of Biology will inculcate among the students a few skills and thus at the end of the session the student will:

- . Acquire the ability to utilize technology and information for the betterment of human kind.
- . Strengthen knowledge & attitude related to livelihood skills & promote life - long learning.
- . Uphold human dignity of individual & Unity and integrity of the nation by encouraging value based learning activities.
- . Integrate innovation.
- . Help in making students perceptive about nature and environment, technology breakthrough in science.

Month:	Topic:
April	Chapter 5. Morphology of flowering plants. Morphology of different parts of flowering plants; root, stem, leaf, inflorescence, flower, fruit and seed. Description of family Solanaceae.
May	Chapter 1. The living world. Biodiversity; Need for classification; three domains of life; taxonomy and systematics; concept of species and taxonomical hierarchy; Binomial nomenclature.
July	Chapter 2. Biological classification. Five kingdom classification; salient features and classification of Monera, Protista and Fungi into major groups; Lichens, Viruses and Viroids.
August	Chapter 3. Plant Kingdom. Classification of plants into major groups; Salient and distinguishing features and a few examples of Algae, Bryophyta, Pteridophyta and Gymnosperms.
September	Revision; Mid Term Examination.
October	Chapter 6. Anatomy of Flowering plants. Anatomy and functions of tissue systems in dicots and monocots. Chapter 10. Cell cycle and Cell division.

	Cell cycle, mitosis, meiosis and their significance.
November	Chapter 13. Photosynthesis in Higher plants. Photosynthesis as a means of autotrophic nutrition, site of photosynthesis, pigments involved in photosynthesis; photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C ₃ and C ₄ pathways; factors affecting photosynthesis
December	Chapter 14. Respiration in plants. Exchange of gases; cellular respiration-glycolysis, fermentation(anaerobic),TCA cycle and electron transport system(aerobic); energy relations-number of ATP molecules generated; amphibolic pathways; respiratory quotient. Chapter 15. Plant- Growth and development. Seed germination, phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation, and redifferentiation; sequence of developmental processes in a plant cell; plant growth regulators- auxins, gibberellin, cytokinin, ethylene and ABA.
January	Revision
February	Annual Examination.

ASSESSMENT PLANNER FOR - XI D BOTANY 2024-25

Periodic Assessment 1: Chapter 5. Morphology of flowering plants.

Periodic Assessment 2: Chapter 2. Biological Classification.

Midterm Exam: Chapter 1. The living world

Chapter 2. Biological classification

Chapter 3. Plant Kingdom

Chapter 5. Morphology of flowering plants.

Periodic Assessment 3: Chapter 10. Cell cycle and cell division

Periodic Assessment 4: Chapter 11. Photosynthesis in higher plants

Annual Examination: Chapter 1. The living world

Chapter 2. Biological classification

Chapter 3. Plant Kingdom

Chapter 5. Morphology of flowering plants

Chapter 6. Anatomy of flowering plants

Chapter 10. Cell cycle and cell division

Chapter 11. Photosynthesis in higher plants

Chapter 12. Respiration in plants

Chapter 13. Plant growth and development

Class XI - Zoology(2024-2025)

LEARNING OUTCOMES

A study of biology will inculcate among the students a few skills and thus at the end of the session the students will

- Acquire the ability to utilize technology and information for the betterment of human kind.
- Strengthen knowledge and attitude related to livelihood skills and promote life long learning.
- Uphold human dignity of individual and the unity and integrity of the nation by encouraging value-based learning activities.
- Integrate innovation.
- Help in making students perceptive about nature, the environment, technology breakthrough in science.

