

PHYSICS SYLLABUS (2023-2024): CLASS- XII

❖ PERIODIC TEST -1 (PT)			
• Chapters	Blue Print	PT-1	Marks
✓ Ch-1. Electric Charges and Field	MCQ	(1 x 7)	9
✓ Ch-2. Electric Potential and Capacitance	Assertion Reason	(1 x 2)	
✓ Ch-3. Current Electricity	Very Short Question		
	Short Question-1	(2 x 3)	6
	Short Question-2	(3 x 5)	15
	Long questions including Case Study	(5 x 2)	10
	Total		40
❖ First Term Exam			
• Chapters	Blue Print	First Term	Marks
✓ Ch-1. Electric Charges and Field	MCQ	(1 x 12)	16
✓ Ch-2. Electric Potential and Capacitance	Assertion Reason	(1 x 4)	
✓ Ch-3. Current Electricity	Very Short Question		
✓ Ch-4. Moving charges and field	Short Question-1	(2 x 5)	10
✓ Ch-5. Magnetism and Matter	Short Question-2	(3 x 7)	21
✓ Ch-6. Electromagnetic induction	Case Study	(4 x 2)	8
✓ Ch-7. Alternating Current	Long Questions	(5 x 3)	15
✓ Ch-8. Electromagnetic waves	Total		70
• Practicals	Blue Print	Practicals	Marks
✓ Ch-3. Current Electricity	Experiment		10
✓ Ch-4. Moving charges and field	Activity		5
✓ Ch-6. Electromagnetic induction	Practical Record		5
	VIVA- Voce		10
❖ Second Term Exam			
➤ Chapters	Blue Print	Second Term	Marks
✓ Ch-1. Electric Charges and Field	MCQ		1x16=16
✓ Ch-2. Electric Potential and Capacitance	Assertion Reason		
✓ Ch-3. Current Electricity	Very Short Question		
✓ Ch-4. Moving charges and field	Short Question-1	(2 x 5)	10
✓ Ch-9. Ray Optics	Short Question-2	(3 x 7)	21
✓ Ch-10. Wave Optics	Case Study	(4 x 2)	8
✓ Ch-11. Dual Nature of Matter and Radiations	Long Questions	(5 x 3)	15
✓ Ch-12. Atoms	Total		70
❖ Pre Board- 1 and 2 – Full Syllabus			
○ Blue Print will be same as given in Second Term			
• Final Practicals	Blue Print	Practicals	Marks
✓ Ch-3. Current Electricity	Two Experiments (from each section)		14
✓ Ch-4. Moving charges and field	Practical Record (Experiments and Activities)		5
✓ Ch-6. Electromagnetic induction	One Activity		3
	Investigatory project		3
	VIVA- Voce		5
	Total		30

Marks Distribution

Unit	Chapter Name	Marks
Unit- 1	Ch-1. Electric Charges and Field	16
	Ch-2. Electric Potential and Capacitance	
Unit- 2	Ch-3. Current Electricity	
Unit- 3	Ch-4. Moving charges and field	17
	Ch-5. Magnetism and Matter	
Unit- 4	Ch-6. Electromagnetic induction	18
	Ch-7. Alternating Current	
Unit- 5	Ch-8. Electromagnetic waves	
Unit- 6	Ch-9. Ray Optics	12
	Ch-10. Wave Optics	
Unit- 7	Ch-11. Dual Nature of Matter and Radiation	
Unit- 8	Ch-12. Atoms	07
	Ch-13. Nuclei	
Unit- 9	Ch- 14. Semiconductors	70
	Total	70

Month wise Syllabus

Month	Chapter's Name
April	Ch-1. Electric Charges and Field
	Ch-2. Electric Potential and Capacitance
May	Ch-3. Current Electricity
June	_____Vacations_____
July	Ch-4. Moving charges and field
	Ch-5. Magnetism and Matter
August	Ch-6. Electromagnetic induction
	Ch-7. Alternating Current
	Ch-8. Electromagnetic waves

September	1 st Terminal
October	Ch-9. Ray Optics
	Ch-10. Wave Optics
November	Ch-11. Dual Nature of Matter and Radiation
	Ch-12. Atoms
December	Ch-13. Nuclei Ch- 14. Semiconductors
January	Revision + Pre board - 1 + Final Practicals
February	Revision + Pre Board – 2 + Final Practicals
March	Final Board Examination

PRACTICALS

The record to be submitted by the students at the time of their annual examination has to include:

- Record of at least 8 Experiments [with 4 from each section], to be performed by the students.
- Record of at least 6 Activities [with 3 each from section A and section B], to be performed by the students.
- The Report of the project carried out by the students.

