

CURRICULUM PLAN
SUBJECT: ENGLISH CORE (301)
CLASS XI (2021-22)

Months	No. of working days	Topics to be coveredL	Learning Outcomes
April	21	<p>Literature:</p> <ul style="list-style-type: none"> • Hornbill: The Portrait of a Lady, • The photograph, • Discovering Tut. <p>Snapshot:</p> <ul style="list-style-type: none"> • The Summer of the beautiful, • The Address. <p>Grammar</p> <ul style="list-style-type: none"> • Determiners, • Editing & Omission, • Gap filling. <p>Writing Skills:</p> <ul style="list-style-type: none"> • Advertisement, • Report writing, • Notice. 	<p>After going through these, students will be able to:</p> <ul style="list-style-type: none"> • Think about and analyze the text. • Use determiners appropriately. • Infer the format of notice and report writing.
May	13	<p>Reading Skills:</p> <ul style="list-style-type: none"> • Note making • Unseen passages. 	<p>After going through the given syllabus students will be able to</p> <ul style="list-style-type: none"> • Read and comprehend the text. • Use grammar correctly.
June		Summer vacation	

July	26	<p>Literature:</p> <p>Hornbill:</p> <ul style="list-style-type: none"> • We are not afraid to die, • Laburnum Top, • The voice of the rain (Poem), • Landscape of the Soul. <p>Snapshots:</p> <ul style="list-style-type: none"> • Range's marriage, • Albert Einstein at School. <p>Writing Skills:</p> <ul style="list-style-type: none"> • Letter writing (business letter of 	<p>After going through the given syllabus student will be able to:</p> <ul style="list-style-type: none"> • Read, examine and evaluate language, style, meaning and message. • Write letter with proper format without grammatical errors.
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		<p>enquiries, registering complaints),</p> <ul style="list-style-type: none"> • Poster. <p>Grammar:</p> <ul style="list-style-type: none"> • Error & Omission, • Modals 	
August	25	<p>Literature:</p> <p>Hornbill:</p> <ul style="list-style-type: none"> • The Ailing Planet, • The Browning Version, • The Voice of the Rain. <p>Snapshot:</p> <ul style="list-style-type: none"> • Mother's Day. 	<p>After going through the given topic's students will be able to:</p> <ul style="list-style-type: none"> • Think about and analyze the text.
September	25	Revision and half yearly examination	
October	23	<p>Reading Skills:</p> <ul style="list-style-type: none"> • Note making. <p>Grammar:</p> <ul style="list-style-type: none"> • Common Errors, • Voice. <p>Writing Skills:</p> <ul style="list-style-type: none"> • Letter (asking for and giving information, placing orders and sending replies), • Speech Writing. 	<p>After going through the given syllabus students will be able to:</p> <ul style="list-style-type: none"> • Think and analyze on the basis of reading of the text • Use voice properly in sentences.

November	21	<p>Reading Skills:</p> <ul style="list-style-type: none"> • Unseen passage. <p>Literature:</p> <p>Hornbill:</p> <ul style="list-style-type: none"> • The Adventure, Childhood. <p>Snapshot:</p> <ul style="list-style-type: none"> • The Ghats Of the Only World, • Birth. <p>Grammar:</p> <ul style="list-style-type: none"> • Transformation of sentences. <p>Writing Skills:</p> <ul style="list-style-type: none"> • Letters to the editor (giving suggestions/opinions on an issue), 	<p>After going through the given syllabus students will be able to:</p> <ul style="list-style-type: none"> • Read, understand and infer the text. • Write letter to the Editor without grammatical errors.
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		• Narration.	
December	25	<p>Literature:</p> <p>Hornbill:</p> <ul style="list-style-type: none"> • Father to son. <p>Grammar:</p> <ul style="list-style-type: none"> • Common Error 	<p>After going through the given syllabus students will be able to:</p> <ul style="list-style-type: none"> • Improve vocabulary and language skills.
January	17	<p>Snapshot:</p> <ul style="list-style-type: none"> • Tale of Melon City. <p>Writing Skills:</p> <ul style="list-style-type: none"> • Article writing, • Letter (Application for a job with a bio data or resume) Letter (letter to the school or college authorities, regarding admissions, school issues, requirements / suitability of courses, etc.) 	<p>After going through the given syllabus students will be able to:</p> <p>Write Articles & letters in proper format.</p>
February	23	Annual Examination	
March	15		

Exam wise Distribution of syllabus

PT1: LITERATURE: The Portrait of a Lady, the photograph, Discovering Tut, the summer of

the beautiful, The Address. GRAMMAR- Determiners, Editing, Omission, Gap filling.
WRITING SKILLS: Advertisement, Report writing, Notice.