April	Chapter-4	: Animal Kingdom <ul style="list-style-type: none"> • Salient features and classification of animals,
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May	Chapter 7	<ul style="list-style-type: none"> • non-chordates up to phyla level and chordates up to class level (salient features and a few examples of each category). <p>Structural Organisation in Animals</p> <ul style="list-style-type: none"> • Morphology, • Anatomy and functions of different systems (digestive, circulatory, respiratory, nervous and reproductive) of frog
July	Chapter-8	<p>Cell-The Unit of Life</p> <ul style="list-style-type: none"> • Cell theory and cell as the basic unit of life • structure of prokaryotic and eukaryotic cells • Plant cell and animal cell • cell envelope; cell membrane, cell wall • cell organelles - structure and function • endomembrane system • endoplasmic reticulum • golgi bodies • lysosomes • vacuoles • mitochondria • ribosomes • plastids • microbodies • cytoskeleton • cilia, flagella • centrioles (ultrastructure and function) • nucleus.
July & August	Chapter-14	<p>Breathing and Exchange of Gases</p> <ul style="list-style-type: none"> • Respiratory organs in animals (recall only) • Respiratory system in humans • mechanism of breathing and its regulation in humans • exchange of gases • transport of gases • regulation of respiration respiratory volume • disorders related to respiration - asthma, emphysema, occupational respiratory disorder
August	Chapter-15	<p>Body Fluids and Circulation</p> <ul style="list-style-type: none"> • Composition of blood • blood groups • coagulation of blood • composition of lymph and its function • human circulatory system - Structure of human heart and blood vessels • cardiac cycle, cardiac output • ECG; double circulation • regulation of cardiac activity • disorders of circulatory system - hypertension, coronary artery disease, angina pectoris, heart failure

September	Chapter-18	<p>Neural Control and Coordination</p> <ul style="list-style-type: none"> • Neuron and nerves • Nervous system in humans • central nervous system; • peripheral nervous system • visceral nervous system ,generation and conduction of nerve impulse
October	Chapter-16	<p>REVISION & HALF YEARLY EXAM</p> <p>Excretory Products and their Elimination</p> <ul style="list-style-type: none"> • Modes of excretion - ammonotelism, ureotelism, uricotelism • human excretory system – structure and function; • urine formation • osmoregulation • regulation of kidney function - renin - angiotensin, atrial natriuretic factor • ADH and diabetes insipidus • role of other organs in excretion • disorders - uremia, renal failure, renal calculi, nephritis; dialysis and artificial kidney • kidney transplant.
October & November	Chapter-17	<p>Locomotion and Movement</p> <ul style="list-style-type: none"> • Types of movement - ciliary, flagellar, muscular; • skeletal muscle • contractile proteins and muscle contraction <p>, osteoporosis, gout</p> <ul style="list-style-type: none"> • disorders of muscular and skeletal systems - myasthenia gravis, tetany, muscular dystrophy, arthritis skeletal system and its functions
December	Chapter-9	<p>Biomolecules</p> <ul style="list-style-type: none"> • Chemical constituents of living cells • biomolecules, structure and function of proteins carbohydrates, lipids, nucleic acids • Enzyme - types, properties • enzyme action.
January	Chapter-15	<p>Chemical Coordination and Integration</p> <ul style="list-style-type: none"> • Endocrine glands and hormones • human endocrine system - hypothalamus • pituitary, pineal, thyroid, parathyroid, adrenal, pancreas, gonads • mechanism of hormone action (elementary idea)

		<ul style="list-style-type: none"> • role of hormones as messengers and regulators • hypo - and hyperactivity and related disorders; dwarfism, acromegaly, cretinism, goiter, exophthalmic goitre, diabetes, Addison's disease.
February		REVISION & ANNUAL EXAM

ASSESSMENT PLANNER 2024-25
CLASS XI ZOOLOGY

ASSESSMENT	CHAPTER
1. PT- I	1. Animal Kingdom
2. MID TERM EXAM	1. Animal kingdom 2. Structural organisation in animals 3. Cell -the unit of life 4. Breathing and exchange of gases 5. Body fluids and circulation 6. Neural control & coordination
3. PT-II	1. Excretory products and their elimination
4. PT-III	1. Locomotion and movement
5. ANNUAL EXAM	1. Animal kingdom 2. Structural organisation in animals 3. Cell -the unit of life 4. Breathing and exchange of gases 5. Body fluids and circulation 6. Neural control & coordination 7. Excretory products and their elimination 8. Locomotion and Movement 9. Biomolecules 10. Chemical coordination and integration.