CHEMISTRY SYLLABUS (2023-2024): CLASS- XII

❖ PERIODIC TEST -1			
• Chapters	Blue Print	PT-1	Marks
✓ Ch- Solutions	MCQs	(1 x7)	7
✓ Ch- Electrochemistry	Assertion Reason Questions	(1 x 2)	2
✓ Ch- Chemical Kinetics	Short Answer Questions Type 1	(2 x 4)	8
	Short Answer Questions Type 2	(3 x 3)	9
	Case Study	(4 x 1)	4
	Long Questions	(5 x 2)	10
	Total		40
❖ PRACTICALS			
• Volumetric Analysis	Blue Print	Practicals	Marks
• Salt Analysis	• Volumetric Analysis		10
• Practical Record and VIVA	• Salt Analysis		10
	• Practical Record and VIVA		10
	Total		30
❖ First Term Exam			
• Chapters	Blue Print	First Term	Marks
✓ Ch: Solutions	MCQs	(1 x 12)	12
✓ Ch: Electrochemistry	Assertion Reason Questions	(1 x 4)	4
✓ Ch: Chemical Kinetics	Short Answer Questions Type- 1	(2 x 5)	10
✓ Ch: d- and f- Block Elements	Short Answer Questions Type- 2	(3 x 7)	21
✓ Ch: Coordination Compounds	Case Study	(4 x 2)	8
✓ Ch: Haloalkanes and Haloarenes	Long Answer Questions	(5 x 3)	15
	Total		70
❖ Second Term Exam			
• Chapters	Blue Print	Second Term	Marks
✓ Ch: Electrochemistry	MCQs	(1 x 12)	12
✓ Ch: Chemical Kinetics	Assertion Reason Questions	(1 x 4)	4
✓ Ch: Coordination Compounds	Short Answer Questions Type- 1	(2 x 5)	10
✓ Ch: Haloalkanes and Haloarenes	Short Answer Questions Type- 2	(3 x 7)	21
✓ Ch: Alcohols, Phenols and Ethers	Case Study	(4 x 2)	8
✓ Ch: Aldehydes, Ketones and Carboxylic Acids	Long Answer Questions	(5 x 3)	15
✓ Ch: Amines	Total		70

❖ Pre Board- 1 and 2 – Full Syllabus		
○ Blue Print will be same as given in Second Term		
❖ Final PRACTICALS		
• Volumetric Analysis	Blue Print	Practicals
• Salt Analysis	• Volumetric Analysis	08
• Content Based Experiment	• Salt Analysis	08
• Project Work	• Content Based Experiment	06
• Class Record and VIVA	• Project Work	04
	• Class Record and VIVA	04
	Total	30

Marks Distribution

S.No.	<u>Chapter Name</u>	<u>Marks</u>
1.	Solutions	7
2.	Electrochemistry	9
3.	Chemical Kinetics	7
4.	d- and f- Block Elements	7
5.	Coordination Compounds	7
6.	Haloalkanes and Haloarenes	6
7.	Alcohols, Phenols and Ethers	6
8.	Aldehydes, Ketones and Carboxylic Acids	8
9.	Amines	6
10.	Biomolecules	7
	Total	70

Month wise Syllabus

Month	Chapter's Name
April	Chapter : Solutions
	Chapter : Electrochemistry
May	Chapter : Kinetics
June	_____ Vacations _____
July	Chapter : d- and f- Block Elements
	Chapter : Coordination Compounds
August	Chapter : Haloalkanes and Haloarenes
September	First Term Examination
October	Chapter : Alcohols, Phenols and Ethers
	Chapter : Aldehydes, Ketones and Carboxylic Acids
November	Chapter : Amines

	Chapter : Biomolecules
December	Revision + Second Term Exam
January	Revision + Pre board - 1 + Final Practicals
February	Revision + Pre Board – 2 + Final Practicals
March	Final Board Examination

Book References :