Half Yearly: LITERATURE: The Portrait of a Lady, The photograph, Discovering Tut, We are not afraid to die... , Laburnum Top, The voice of the rain (Poem) , Landscape of the Soul, The Ailing Planet, The Browning Version, The Voice of the Rain, The Summer of the beautiful, The Address, Range's marriage, Albert Einstein at School, Mother's day.
GRAMMAR: Determiners, Editing, Omission, Gap filling. WRITING: Advertisement, Report writing, Notice, Letter writing (business letter of enquiries, registering complaints) and Poster.

PT2: LITERATURE The Adventure, Childhood, The Ghats of the Only World, Birth,
GRAMMAR- Transformation of sentences. WRITING SKILLS: Letters to the editor (giving suggestions/opinions on an issue), Narration.

Annual Examination: Full syllabus.

EXAMINATION SPECIFICATIONS

TIME: 3 HOURS MARKS: 80 SECTION - A (READING) (20 MARKS)

Q1. Comprehension Passage (12 Marks)

Q2. Note making Passage (8 Marks)

SECTION - B (WRITING SKILLS and GRAMMAR) (30 MARKS)

Q3. One out of two short compositions not more than 50 words. e.g.: Advertisements, Notices, and Posters. (4 Marks)

Q4. Long answer questions: Letters based on visual / verbal input e.g.: Business / Official Letters / Letters to Editor & Application for jobs, semiofficial letters etc.

(6 X2=12Marks)

Q5. Very Long answer questions based on visual / verbal input e.g.: article, debate, speech or report. (8 Marks)

Q6. GRAMMAR: Error Correction, editing tasks B. Re - ordering of sentences, C. Transformation of sentences (6 Marks)

SECTION - C (LITERARY TEXT) (30 Marks) 7. Two Objective Type Questions out of three - Based on an extract from poetry to test reference to context comprehension and appreciation. – (1x2=2 Marks)

8. Five Short Answer Questions out of six (3 questions should be from Hornbill) - Based on prose, poetry and plays from both the texts. (2x5=10 marks)

9. One Long Answer Question out of two from Hornbill (to be answered in120-150 words) Based on prescribed texts to test global comprehension and extrapolation beyond the texts. (6 Marks)

10. One Long Answer Questions out of two from Snapshots (to be answered in120-150 words) -Based on theme, plot, incidents or events to test global comprehension and extrapolation beyond the texts. (6 Marks)

11. One Long Answer Question out of two from Hornbill (to be answered in120-150 words)- Based on understanding appreciation, analysis and interpretation of the characters/events/episodes/incidents. (6 Marks)

Prescribed Textbooks:

1. Hornbill: Textbook published by NCERT, New Delhi

2. Snapshots: Supplementary Reader published by NCERT, New Delhi.

REFERENCE BOOK: BBC

PAPER DESIGN:

Typology	Testing Competencies	Objective Type Question including MCQs(1 mark each)	Short Answer Questions (2 marks each)	Short Answer Question (4 marks each)	Long Answer Question 120-150 words (6 marks each)	Very Long Answer Question 150-200 words (HOTS) (10 marks each)	Total marks
Comprehension	Conceptual understanding, decoding, Analyzing, inferring, interpreting, appreciating, literary, conventions and vocabulary, summarizing and using appropriate format/s	MCQ = 5 Objective Type Questions = 7	-	2	-	-	20
Writing Skills	Reasoning, appropriacy of style and tone, using appropriate format and fluency, inference, analysis, evaluation and creativity	-	-	1	1	2	30
Literature Textbooks and Supplementary Reading Text	Recalling, reasoning, appreciating literary convention, inference, analysis, creativity with fluency	8 Objective Type Questions (4 from 1 prose and 4 from 1 poetry extract)	5	-	2	-	30
	TOTAL	1x20=20	2x5=10	4x3=12	6x3=18	10x2=20	80
Assessment of Listening and Speaking Skills		-	-	-	-	-	20
	GRAND TOTAL	-	-	-	-	-	100

CURRICULUM PLAN
SUBJECT:PHYSICS(042)
CLASS XI (2021-22)