Computer Science(083)
Class XI (2024-25)

Ist Term

(July - September)

April -May

Unit I: Computer Systems and Organisation

- **Basic Computer Organisation:** Introduction to computer system, hardware, software, input device, output device, CPU, memory (primary, cache and secondary), units of memory (Bit, Byte, KB, MB, GB, TB, PB)
- **Types of software:** system software (operating systems, system utilities, device drivers), programming tools and language translators (assembler, compiler & interpreter), application software
- **Operating system (OS):** functions of operating system, OS user interface
- **Boolean logic:** NOT, AND, OR, NAND, NOR, XOR, truth table, De Morgan's laws and logic circuits
- **Number system:** Binary, Octal, Decimal and Hexadecimal number system; conversion between number systems.
- **Encoding schemes:** ASCII, ISCII and UNICODE (UTF8, UTF32)

July

Unit II: Computational Thinking and Programming - 1

- **Introduction to problem solving:** Steps for problem solving (analysing the problem, developing an algorithm, coding, testing and debugging). Representation of algorithms using flow chart and pseudo code, decomposition
- **Familiarization with the basics of Python programming:** Introduction to Python, features of Python, executing a simple "hello world" program, execution modes: interactive mode and script mode, Python character set, Python tokens (keyword, identifier, literal, operator, punctuator), variables, concept of l-value and r-value, use of comments
- **Knowledge of data types:** number (integer, floating point, complex), boolean, sequence (string, list, tuple), none, mapping (dictionary), mutable and immutable data types
- **Operators:** arithmetic operators, relational operators, logical operators, assignment operator, augmented assignment operators, identity operators (is, is not), membership operators (in, not in)
- **Expressions, statement, type conversion & input/output:** precedence of operators, expression, evaluation of expression, python statement, type conversion (explicit & implicit conversion), accepting data as input from the console and displaying output
- **Errors:** syntax errors, logical errors, runtime errors

August

- **Flow of control:** introduction, use of indentation, sequential flow, conditional and iterative flow control
- **Conditional statements:** if, if-else, if-elif-else, flowcharts, simple programs: e.g.: absolute value, sort 3 numbers and divisibility of a number
- **Iterative statements:** for loop, range function, while loop, flowcharts, break and continue statements, nested loops, suggested programs: generating pattern, summation of series, finding the factorial of a positive number etc

September

- **Revision**

October

- **Strings:** introduction, indexing, string operations (concatenation, repetition, membership & slicing), traversing a string using loops, built-in functions: len(), capitalize(), title(), lower(), upper(), count(), find(), index(), endswith(), startswith(), isalnum(), isalpha(), isdigit(), islower(), isupper(), isspace(), lstrip(), rstrip(), strip(), replace(), join(), partition(), split()

November

- **Lists:** introduction, indexing, list operations (concatenation, repetition, membership & slicing), traversing a list using loops, built-in functions: len(), list(), append(), extend(), insert(), count(), index(), remove(), pop(), reverse(), sort(), sorted(), min(), max(), sum(); nested lists, suggested programs: finding the maximum, minimum, mean of numeric values stored in a list; linear search on list of numbers and counting the frequency of elements in a list

December

- **Tuples:** introduction, indexing, tuple operations (concatenation, repetition, membership & slicing), built-in functions: len(), tuple(), count(), index(), sorted(), min(), max(), sum(); tuple assignment, nested tuple, suggested programs: finding the minimum, maximum, mean of values stored in a tuple; linear search on a tuple of numbers, counting the frequency of elements in a tuple
- **Dictionary:** introduction, accessing items in a dictionary using keys, mutability of dictionary (adding a new item, modifying an existing item), traversing a dictionary, built-in functions: len(), dict(), keys(), values(), items(), get(), update(), del, clear(), fromkeys(), copy(), pop(), popitem(), setdefault(), max(), min(), count(), sorted(), copy(); suggested programs : count the number of times a character appears in a given string using a dictionary, create a dictionary with names of employees, their salary and access them
- **Introduction to Python modules:** Importing module using 'import ' and using from statement, Importing math module (pi, e,sqrt, ceil, floor, pow, fabs, sin, cos, tan); random module (random, randint, randrange), statistics module (mean, median, mode)