1. NCERT Chemistry

2. Pradeep's New Course CHEMISTRY

ENGLISH SYLLABUS (2023-2024): CLASS- XII

❖ PERIODIC TEST -1 (PT)			
	Blue Print	PT-1	Marks
➤ Reading Comprehension:	✓ Reading		10
✓ Unseen Passage (Factual, Descriptive or Literary)			
✓ Case Based Passage (with verbal/ visual input)	✓ Writing and Grammar		10
➤ Writing Task:			
✓ Notice Writing	✓ Language and Literature		20
✓ Letter Writing (Application for Job with bio data/ resume)			
➤ Literature (Flamingo)	Total		40
✓ Ch-1. The Last Lesson			
✓ Ch-2. Lost Spring			
✓ Ch-3. Deep Water			
✓ Poetry- Keeping Quiet			
➤ Vistas			
✓ Ch-1. The Third Level			
✓ Ch-2. The Tiger King			
❖ SEA -1			
✓ ASL (Assessment of Speaking and Listening)	Blue Print	SEA-1	Marks
	✓ Listening		5
	✓ Speaking		5
	Total		10
❖ First Term Exam			
	Blue Print	First Term	Marks
➤ Reading Comprehension:			
✓ Factual and Case based passages	➤ Section A (Reading)		
	✓ Unseen Passage-1		12
	✓ Unseen Passage-2		10
➤ Writing Task:	➤ Section B (Writing)		
✓ Notice Writing	✓ Notice Writing		4
✓ Invitation (Formal and Informal)	✓ Invitation & Reply		4
✓ Letter Writing	✓		
✓ Article Writing	✓		
✓ Report Writing	✓		
➤ Literature (Flamingo)	✓ Letter Writing		5
✓ Ch-1. The Last Lesson	✓ Article and Report Writing		5
✓ Ch-2. Lost Spring	➤ Literature	40	
✓ Ch-3. Deep Water	✓ One Poetry Extract (E)		6
✓ Ch-4. The Rattrap	✓ One Prose Extract (V)		4
✓ Ch-5. Indigo	✓ One Prose Extract (E)		6
✓ Poems	✓ Short Answer Type Questions (E) (5 x 2)		10
✓ My Mother in 66	✓ Short Answer Type Questions (V) (2 x 2)		4
✓ Keeping Quiet	✓ One Long Answer Type (E)		5
✓ A Thing of Beauty	✓ One Long Answer Type (V)		5
✓ A Roadside Stand			

➤ Vistas		
✓ Ch-1. The Third Level		
✓ Ch-2. The Tiger King		
✓ Ch-3. Journey to the End of the Earth		
✓ Ch-4. The Enemy	Total	80

❖ SEA -2		
✓ ASL (Assessment of Speaking and Listening)	Blue Print	SEA-2
	✓ Listening	Marks
	✓ Speaking	5
	Total	10

❖ Second Term Exam		
	Blue Print	Second Term
➤ Reading Comprehension:		
✓ Descriptive and Literary passages	➤ Section A (Reading)	
✓ Case Based factual passages	✓ Unseen Passage-1	12
➤ Writing Task:	✓ Unseen Passage-2	10
✓ Report Writing	➤ Section B (Writing)	
✓ Invitation and their replies	✓ Notice Writing	4
➤ Literature (Flamingo)	✓ Invitation & Reply	4
✓ Ch-7. The Interview (Prose)	✓ Letter Writing	5
✓ Ch-8. Going Places	✓ Article and Report Writing	5
✓ Poetry- Aunt Jennifer's Tigers	➤ Literature	40
➤ Vistas		
✓ Ch-6. On the Face of It		
✓ Ch-8. Memories of Childhood.		
✓ The Cutting of My Long Hair.		
✓ We Too Are Human Beings.	Total	80
• First Term Syllabus		

Marks Distribution

Section	Competencies	Total Marks
Reading Skills	Conceptual understanding, decoding, Analyzing, inferring, interpreting, appreciating, literacy, conventions and vocabulary, summarizing and using appropriate format/s.	20
Creative Writing Skills	Conceptual understanding, application of rules, Analysis Reasoning, appropriacy of style and tone, using appropriate format and fluency, inference, analysis, evaluation and creativity.	20
Literature Text Books and Supplementary Reading Texts	Recalling, reasoning, critical thinking, appreciating literacy convention, inference, analysis, creativity with fluency.	40
	Total	80
	Assessment of Listening and Speaking Skills	10

	Internal Assessment <ul style="list-style-type: none"> • Listening • Speaking • Project Work 	5 5 10
	Grand Total	100

Month wise Syllabus

Month	Chapter's Name
April	<u>Reading Comprehension:</u>
	Unseen Passage (Factual, Descriptive or Literary)
	<u>Writing Skills:</u> Notice Writing
	<u>Literature (Flamingo)</u>
	Ch-1. The Last Lesson
	Ch-2. Lost Spring
	Ch-3. Deep Water
	<u>Poetry:</u> My Mother at Sixty- Six
May	<u>Reading Comprehension:</u>
	Case Based Passage (with verbal/ visual input)
	<u>Writing Skills:</u> Notice Writing/ Letter Writing (Application for Job with bio data/ resume)
	<u>Literature (Flamingo)</u>
	Ch-4. The Rattrap
	Poetry- Keeping Quiet
	<u>Vistas</u>
	Ch-1. The Third Level Ch-2. The Tiger King
June	<u>Vacations</u>
July	Reading- Factual Passages
	<u>Writing Task:</u>
	Formal/ Informal invitation and Replies
	Article Writing (Analytical/ Descriptive)
	<u>Literature (Flamingo)</u>
	Ch-5. Indigo
	Poetry- A Thing of Beauty
	<u>Vistas</u>
Ch-3. Journey to the End of the Earth	