Months	No. of working days	Lesson no. and Lesson Name	Activities / practical	Learning Outcomes
April	21	Ch-1. Physical world Ch-2. Units and measurements Ch-3. Motion in a straight line	Pract-To measure diameter of a small spherical/cylindrical body and to measure internal diameter and depth of a given beaker/calorimeter using Vernier Calipers and hence find its volume. Pract- To measure diameter of a given wire and thickness of a given sheet using screw gauge. Act -To make a paper scale of given least count,	Students will be able to : Understand about the fundamental laws and fundamental forces in nature. Understand about the various types of system of units used in daily life Understand about distance and displacement regarding any object

			e.g., 0.2cm, 0.5 cm.	
May	13	Ch-4. Motion in plane Ch-5. Laws of motion Ch-6. Work, energy and power	Pract- To determine volume of an irregular lamina using screw gauge Act- To determine mass of a given body using a metre scale by principle of moments...	Students will be able to: Understand about the projectile motion and time of flight of a particle. Understand about the newton's law of motion in various cases. Understand about the concept of work energy and power.
June		Summer Vacation		
July	26	Ch-7. System of particles and rotational motion Ch-8. Gravitation	Pract- To determine the mass of two different objects using a beam balance. Pract- To find the weight of a given body using parallelogram law of vectors. Act- To note the change in level of liquid in a container	Students will be able to: Understand about the rotation of the particles and to find the center mass of the particles. Understand about the universe and gravitational

			on heating and interpret the observations.	force exists in nature.
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August	25	Chapter–9: Mechanical Properties of Solids Chapter–10: Mechanical Properties of Fluids	Pract- To study variation of time period of a simple pendulum of a given length by taking bobs of same size but different masses and interpret the result. Pract- To study the relationship between force of limiting friction and normal reaction and to find the co efficient of friction between a block and a horizontal surface. Act- To measure the force of limiting friction for rolling of a roller on a horizontal plane.	Students will be able to: Understand about stress and strain of the body and relate with hook’s law. Understand about the motion of fluid in various cases.
September	25	Revision and Half Yearly Examination		
October	23	Chapter–11: Thermal Properties of Matter Chapter–12: Thermodynamics	Pract- To determine Young's modulus of elasticity of the material of a given wire. Pract- To study the variation in volume with pressure for a sample of air at constant temperature by plotting graphs between P and V, and between P and 1/V Act- To observe change of state and plot a cooling curve for molten wax	Students will be able to: Finding the various methods to transfer the heat from one point to another point. Understand about the law of thermodynami cs and learns about Carnot engine.

November	21	Chapter-13: Kinetic Theory	Pract- To study the relationship between the temperature of a hot body and time by plotting a cooling curve. Pact- To determine specific heat capacity of a given solid by method of	Students will be able to Understand about the kinetic theory of gases which known by Boyle's law, Charles's law etc. Understand
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			mixtures. Act- To observe the decrease in pressure with increase in velocity of a fluid	about gases equation.
December	25	Chapter-15: Wave	Pract- To find the speed of sound in air at room temperature using a resonance tube by two resonance positions. Pract- To study the relation between frequency and length of a given wire under constant tension using sonometer. Act- To study the factors affecting the rate of loss of heat of a liquid	Students will be able to: Understand about the types of waves and difference between longitudinal and transverse waves
January	17	Chapter-14: Oscillations		Understand about oscillation and its properties. REVISION FULL SYLLABUS
February	23	ANNUAL EXAMINATION		
March	15			

PT 1: Ch-1: Physical World, Ch-2: Units and Measurements, Ch-3: Motion in a Straight Line

PT 2: Ch-4: Motion in a Plane, Ch-5: Laws of Motion, Ch-6: Work, Energy and Power **Half**

Yearly: Ch. 1, Ch.2, Ch.3, Ch.4, Ch.5, Ch.6,

PT 3: Ch-7: System of Particles and Rotational Motion, Ch-8: Gravitation, Ch-9:

Mechanical Properties of Solids, CH-10; Mechanical Properties of Fluids **Annual**

Examination: full syllabus

SECTION–A

Experiments

1. To measure diameter of a small spherical/cylindrical body and to measure internal diameter and depth of a given beaker/calorimeter using Vernier Calipers and hence find its volume.
2. To measure diameter of a given wire and thickness of a given sheet using screw gauge.
3. To determine volume of an irregular lamina using screw gauge.
4. To determine radius of curvature of a given spherical surface by a spherometer. 5. To determine the mass of two different objects using a beam balance. 6. To find the weight of a given body using parallelogram law of vectors. 7. Using a simple pendulum, plot its L-T² graph and use it to find the effective length of second's pendulum.
8. To study variation of time period of a simple pendulum of a given length by taking bobs of same size but different masses and interpret the result.
9. To study the relationship between force of limiting friction and normal reaction and to find the coefficient of friction between a block and a horizontal surface.
10. To find the downward force, along an inclined plane, acting on a roller due to gravitational pull of the earth and study its relationship with the angle of inclination θ by plotting graph between force and $\sin \theta$.