*** Detailed Home Assignment & Project Work for 2nd Term

January**Unit III: Society, Law and Ethics**

- Digital Footprints
- Digital society and Netizen: net etiquettes, communication etiquettes, social media etiquettes
- Data protection: Intellectual Property Right (copyright, patent, trademark), violation of IPR (plagiarism, copyright infringement, trademark infringement), open source softwares and licensing (Creative Commons, GPL and Apache)
- Cyber-crime: definition, hacking, eavesdropping, phishing and fraud emails, ransomware, preventing cyber crime
- Cyber safety: safely browsing the web, identity protection, confidentiality, cyber trolls

and bullying.

- Safely accessing web sites: malware, viruses, Trojans, adware
- E-waste management: proper disposal of used electronic gadgets
- Indian Information Technology Act (IT Act)
- Technology & Society: Gender and disability issues while teaching and using computers

February

Revision

ASSESSMENT PLANNER

SUBJECT: Computer Science (083)

CLASS: XI

TEST	SYLLABUS
Periodic Test – 1 20 Marks	1. BASIC COMPUTER ORGANISATION 2. TYPES OF SOFTWARE 3. OPERATING SYSTEM
Periodic Test – 2 40 Marks	1. NUMBER SYSTEM & ENCODING SCHEMES 2. BOOLEAN LOGIC 3. INTRODUCTION TO PROBLEM SOLVING 4. BASICS OF PYTHON PROGRAMMING 5. FEATURES OF PYTHON 6. COMMENTS IN PYTHON 7. NOTION OF VARIABLE & ITS MANIPULATION 8. DATA TYPES & OPERATORS 9. OPERATORS & TYPES 10. EXECUTION OF PYTHON PROGRAM
Half Yearly Exam Theory / Practical 70 / 30	1. BASIC COMPUTER ORGANISATION 2. TYPES OF SOFTWARE & MEMORY UNITS 3. CONCEPT OF COMPILER & INTERPRETER 4. OPERATING SYSTEM 5. NUMBER SYSTEM & ENCODING SCHEMES 6. BOOLEAN LOGIC 7. INTRODUCTION TO PROBLEM SOLVING 8. BASICS OF PYTHON PROGRAMMING 9. FEATURES OF PYTHON 10. COMMENTS IN PYTHON 11. NOTION OF VARIABLE & ITS MANIPULATION 12. DATA TYPES & OPERATORS 13. OPERATORS & TYPES 14. EXECUTION OF PYTHON PROGRAM 15. CONDITIONAL STATEMENTS 15. FLOW OF CONTROL
Periodic Test – 3 20 Marks	1.STRINGS 2.LISTS

Class Test 20 Marks	1.TUPLES 2.DICTIONARIES 3.SOCIETY , LAW & ETHICS
Annual Examination Theory / Practical 70 / 35	Prescribed Books :- COMPUTER SCIENCE WITH PYTHON NCERT TEXTBOOK & SULTANCHAND & SONS

Class XI - Psychology(2024 – 2025)

One Theory Paper

Marks: 70

Units	Topics	Marks
I	Variations in Psychological Attributes	13
II	Self and Personality	13
III	Meeting Life Challenges	9
IV	Psychological Disorders	12
V	Therapeutic Approaches	9
VI	Attitude and Social Cognition	8
VII	Social Influence and Group Processes	6
	Total	70