Month	Chapter's Name
August	Reading Skills- Factual and Unseen Passages
	<u>Writing Task:</u>
	Letter Writing (Letters to the Editor), Report Writing
	<u>Literature (Flamingo)</u>
	Ch-6. Poets and Pancakes
	Poetry. A Roadside's Stand
	<u>Revision.</u> (According to the Schedule)
	<u>Vistas</u>
Ch-4. The Enemy	
September	Revision + First Term Examination
October	Reading Skills- Descriptive and Literary passages
	<u>Writing Task:</u>
	Report Writing, Notice Writing (Descriptive and Analytical)
	<u>Literature (Flamingo)</u>
	Ch-7. The Interview (Prose)
	Poetry- Aunt Jennifer's Tigers
	<u>Vistas</u>
	Ch-6. On the Face of It
November	<u>Reading Skills- Practice of Case Based Factual Passages</u>
	<u>Writing Task:</u>
	Practice of Invitation and their replies (Formal/ Informal)
	<u>Literature (Flamingo)</u>
	Ch-8. Going Places
	Revision of Poems (Poetic devices/ poetry based extracts etc.)
	<u>Vistas</u>
	Ch-8. Memories of Childhood.
	* The Cutting of My Long Hair.
	* We Too Are Human Beings.
December	Revision + Second Term Exam
January	Revision + Pre board - 1 + Final Practicals
February	Revision + Pre Board – 2 + Final Practicals
March	Final Board Examination

MATHS SYLLABUS (2023-2024): CLASS- XII

❖ PERIODIC TEST -1		
➤ Chapters	Blue Print PT-1	Marks
✓ Ch-2: Inverse Trigonometric Functions	MCQ & Assertion Reason (1x11)	11
✓ Ch-3: Matrices	Very Short Questions (2x3)	06
✓ Ch-4: Determinants	Short Questions (3x3)	09
✓ Ch-5: Continuity & Differentiability	Long Questions (5x2)	10
	Cased based Questions (4x1)	04
	Total	40
❖ SEA -1		
MCQs (Pen Paper Test) + Assertion Reason + Case Study	Blue Print SEA-1	Marks
VIVA Voce	MCQs	15
	Assertion Reason	
➤ Activities	Case Study	
By Paper folding, make a box open at the top (Surface area, volume of the box)	VIVA Voce	05
	Total	20
❖ First Term Exam		
	Blue Print First Term	Marks
✓ Ch-2 Inverse Trigonometric Functions	MCQ & Assertion Reason (1x20)	20
✓ Ch-3 Matrices	Very Short Questions (2x5)	10
✓ Ch-4 Determinants	Short Questions (3x6)	18
✓ Ch-5 Continuity & Differentiability	Long Questions (5x4)	20
✓ Ch-6 Applications of Derivatives	Cased based Questions (4x3)	12
✓ Ch-7 Integration		
✓ Ch-8 Application of Integration		
✓ Ch-9 Differential Equation		
✓ Ch-10 Vectors		
✓ Ch-12 Linear Programming	Total	80
❖ SEA -II		
MCQs (Pen Paper Test) + Assertion Reason + Case Study	Blue Print SEA-1	Marks
VIVA Voce	MCQs	15
	Assertion Reason	
	Case Study	
➤ Activities	VIVA Voce	05
Graph Activity (Ch-12 Linear Programming)		
	Total	20

❖ Second Term Exam		
➤ Chapters	Blue Print Second Term	Marks
✓ Ch-1 Relation & Functions	MCQ & Assertion Reason (1x20)	20
✓ Ch-2 Inverse Trigonometric Functions	Very Short Questions (2x5)	10
✓ Ch-3 Matrices	Short Questions (3x6)	18
✓ Ch-4 Determinants	Long Questions (5x4)	20
✓ Ch-5 Continuity & Differentiability	Cased based Questions (4x3)	12
✓ Ch-6 Applications of Derivatives		
✓ Ch-7 Integration		
✓ Ch-8 Application of Integration		
✓ Ch-9 Differential Equation		
✓ Ch-10 Vectors	Total	80
✓ Ch-11 Three Dimensional Geometry		
✓ Ch-12 Linear Programming		
✓ Ch-13 Probability		
❖ Pre Board 1 & 2- Full Syllabus		
○ Blue Print will be same as given in Second Term		