Activities:

1. To make a paper scale of given least count, e.g., 0.2cm, 0.5 cm.
2. To determine mass of a given body using a meter scale by principle of moments. 3. to plot a graph for a given set of data, with proper choice of scales and error bars. 4. To measure the force of limiting friction for rolling of a roller on a horizontal plane. 5. To study the variation in range of a projectile with angle of projection.
6. To study the conservation of energy of a ball rolling down on an inclined plane (using a double inclined plane).
7. To study dissipation of energy of a simple pendulum by plotting a graph between square of amplitude and time.

SECTION–B

Experiments

1. To determine Young's modulus of elasticity of the material of a given wire. 2. To find the force constant of a helical spring by plotting a graph between load and extension.
3. To study the variation in volume with pressure for a sample of air at constant temperature by plotting graphs between P and V, and between P and 1/V.
4. To determine the surface tension of water by capillary rise method.
5. To determine the coefficient of viscosity of a given viscous liquid by measuring terminal velocity of a given spherical body.
6. To study the relationship between the temperature of a hot body and time by plotting a cooling curve.
7. To determine specific heat capacity of a given solid by method of mixtures. 8. To study the relation between frequency and length of a given wire under constant tension using sonometer.
9. To study the relation between the length of a given wire and tension for constant frequency using sonometer.
10. To find the speed of sound in air at room temperature using a resonance tube by two resonance positions.

Activities (for the purpose of demonstration only)

PAPER DESIGN:

S N	Typology of Questions	VS(1 m)	SA (2m)	LA-I (3 M)	LA-II (5 M)	Tota l	Perce ntage
1	Remembering: Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.	2	2	1	-	12	12 %
2	Understanding: Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas	6	2	2	1	21	30 %
3	Applying: Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	6	2	1	2	23	33 %
4	Analyzing and Evaluating: Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria.	6	1	2	-	14	20 %
5	Creating: Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.	-	-	1	-	3	5 %
	Total	20x 1=2 0	7x2 = 14	7x3= 21	3x5= 15	70	100

CURRICULUM PLAN
SUBJECT: Chemistry(043)
CLASS XI (2021-22)

Month	No of working Days	Unit /Topics to be covered	Practical /Experiments	Learning outcomes (After studying this unit students will be able to-)
April	21	Unit-1: Some Basic Concepts of Chemistry Unit -2: Structure of atom Unit-3: Classification of elements & periodicity in properties	Experiments related to 1. Acquaintance with chemistry laboratory. 2. Basic Laboratory techniques.	Unit -1 Explain the characteristics of states of matter/ Define SI and base unit along with conversions/understand laws of chemical combination and its application Unit -2 Know the Discovery of electron proton and neutron/orbital concept/Calculation and significance of Quantum numbers Unit - 3 Appreciate the concept of grouping

				elements /recognize the periodic trends.
May	13	Unit-4: Chemical bonding & Molecular structure Unit-5: States of matter Unit-8: Redox reactions	1. To determine the boiling point and melting point of Liquid and solid organic compound respectively. 2. Titrimetric Analysis /Quantitative analysis.	Unit -4 understand various types of bonding/ VSEPR theory /MOT theory/ Hybridization as the basis of chemical reactions. Unit -5 Explain the law governing behavior of ideal gases/ real gases /and realize the continuity in states of

				matter. Unit -8 Identify redox as a class of reaction /classify redox reaction into various type of reactions /and learn the electrode process
June		Summer Vacations		

July	26	Unit-9: Hydrogen Unit-10:S block elements Unit-14 Environmental chemistry	1. Experiments related to purification of substances by crystallization.	Ch-9 Identify the modes of occurrence of hydrogen /Preparation, properties, chemical behavior and uses of Di hydrogen. Unit -10 Describe the general characteristic of alkali metal and their compounds. Unit -14 understand the meaning of environment chemistry, various environmental issues.
August	25	Unit-12: Organic chemistry: Some basic principles & techniques	1. Elemental detection of organic compound.	Unit -12 Naming of HC , Preparation and properties of organic compound and its conversion/ correlate structure with various properties.
September	25	Unit-13: Hydrocarbons	1. Experiments related to test for functional group in organic compounds.	Unit-13 Preparation properties of organic compound and its conversion/ correlate structure with various properties.
October	23	Unit 6:Thermodynamics	Experiments related to test for	Unit -6 explain the terms related to

			action and anion in a salt sample.(Qualitative analysis)	thermodynamics/ calculate W and E/ concepts of Gibbs energy / Entropy/Enthalpy in a process.
November	21	Unit-7: Equilibrium	1. To Study the chemical equilibrium and shift of equilibrium by change in concentration.	Unit 7 identify the dynamic nature of equilibrium /explain various states of equilibrium / buffer Solution and calculate solubility product constant
December	25	Unit-14 Environmental chemistry		Unit -14 understand the meaning of environment chemistry, various environmental issues.
January	17	Unit-11: Some p block elements		Unit -11 Describe the general characteristic of P-Block elements and their chemical behavior /importance of p block compounds. REVISION FULL SYLLABUS
February	23	ANNUAL EXAMINATION		
March	15			