COURSE CONTENT

April	Unit I	<p>Variations in Psychological Attributes</p> <p><i>The topics in this unit are:</i></p> <ol style="list-style-type: none"> 1. Introduction 2. Individual Differences in Human Functioning 3. Assessment of Psychological Attributes 4. Intelligence 5. Theories of Intelligence: Psychometric Theories of Intelligence, Information Processing Theories, Theory of Multiple Intelligences, Triarchic Theory of Intelligence, Planning, Attention-Arousal and Simultaneous Successive Model of Intelligence 6. Individual Differences in Intelligence 7. Culture and Intelligence 8. Emotional Intelligence 9. Special Abilities: Aptitude: Nature and Measurement 10. Creativity
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May	Unit II	<p>Self and Personality</p> <p><i>The topics in this unit are:</i></p> <ol style="list-style-type: none"> 1. Introduction
		<ol style="list-style-type: none"> 2. Self and Personality 3. Concept of Self 4. Cognitive and Behavioural Aspects of Self 5. Culture and Self 6. Concept of Personality 7. Major Approaches to the Study of Personality <ul style="list-style-type: none"> • Type Approach • Trait Approach • Psychodynamic Approach • Behavioural Approach • Cultural Approach • Humanistic Approach 8. Assessment of Personality <ul style="list-style-type: none"> • Self-report Measures • Projective Techniques • Behavioural Analysis
July	Unit III	<p>Meeting Life Challenges</p> <p><i>The topics in this unit are:</i></p> <ol style="list-style-type: none"> 1. Introduction 2. Nature, Types and Sources of Stress 3. Effects of Stress on Psychological Functioning and Health <ul style="list-style-type: none"> • Stress and Health • General Adaptation Syndrome • Stress and Immune System • Lifestyle 4. Coping with Stress <ul style="list-style-type: none"> • Stress Management Techniques 5. Promoting Positive Health and Well-being <ul style="list-style-type: none"> • Stress Resistant Personality • Life Skills • Positive Health
July/August	Unit IV	<p>Psychological Disorders</p> <p><i>The topics in this unit are:</i></p> <ol style="list-style-type: none"> 1. Introduction 2. Concepts of Abnormality and Psychological Disorders

		<ul style="list-style-type: none"> • Historical Background <ol style="list-style-type: none"> 3. Classification of Psychological Disorders 4. Factors Underlying Abnormal Behaviour 5. Major Psychological Disorders <ul style="list-style-type: none"> • Anxiety Disorders • Obsessive-Compulsive and Related Disorders • Trauma-and Stressor-Related Disorders • Somatic Symptom and Related Disorders • Dissociative Disorders • Depressive Disorder • Bipolar and Related Disorders • Schizophrenia Spectrum and Other Psychotic Disorders • Neurodevelopmental Disorders • Disruptive, Impulse-Control and Conduct Disorders • Feeding and Eating Disorders • Substance Related and Addictive Disorders
August	Unit V	<p>Therapeutic Approaches The topics in this unit are:</p> <ol style="list-style-type: none"> 1. Nature and Process of Psychotherapy <ul style="list-style-type: none"> • Therapeutic relationship 2. Types of Therapies <ul style="list-style-type: none"> • Psychodynamic Therapy • Behaviour Therapy • Cognitive Therapy • Humanistic-Existential Therapy • Biomedical Therapy • Alternative Therapies 3. Rehabilitation of the Mentally Ill
October	Unit VI	<p>Attitude and Social Cognition The topics in this unit are:</p> <ol style="list-style-type: none"> 1. Introduction 2. Explaining Social Behaviour 3. Nature and Components of Attitudes 4. Attitude Formation and Change <ul style="list-style-type: none"> • Attitude Formation
		<ul style="list-style-type: none"> • Attitude Change • Attitude-Behaviour Relationship <ol style="list-style-type: none"> 5. Prejudice and Discrimination 6. Strategies for Handling Prejudice 7. Social Cognition 8. Schemas and Stereotypes 9. Impression Formation and Explaining <ul style="list-style-type: none"> • Behaviour of Others through Attributions • Impression Formation • Attribution of Causality 10. Behaviour in the Presence of Others 11. Pro-social Behaviour <ul style="list-style-type: none"> • Factors Affecting Pro-social Behaviour

October	Unit VII	<p>Social Influence and Group Processes The topics in this unit are:</p> <ol style="list-style-type: none"> 1. Introduction 2. Nature and Formation of Groups 3. Type of Groups 4. Influence of Group on Individual Behaviour <ul style="list-style-type: none"> • Social Loafing • Group Polarisation
		<p>Practical Marks 30</p> <ul style="list-style-type: none"> • 5 Psychological Test 1 Case Profile

Prescribed Books:

1. Psychology, Class XII, Published by NCERT

PSYCHOLOGY - ASSESSMENT PLANNER -2024-25
XI ABD

TEST	SYLLABUS
PA 1 (20 Marks)	Unit -1 What is Psychology?
PA 2 (20 Marks)	Unit -1 What is Psychology? Unit – 7 Human Memory
HALF YEALY EXAM (70 Marks)	Unit -1 What is Psychology? Unit -2 Methods of Enquiry in Psychology Unit - 4 Human Development Unit – 7 Human Memory
PA 3 (20 Marks)	Unit – 6 Learning
ANNUAL EXAM THEORY / PRAC 70/30	Unit -1 What is Psychology? Unit – 2 Methods of Enquiry in Psychology Unit – 4 Human Development Unit – 5 Sensory, Attentional and Perceptual Unit – 6 Learning Unit – 7 Human Memory Unit – 8 Thinking Unit – 9 Motivation & Emotion

October**UNIT 6 - Test, Measurement & Evaluation**

- Define Test, Measurements and Evaluation.
- Importance of Test, Measurements and Evaluation in Sports.
- Calculation of BMI, Waist – Hip Ratio, Skin fold measurement (3-site)
- Somato Types (Endomorphy, Mesomorphy & Ectomorphy)
- Measurements of health-related fitness

UNIT 7 - Fundamentals of Anatomy, Physiology in Sports

- Definition and Importance of Anatomy and Physiology in exercise and sports
- Functions of Skeletal system, classification of bone and types of joints
- Properties and Functions of Muscles.
- Structure and Functions of Circulatory system and Heart.
- Structure and Functions of Respiratory system.

November**UNIT 8- Fundamentals of Kinesiology and Biomechanics in Sports**

- Definition and Importance of Kinesiology and Biomechanics in sports
- Principles of Biomechanics
- Kinetics and Kinematics in Sports
- Types of Body Movements- Flexion, Extension, Abduction, Adduction, Rotation, Circumduction, Supination & Pronation
- Axis and Planes - Concept and its application in body movements

December**UNIT 9 - Psychology & Sports**

- Definition & Importance of Psychology in Physical Education & Sports
- Developmental Characteristics at Different Stages of Development
- Adolescent Problems & Their Management
- Team Cohesion and Sports
- Introduction to Psychological Attributes: Attention, Resilience, Mental Toughness

January**UNIT 10 - Training and Doping in Sports**

- Concept and Principles of Sports Training
- Training Load; Over Load, Adaptation, and Recovery
- Warming-up & Limbering Down –Types, Method & Importance
- Concept of Skill, Technique, Tactics & Strategies
- Concept of Doping and its Disadvantages

February**Revision and Annual Exam**

ASSESSMENT PLANNER : SESSION 2024 - 2025**SUBJECT: Physical Education****CLASS: XI**

TEST	MAX. MARKS	SYLLABUS
PERIODIC ASSESSEMENT 1	20	<ol style="list-style-type: none">1. Changing Trend & Career in Physical Education2. Olympism value Education
PERIODIC ASSESSEMENT 2	20	<ol style="list-style-type: none">1. Yoga.2. Physical Education & Sports for CWSN.3. Physical Fitness, Health and Wellness
MID TERM EXAMS	70	<ol style="list-style-type: none">1. Changing Trend & Career in Physical Education2. Olympism value Education.3. Yoga.4. Physical Education & Sports for CWSN.5. Physical Fitness, Health and Wellness
PERIODIC ASSESSMENT 3	20	<ol style="list-style-type: none">1. Test Measurement & Evaluation.2. Fundamental of Anatomy, Physiology in Sports.
ANNUAL EXAMS	70	<ol style="list-style-type: none">1. Changing Trend & Career in Physical Education2. Olympism value Education.3. Yoga.4. Physical Education & Sports for CWSN.5. Physical Fitness, Health and Wellness6. Test Measurement & Evaluation.7. Fundamental of Anatomy, Physiology in Sports.8. Fundamental of Kinesiology and Biomechanics in sports.9. Psychology & Sports.10. Training in sports