Marks Distribution

Unit	<u>Chapter Name</u>	<u>Marks</u>
Unit- 1	<u>Relation and Functions</u>	08
	Ch.1 Relationship and functions.	
	Ch.2. Inverse trigonometric functions.	
Unit- 2	<u>Algebra</u>	10
	Ch.3 Matrices	
	Ch.4 Determinants	
Unit- 3	<u>Calculus</u>	35
	Ch.5 Continuity and differentiability	
	Ch.6 Applications of derivatives.	
	Ch. 7 Integration.	
	Ch.8 Application of integration.	
	Ch. 9 differential equations	
Unit- 4	<u>Vectors and Three Dimensional Geometry</u>	14
	Ch. 10. Vectors.	
	Ch.11. Three dimensional geometry	
Unit- 5	<u>Linear programming</u>	5
	Ch.12 Linear programming.	
Unit- 6	<u>Probability</u>	8
	Ch.13.Probability	
	Total	80

Month wise Syllabus

Month	Chapter's Name
April	Ch-2. Inverse Trigonometric Functions
	Ch-3. Matrics
	Ch-4. Determinants
	Ch-5. Derivatives
May	Ch-10. Vectors
	Ch-12. Linear Programming
June	Ch-6. Application of Derivatives
	_____Vacations_____
July	Ch-7. Integration
	Ch-8. Application of Integration
August	Ch-9. Differential Equations
	Revision for 1st Term
September	First Term Examination
October	Ch-11. Three Dimensional Geometry
	Ch-1. Relation & Functions
November	Ch-13. Probability
December	Revision + Second Term Exam
January	Revision + Pre board - 1 + Final Practicals
February	Revision + Pre Board – 2 + Final Practicals
March	Final Board Examination

BIOLOGY SYLLABUS (2023-2024): CLASS- XII

❖ PERIODIC TEST -1			
➤ Unit -VI: Reproduction	Blue Print	PT-1	Marks
✓ Ch-1: Sexual reproduction in flowering plants	MCQs	(1 x 7)	7
✓ Ch-2: Human reproduction	Assertion Reason type Questions	(1 x 2)	2
✓ Ch-3: Reproductive Health	Short Answer Questions Type 1	(2 x 4)	8
	Short Answer Questions Type 2	(3 x 3)	9
	Case Study	(4 x 1)	4
	Long Questions	(5 x 2)	10
	Total		40
➤ Practical	Blue Print		Marks
• One major Experiment	One major Experiment		5
• One Minor Experiment	One Minor Experiment		4
• Slide Preparation	Slide Preparation		5
• Spotting	Spotting		7
• Practical Record	Practical Record		4
• VIVA (Ch-1, 2, 4)	VIVA (Ch-1, 2, 4)		5
	Total		30
❖ First Term Exam			
➤ Unit -VI: Reproduction	Blue Print	First Term	Marks
✓ Ch-1: Sexual reproduction in flowering plants	MCQs	(1 x 12)	12
✓ Ch-2: Human reproduction	Assertion Reason Questions	(1 x 4)	4
✓ Ch-3: Reproductive Health	Short Answer Questions Type- 1	(2 x 5)	10
	Short Answer Questions Type- 2	(3 x 7)	21
➤ Unit -VII: Genetics and Evolution	Case Study	(4 x 2)	8
✓ Ch 4 Principles of Inheritance and Variation	Long Answer Questions	(5 x 3)	15
✓ Ch 5 Molecular basis of Inheritance	Total		70
✓ Ch 6 Evolution			

❖ Second Term Exam			
➤ Unit -VII	Blue Print	Second Term	Marks
✓ Ch-4, 5, 6	MCQs	(1 x 12)	12
➤ Unit -VIII	Assertion Reason type Questions (1 x 4)		4
✓ Ch-7,8	Short Answer Questions Type- 1 (2 x 5)		10
➤ Unit -IX	Short Answer Questions Type- 2 (3 x 7)		21
✓ Ch-9,10	Case Study (4 x 2)		8
➤ Unit -X	Long Answer Questions (5 x 3)		15
✓ Ch-11, 12, 13	Total		70
➤ Practical	Blue Print		Marks
• One major Experiment	One major Experiment		5
• One Minor Experiment	One Minor Experiment		4
• Slide Preparation	Slide Preparation		5
• Spotting	Spotting		7
• Practical Record + VIVA	Practical Record + VIVA		4
• Project Record + VIVA	Project Record + VIVA		5
	Total		30
❖ Pre Board 1 & 2 – Full Syllabus			
○ Blue Print will be same as same in Second Term Exam			

Marks Distribution

Unit	Chapter Name	Marks
VI	Reproduction <ul style="list-style-type: none"> ✓ Ch-1: Sexual reproduction in flowering plants ✓ Ch-2: Human reproduction ✓ Ch-3: Reproductive Health 	16
VII	Genetics and Evolution <ul style="list-style-type: none"> ✓ Ch 4 Principles of Inheritance and Variation ✓ Ch 5 Molecular basis of Inheritance ✓ Ch 6 Evolution 	20
VIII	Biology and human welfare <ul style="list-style-type: none"> ✓ Ch 7 Human health and diseases ✓ Ch 8 Microbes in human welfare 	12
IX	Biotechnology and its Applications <ul style="list-style-type: none"> ✓ Ch 9 Biotechnology - Principles and processes ✓ Ch 10 Biotechnology and its applications 	12
X	Ecology and Environment <ul style="list-style-type: none"> ✓ Ch 11 organisms and populations ✓ Ch 12 Ecosystem 	10