PT1: Ch.-1, Ch.-2, And Ch.-3: Ch.-4

HALF YEARLY : Ch.-1:, Ch.-2:, Ch.-3:, Ch.-4:, Ch.-5: ,Ch.-8:, Ch.-9: Ch.- 14:Ch-10

PT 2: Ch.-11, Ch.-12, Ch-13

ANNUAL EXAMINATION: Complete Syllabus Ch-1 to 14

Prescribed Text Books:

- CHEMISTRY XI PART-1 Published by NCERT
- CHEMISTRY XI PART-2 Published by NCERT
- CHEMISTRY LAB MANUAL based on CBSE curriculum (published by full marks)
- Reference Books: Praveen's new course chemistry by Dawn and Khetrapal

PAPER DESIGN:

S. No.	Typology of Questions	Very Short Answer-Objective type (VSA) (1 Mark)	Short Answer-I (SA) (2Marks)	Long Answer-I (LA-I) (3 marks)	Long Answer-II (LA-II) (5 marks)	Total Marks	% Weight-age
1	Remembering : Exhibit memory of previously learned material by recalling facts, terms, basic concepts and answers.	2	1	1	-	7	10%
2	Understanding : Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions and stating main ideas.	6	2	2	1	21	30%
3	Applying: Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	6	2	2	1	21	30%
4	Analyzing : Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations.	6	1	2	-	14	20%

	Evaluating: Present and defend opinions by making judgments about information, validity of ideas or quality of work based on a set of criteria.						
	Creating: Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.	-	1	-	1	7	10%
	TOTAL	20x1=20	7x2=14	7x3=21	3x5=15	70(37)	100%

CURRICULUM PLAN
SUBJECT: Biology (044)
CLASS XI (2021-22)

Month	No. Of working days	Topics to be covered	Practical / Experiments	Objective learning outcome
April	21	Ch-1: Living World Ch-2: Biological Classification	To study and describe the given sample of flowers, plant specimen and animal specimen.	UNIT I (Diversity of living organism) Students will make out what is life, the biodiversity, need for classification,

				salient features and classification of major groups of plants and animals.
May	13	Ch-3: Plant Kingdom Ch-4: Animal Kingdom Ch-5: Morphology of flowering Plants	To study and describe the given sample of flowers, plant specimen and animal specimen.	UNIT IV (Cont.) Students will make out what is life, the biodiversity, need for classification, salient features and classification of major groups of animals.
July	1	Summer Vacation		
July	26	Ch-6: Anatomy of Flowering Plants Ch-7: Structural Organization in Animals	To prepare the T.S. of dicot and monocot root, stem and leaves	UNIT II (structural organization in plants and animals) Students will understand morphology, anatomy and modifications of different parts of flowering plants and animals.
August	25	Ch-8: Cell: The Unit of Life Ch-9: Bio molecules	To study the osmosis, plasmolysis and DE plasmolysis and rate of transpiration/ To study plant and animal tissue/ To test for carbohydrate, protein, fat/ test for urea, sugar, albumin and bile in urine.	UNIT III (Cell structure and function) Students will understand the basic concepts of cell theory, structure and function of cell organelles, structure and function of biomolecules and cell cycle.
September	25	Ch-10: Cell Cycle and Cell Division	To study mitosis and meiosis in plant and animal cell.	UNIT III (Cell structure and function) Students will understand the

				basic concepts of cell theory, structure and function of cell organelles, structure and function of biomolecules and cell cycle.
October	23	Ch-11: Transport in plants Ch-12: Mineral Nutrition	To study various root, stem and leaf modifications.	UNIT IV (Plant physiology) Students will gain the knowledge of different physiological process like transportation, nutrition.
November	21	Ch-13: Photosynthesis in higher plants Ch-14: Respiration in plants Ch-15: Plant Growth and development Ch-16: Digestion and absorption Ch-17: Breathing and Exchange of gases	To study phototropism, transpiration and respiration in plants.	UNIT IV (cont.) Students will gain the knowledge of different physiological process photosynthesis, respiration in plants. UNIT V (Human Physiology) Students will get the elementary idea of various human physiological processes like digestion, respiration.
December	25	Ch-18: Body fluids and circulation Ch-19: Excretory Products and their elimination Ch-20: Locomotion and Movement	To study human bone and joint/ external morphology of cockroach.	UNIT V (cont.) Students will get the elementary idea of various human physiological process like circulation, excretion, locomotion,