	✓ Ch 13 Biodiversity and its Conservation	
	Total	70

Month wise Syllabus

Month	Chapter's Name
April	Ch 1 Sexual reproduction in flowering plants
	Ch 2 Human reproduction (Half)
May	Ch 2 Human reproduction (full)
	Ch 3 Reproductive health
	Ch 4 Principles of Inheritance and Variation (Half)
	Periodic Test
June	_____Vacations_____
July	Ch 4 Principles of Inheritance and Variation (full)
	Ch 5 Molecular basis of Inheritance (Half)
August	Ch 5 Molecular basis of Inheritance (full)
	Ch 6 Evolution
September	First Term Examination
October	Ch 7 Human health and diseases
	Ch 8 Microbes in human welfare
	Ch 9 Biotechnology - Principles and processes
	Ch 10 Biotechnology and its applications
November	Ch 11 organisms and populations
	Ch 12 Ecosystem
	Ch 13 Biodiversity and its Conservation
December	Revision + Second Term Exam
January	Revision + Pre board - 1 + Final Practicals
February	Revision + Pre Board – 2 + Final Practicals

Practicals:-

A. List of Experiments

1. Prepare a temporary mount to observe pollen germination.
2. Study the plant population density by quadrat method.
3. Study the plant population frequency by quadrat method.
4. Prepare a temporary mount of onion root tip to study mitosis.
5. Isolate DNA from available plant material such as spinach, green pea seeds, papaya, etc.

B. Study and observe the following (Spotting):

1. Flowers adapted to pollination by different agencies (wind, insects, birds).
2. Pollen germination on stigma through a permanent slide or scanning electron micrograph.
3. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper/mice).
4. Meiosis in onion bud cell or grasshopper testis through permanent slides.
5. T.S. of blastula through permanent slides (Mammalian).
6. Mendelian inheritance using seeds of different colours/sizes of any plant.
7. Prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness.
8. Controlled pollination - emasculation, tagging and bagging.
9. Common disease causing organisms like Ascaris, Entamoeba, Plasmodium, any fungus causing ringworm through permanent slides, models or virtual images or specimens.
Comment on symptoms of diseases that they cause.
10. Models specimen showing symbiotic association in root nodules of leguminous plants, Cuscuta on host, lichens.
11. Flash cards models showing examples of homologous and analogous organs.

BOOK REFERENCES

NCERT BOOK

PRADEEP'S BIOLOGY

MUSIC SYLLABUS (2023-2024): CLASS- XII

❖ PERIODIC TEST -1 (PT)			
	Blue Print	First Term	Marks
✓ Definitions - Alaap, taan, Gram , moorchhna , kann			
✓ Taal jhap	Section A MCQ's	(1x8)	08
✓ Raag- Bhairav - description and chhota khayal	Section B	(2x5)	10
❖ First Term Exam	Section C	(2x6)	12
✓ Definitions - Alaap, taan, gram, moorchhna, kann, meend			
✓ Taal - Dhamaar	Total		30
✓ Sangeet ratnakar			
✓ Character sketch- Ustad faiyaz khan			
✓ Raag Bhairav and malkons - Description and chhota khayal			
SECOND Term Exam			Marks
	Blue Print	Second Term	
	Section A MCQ's	(1x8)	08
✓ Definitions - Khatka , kurki, gamak , alaap , taan	Section B	(2x5)	10
✓ Sangeet parijat	Section C	(2x6)	12
✓ Time Theory of Ragas			
✓ PT krishn Rao shankar and Bade Ghulam Ali Khan	Total		30
✓ Raag bageshri			
✓ Taal roopak , jhap and dhamar			
✓ Dhamar in raag malkons			
❖ Pre Board 1 & 2- Full Syllabus			
○ Blue print will be same as given in Second Term			
❖ PRACTICALS			
✓ Raag Bhairav and malkons			
✓ Dhamar taal			
✓ Patriotic or devotional song			

Month wise Syllabus

Month	Chapter's Name
April - May	<u>Definitions</u>
	Alankar Alaap Taan
	Gamak Gram Moorchhna
	Character sketch- Ustad Faiyaz Khan
	Practical -Raag Bhairav (Description and Notation of Chota Khayal)