January	17	Ch-21: Neural control and Coordination Ch-22: Chemical Coordination and Integration		Students will get the elementary idea of neural control and coordination and diseases related to systems. REVISION FULL SYLLABUS
February	23	Annual Examination		
March	15			

Names of Text Books:

Biology for Class XI Publisher: NCERT

1. Comprehensive Biology activities Publisher: Laxmi Publication

2. Reference: Biology by Modern ABC

3. Biology Exam kit by Laxmi Publication

Exam wise Distribution of syllabus:

PT1: Ch-1, Ch-2, Ch-3, Ch-4

PT2: Ch-9, Ch-11, Ch-12

Half-Yearly Examination: Ch-1, Ch-2, Ch-3, Ch-4, Ch-5, Ch-6, Ch-7, Ch-8,

Annual Examination: Full Syllabus.

PAPER DESIGN:

S. No.	Typology of Questions	Very Short Answer (VSA) (2 Marks)	Short Answer-I (SA-I) 2 Marks	Short Answer-II (SA-II) (3 marks)	Long Answer (LA) (5 marks)	Total Marks	% Weightage
1.	Remembering- (Knowledge based Simple recall questions, to know specific facts, terms, concepts, principles, or theories, Identify, define, or recite, information)	2	1	1	-	7	10%
2.	Understanding- (Comprehension - To be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase information)	-	2	4	1	21	30%
3.	Application (Use abstract information in concrete situation, to apply knowledge to new situations, Use given content to interpret a situation, provide an example, or solve a problem)	-	2	4	1	21	30%
4.	Evaluating & Analysis - Classify, Compare, Contrast, or differentiate between different pieces of information, Organize and/or integrate unique pieces of information from a variety of sources)	2	1	1	1	12	17%
5.	Creating - (Appraise, judge, and/or justify the value or worth of a decision or outcome, or to predict outcomes based on values)	1	1	2	-	9	13%
	TOTAL	5x1=5	7x2=14	12x3=36	3x5=15	70(27)	100%

CURRICULUM PLAN
SUBJECT: Mathematics (041)
CLASS XI (2021-22)

Month	No. Of working days	Topics to be covered	Concept/ Mathematics Activities	Objective /learning outcome
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April	21	Ch-1: Sets Ch.- 2: Relations and functions	<ul style="list-style-type: none"> • To find the number of subsets of a given set and verify that if a set has n number of elements, then the total no. of subsets is 2^n. • To distinguish between a Relation & Function. 	Students will be able to: Sets and their representations. Empty set. Finite and Infinite sets. Equal sets. Subsets. Subsets of a set of real numbers especially intervals. Power set. Universal set. Venn diagrams. Ordered pairs. Cartesian product of sets. Number of elements in the Cartesian product of two finite sets.
May	13	Ch.- 4: Principle of mathematical induction Ch.- 5: Complex numbers and quadratic equation Ch-6 Linear inequalities	<ul style="list-style-type: none"> • To interpret geometrically the meaning of $i = \sqrt{-1}$ and its integral power. 	Students will be able to: Process of the proof by induction, motivating the application of the method by looking at natural numbers as the least inductive subset of real numbers. The principle of mathematical induction and simple Need for complex numbers, especially V-1, to be motivated by inability to solve some of the quadratic equations. Algebraic properties of complex numbers.

				Armand plane and polar representation
June	1	Summer Vacations		

July	26	Ch.- 7: Permutation and combination Ch.- 8: Binomial theorem	<ul style="list-style-type: none"> • To find the number of ways in which three cards can be selected from given five cards. 	Students will be able to: Fundamental principle of counting. Factorial n. (n!) Permutations and combinations, derivation of Formulae for n History, statement and proof of the binomial theorem for positive integral indices. Pascal's triangle, General and middle term in binomial
August	25	Ch.- 10: Straight lines Ch.- 11: Conic sections Ch.- 12: Introduction to three dimensional geometry	<ul style="list-style-type: none"> • An alternating method to construct a parabola. • To explain the concept of octants by three mutually perpendicular planes in space • To construct an ellipse using a rectangle. 	Students will be able to: Slope of a line and angle between two lines. Various forms of equations of a line: parallel to axis, point –slope 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. Coordinate axes and coordinate planes in three dimensions. Coordinates of a point. Distance between two points and section formula.
September	25	Revision and		

		Half Yearly Examination		
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October	23	Ch. - 13 Limits and derivatives. Ch.- 14: Mathemati cal reasoning	<ul style="list-style-type: none"> • Verification of the geometrical significance of derivative 	Students will be able to: 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.
November	21	Ch.- 15: Statistics Ch-16: Probability	<ul style="list-style-type: none"> • To write the sample space, when a coin is tossed once, twice, three times, four times. 	Students will be able to: Measures of Dispersion: Range, Mean deviation, variance and standard deviation of ungrouped/groupe d data. Analysis of frequency distributions. Random experiments; outcomes, sample spaces (set representation). Events; occurrence of events, 'not', 'and' and 'or' events, exhaustive events, mutually exclusive events, Axiomatic (set theoretic) probability
December	25	Ch-9: Sequences and series	<ul style="list-style-type: none"> • To demonstrate that the Arithmetic mean of two different positive numbers is always greater than the Geometric mean. 	Students will be able to: Sequence and Series. Arithmetic Progression (A. P.). Arithmetic Mean (A.M.) Geometric Progression (G.P.), general term of a G.P., sum of n terms of

				a G.P., infinite G.P. and its sum, geometric mean (G.M.), relation between A.M.
January	17	Ch-3: Trigonometric functions		Definition of trigonometric functions with the help of unit circle. Truth of the identity $\sin^2x + \cos^2x = 1$, for all x . Revision
February	23	Annual Examination		
March	15			

Prescribed Books:

Mathematics for Class XI Publisher: NCERT

Reference Book: RD. SHARMA

Exam wise syllabus distribution:-

Periodic -Test 1: Ch-1: Sets, Ch. - 2: Relations and functions, Ch. - 3: Trigonometric functions, Ch. - 4: Principle of mathematical induction, Ch. - 5: Complex numbers and quadratic equation, Ch-6 Linear inequalities

Half-Yearly Examination: Ch-1, Ch-2, Ch-3, Ch-4, Ch-5, Ch-6, Ch-7, Ch-8, Periodic

-Test 2: Ch-9: Sequences and series, Ch. - 10: Straight lines, Ch- 11: Conic sections, Ch. - 12: Introduction to three dimensional geometry, Ch. - 13 Limits and derivatives

Annual Examination: Full Syllabus.

PAPER DESIGN:

S. No.	Typology of Questions	Very Short Answer-Objective type (VSA) (1 Mark)	Short Answer-I (SA) (2 Marks)	Long Answer-I (SA) (4 Marks)	Long Answer (LA) (6 Marks)	Total Marks	% Weightage
1	Remembering: Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.	4	1	1	1	16	20
2	Understanding: Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas	6	2	3	1	28	35
3	Applying: Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	6	2	1	1	20	25
4	Analysing : Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations Evaluating: Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria. Creating: Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions	4	1	1	1	16	20
	Total	20x1 =20	6x2 =12	6x4=24	4x6=24	80	100

CURRICULUM PLAN
SUBJECT: Physical Education (048)
CLASS XI (2021-22)

Month	Working days	Topics to be covered
April	21	Ch.- I -> Changing Trends & Career in Physical Education
May	13	
June		Summer Vacation
July	26	Ch.- II-> Olympic Movement
August	25	Ch.-III>physical fitness and wellness and lifestyle Ch.-IV>Physical education and sports for CWSN
September	25	Ch.-v> Yoga Half yearly revision
October	23	Ch.-VI>Physical activity and leadership training Ch.-VII>Test and measurement
November	21	Ch.-IX> Psychology & Sports
DECEMBER	25	Ch.-X -> Training and doping in sports
JANUARY	17	Ch.-VIII -> Fundamental of anatomy and physiology in sports Revision For Annual Exam
FEBRUARY	23	Annual Exam
March	15	

- PT-I -> Ch.- I , II
- P.T-II -> Ch.-IV , V
- Half Yearly ->Ch.- I , II , III,IV,V
- U.T-III -> Ch.-VI,VII
- U.T->IV,CH-VIII,IX,X
- Annual Exam -> Full Syllabus

Names of Text Books:

- Sara Swati

Practical Max.

Marks 30

01. Physical Fitness Test - 6 Marks
02. Proficiency in Games and Sports (Skill of any one Game of choice from the given list*) - 7 Marks
03. Yogic Practices - 7 Marks
04. Record File ** - 5 Marks
05. Viva Voce (Health/ Games & Sports/ Yoga) - 5 Marks

* Athletics, Archery, Badminton, Boxing, Chess, Judo, Shooting, Skating, Swimming, Taekwondo, Tennis, Aerobics, Gymnastics, Rope-Skipping, Yoga, Bocce & Unified Basketball [CWSN (Children with Special Needs - Divyang)]

**Record File shall include:

Practical-1: Labeled diagram of 400 M Track & Field with computations. Practical-2:

Computation of BMI from family or neighborhood & graphical representation of the data.

Practical-3: Labeled diagram of field & equipment of any one game of your choice out of the above list.

Practical-4: List of current National Awardees (Dronacharya Award, Arjuna Award & Rajiv

Gandhi Khel Ratna Award) Practical-5: Pictorial presentation of any five Asanas for

improving concentration.