June	<u> </u> Vacations <u> </u>
July- August	<u>Definitions</u>
	Khatka Murki Kan Meend
	Sangeet Ratnakar
	Time Theory of Ragas
	Practical - Dhamar Taal Raag Malkons (Description and Notation of Chota Khayal)
September- October	Sangeet Parijaat
	Time theory of ragas
	Character sketch- Pt Krishna Rao Shankar
	Practical - Dhamar in Raag malkons
November	character sketch- Bade Ghulam Ali
	Taanpura
December	Practical – Raag Bageshri (Description and Notation of Chhota Khayal and Bada Khayal)
	TARANA in any Raag
	Revision + Second Term Exam
January	Revision + Pre Board 1 + Final Practicals
February	Revision + Pre Board 2 + Final Practicals
March	Final Board Examination

PHYSICAL EDUCATION SYLLABUS (2023-2024): CLASS- XII

❖ PERIODIC TEST -1 (PT)			
➤ Chapters	Blue Print	PT-1	Marks
✓ Management of Sporting Events.	MCQ	(1 X 7)	6
✓ Yoga as a Preventive Measure for Lifestyles Disease	Very Short Question (2 x 3)		6
✓ Test and Measurement in Sports	Short Question	(3 x 3)	9
	Case Study	(4x 2)	8
	Long Questions	(5 x 2)	10
	Total		40
	Blue Print		Marks
➤ Practical Work	Physical Fitness Test (Sai Khelo India Test, BPET)		6
	Skill of any one recognised game of choice		7
	Yoga Practices		7
	VIVA Voce		5
	Record File		5
	Total		30
❖ First Term Exam			
➤ Chapters	Blue Print	First Term	Marks
✓ Management of Sporting Events.	MCQ	(1 X 18)	18
✓ Children and women in sports	Very Short Question (2 x 5)		10
✓ Yoga	Short Question	(3 x 5)	15
✓ Physical Education and Sports for CWSN	Case Study	(4x 3)	12
✓ Test and Measurement in Sports	Long Questions	(5 x 3)	15
	Total		70
❖ Second Term Exam			
➤ Chapters	Blue Print	Second Term	Marks
✓ Management of Sporting Events.	MCQ	(1 X 18)	18
✓ Children and women in sports	Very Short Question (2 x 5)		10
✓ Yoga	Short Question	(3 x 5)	15
✓ Physical Education and Sports for CWSN	Case Study	(4x 3)	12
✓ Sports and Nutrition	Long Questions	(5 x 3)	15
✓ Test and Measurement in Sports			
✓ Physiology and Injuries in Sports			
✓ Biomechanics and Sports			
✓ Psychology and Sports			
✓ Training in Sports	Total		70
Pre Board 1 & 2 (Full Syllabus)			

Marks Distribution

UNIT NO.	UNIT NAME	Marks
1	Management of Sporting Events.	9
2	Children and Women in Sports	7
3	Yoga as a Preventive Measure for Lifestyles Disease	7
4	Physical Education and Sports for CWSN	8
5	Sports and Nutrition.	7
6	Test and Measurement in Sports.	8
7	Physiology and Injuries in Sports.	8
8	Biomechanics and Sports	10
9	Psychology and Sports	7
10	Training in Sports	9
	PRACTICAL	30
	TOTAL	100

Month wise Syllabus

Month	Chapter Name
April	Ch-3 Yoga as a preventive measure for lifestyle disease. Ch-6 Test and Measurement in Sports.
May	Ch-1 Management of sporting events. Ch-2 Children and women in sports.
June	Holidays
July	Ch-4 Physical Education and Sports for CWSN. + Revision
August	Ch-5 Sports and Nutrition. Ch-7 Physiology and Injuries in sports. + Revision
September	1st Term Examination
October	Ch-8 Biomechanics and Sports. Ch-9 Psychology and Sports.
November	Ch-10 Training in Sports. + Revision
December	Revision + Second Term
January	Revision + Pre Board 1 + Final Practicals
February	Revision + Pre Board 2 + Final Practicals
March	Final Term Exam