PAPER DESIGN:

S.no	Typology of questions	mcq 1mark	Short answer 1 3 marks	Short answer ii 5 marks	Marks
1	Remembering: Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers	5	3	2	24
2	Understanding: Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas	5	3	1	19
3	Applying: Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	5	2	1	16
4	Analyzing and Evaluating: Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations. Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria. Creating: Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.	5	2	-	11
	Total	20x1=20	10x3=30	4x5=20	70 (34)

n questions of 1 mark (4 choices), 3 marks (3 choices) and 5 marks (2 choices). In all, total 9 internal choices

CURRICULUM PLAN
SUBJECT: COMPUTER SCIENCE (083)
CLASS XI (2021-22)

Month	NUMBER OF WORKING DAYS	LESSON NAME	PRACTICAL	LEARNING OUTCOMES
April	21	Ch-1 Getting started with python Ch-12 cyber safety	1. Write the program to print hello? 2. Write the program to calculate addition of five numbers and find average?	Students are able to learn how to install python in desktop. Students are able to learn the features and advantage of python and also know differences of other high level programming languages Students also know the cybercrime and security threats in network.
May	13	Ch-2 python programming fundamental	3. A Write the program to calculate addition, subtraction, multiplication, division of two numbers by using assignment operators. ? 3. B Write a program to calculate the simple interest and compound interest. 4. Write the program to print string concatenation?	Students are able to learn keyword, variable and data types. Students are able to learn how to do string concatenating and assignment operators.
June			Summer vacation	

July	26	Ch-3 conditional and looping construct ch-4 strings in python Ch-5 list in python	5. Write the program to print number is even or odd using if-else statement? 6. Write the program to calculate percentage of student and display grade using if-elif else statement? 7. Write the program to print and calculate the factorial of an input number using for loop?	Students are able to learn how to make flowchart and work on it. Students are able to learn the method of list and its functioning. Students are able to learn the list method.
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			8. Write the program to print the length, Capitalize, split of an input string?	
August	25	Ch-6 Tuples and dictionary Ch-7 error and exception handling in python	9. Write the program to print concatenation and repetition of list? 10. Write the program to Find the largest and smallest number of list?	Student are able to learn the tuple functions like Len (), count (), any (), min () max () etc. Students are able to learn+ the dictionary key value pair and how to create the dictionary? Students
September	25	HAFF YEARLY		
October	23	Ch-8 Computer system organization Ch-9Data representation		Students are able to learn communication bus, mobile System organization, concept of operating System and also difference between cloud and parallel computing.

November	21	Ch-9 Boolean logic Ch-10 Database concepts	11. Consider the following tables STUDENT and STUDENT DETAILS. Write SQL commands for the statement.	Students are able to learn data representation in number System, ASCII, ISCII, UNICODE and logic gates, De Morgan's Theorems.
December	25	Ch-11 Structured query language		Students are able to learn DBMS, relational database, key, relational Algebra.
January	17			Students are able to learn my SQL, data type, commands, joins, unions, indexes. REVISION FULL SYLLABUS
February	23	ANNUAL EXAMINATION		
March	15			

PT1: Ch-1 Getting started with python, Ch-12 cyber safety

PT2: Ch-2 python programming fundamental, Ch-3 conditional and looping construct, Ch-4 strings in python, Ch-5 list in python.

HAFF YEARLY: : Ch-1 Getting started with python, Ch-12 cyber safety, Ch-2 python programming fundamental, Ch-3 conditional and looping construct, ch-4 strings in python, Ch-5 list in python, Ch-6 Tuples and dictionary, Ch-7 error and exception handling in python.

PT 3: Ch-8 Computer system organization, Ch-9 Data representation, Ch-10 Database concepts.

ANNUAL EXAMINATION: FULL SYLLABUS.

Reference book: PREETI ARORA

PAPER DESIGN:

Unit No.	Unit Name	Marks
		Theory
1.	Introduction to Computer System	5
2.	Introductory Python Programming	30
3.	Data Handling	10
4.	Data Management	15
5.	Society, Law and Ethics	10
		70

PARCTICALS:

S. No	Description	Marks
1	Problem solving using arithmetic operations, conditional statements and iterations with the help of a Python program 60% logic + 20% documentation + 20% code quality (To be tested on the day of the final exam)	6
2	Problem solving using numPy (To be tested on the day of the final exam)	4
3	SQL - 5 Queries based on single table (To be tested on the day of the final exam)	5
4	Report File <ul style="list-style-type: none"> • Minimum 20 Python Programs • Minimum 20 SQL Queries 	6
5	Viva	4
6	Project using the concepts learnt in the course	5
	Total	30