INFORMATION TECHNOLOGY SYLLABUS (2023-2024): CLASS- XII

❖ PERIODIC TEST -1 (PT)		
➤ Part A:	Blue Print	PT-1
✓ Unit 3: ICT Skill-IV	Objective type Questions (1x14)	Marks 14
➤ Part B:	Short Question	(2 x 6) 12
✓ Unit 1: Database Concepts	Short Question	(3 x 2) 6
	Long Questions	(4 x 2) 8
	Total	40
➤ Practical Work		
✓ SQL Commands	Practical Work	20
✓ Basic Java Programming	Practical File	10
	VIVA Voce	5
	Total	40
❖ First Term Exam		
➤ Part A:	Blue Print	First Term
✓ Unit 1: Communication Skills-IV	Objective type Questions (1x30)	Marks 30
✓ Unit 3: ICT Skills-IV	Short Question	(2 x 6) 12
➤ Part B:	Short Question	(3 x 2) 6
✓ Unit -1 : Database Concepts	Long Questions	(4 x 3) 12
✓ Unit-3: JAVA - Fundamentals of Java programming		
	Total	60
❖ Second Term Exam		
✓ Part A:	Blue Print	Second Term
✓ Unit 2: Self-Management Skills-IV	Objective type Questions (1x30)	Marks 30
✓ Unit 4: Entrepreneurial Skills-IV	Short Question	(2 x 6) 12
✓ Unit 5: Green Skills-IV	Short Question	(3 x 2) 6
	Long Questions	(4 x 3) 12
✓ Part B:	Total	60
✓ Unit -2 : Operating Web Based Applications		
✓ JAVA - Fundamentals of Java programming		
✓ Unit-4: Work Integrated Learning IT		
Preboard-1 (Full Syllabus)		
Preboard-2 (Full Syllabus)		
Final Board: Practicals		

Marks Distribution

Total Marks: 100 (Theory: 60 + Practical: 40)

Part-A	MARKS
Unit 1 : Communication Skills- IV	2
Unit 2 : Self-Management Skills- IV	3
Unit 3 : ICT Skills- IV	1
Unit 4 : Entrepreneurial Skills- IV	3
Unit 5 : Green Skills- IV	1
Total	10
Part B	
Unit -1 : Database Concepts – RDBMS Tool	15
Unit -2 : Operating Web Based Applications	10
Unit-3: JAVA - Fundamentals of Java programming, Introduction to Java, Object Oriented Programming, Java Language Elements, Operators, Control Flow, Array, Class Design, Exception Handling, Assertions, Threads, Wrapper Classes, String Manipulation.	20
Unit-4: Work Integrated Learning IT – DMA	5
Total	50
Part-C	
Practical Work	35
Part-D	
Project Work	5
GRAND TOTAL	100

Month wise Syllabus

Month	Content
April	Part-A Unit-3 ICT Skills-IV Part-B Unit-1 DATABASE CONCEPTS – RDBMS TOOL <ul style="list-style-type: none">• Creating and populating tables.
May	Part-B Unit-1 DATABASE CONCEPTS – RDBMS TOOL <ul style="list-style-type: none">• Modifying the content and structure of table.• Ordering and Grouping.• Operating with multiple tables.
June	Summer Vacations
July	Part- B Unit-3 Fundamentals of Java Programming <ul style="list-style-type: none">• Introduction to Java,• Object Oriented Programming,• Java Language Elements,• Operators, Control Flow

Month	Content
August	<p>Unit-3 Fundamentals of Java Programming (Contd..)</p> <ul style="list-style-type: none"> • Array, • Class Design, • Exception Handling, • Assertions, • Threads • Wrapper Classes, • String Manipulation <p>Part -A Unit 1 : Communication Skills- IV</p>
September- First Term Examination	
October	<p>Part – B Unit-2 Operating Web Based Applications</p> <ul style="list-style-type: none"> • Online Reservation Systems. • E-Governance. • Online Shopping and Bill payments. • Online Tutorials and Tests. • Project Management – Web Based Application development. <p>Project essentials and tips.</p> <ul style="list-style-type: none"> • Case Study - Online Game. • Case Study - Online Quiz. • Case Study – Online Bill Calculator. <p>Part -A Unit 2 : Self-Management Skills- IV</p>
November	<p>Unit-4 Work Integrated Learning IT – DMA</p> <ul style="list-style-type: none"> • Identification of Work Areas. • Work Experience. <p>Part -A Unit 4 : Entrepreneurial Skills- IV Unit 5 : Green Skills- IV</p>
December	Revision of Part B + Second Term Examination
January	Revision of Part A + Pre Board- 1 + Final Practical
February	Revision + Pre Board 2 + Final Practical
March- Final Term Examination	

ARTIFICIAL INTELLIGENCE SYLLABUS (2023-2024): CLASS- XII

❖ PERIODIC TEST -1 (PT)			
➤ Part B: Subject Specific Skills-THEORY	Blue Print	PT-1	Marks
✓ Unit 1: Capstone Project	Objective type Questions (1 X 14)		14
	Short Question	(2 x 7)	14
	Long Questions	(4 x 3)	12
	Total		40
	Blue Print	Practical Exam	Marks
➤ Project Work	VIVA Voce		20
	Project File		30
	Total		50
❖ First Term Exam			
➤ Part A: Employability Skills	Blue Print	First Term	Marks
✓ Unit 1: Communication Skills-IV			
✓ Unit 3: ICT Skills-IV	Objective type Questions (1 X 24)		24
➤ Part B: Subject Specific Skills-THEORY	Short Question	(2 x 7)	14
✓ Unit 1: Capstone Project	Long Questions	(4 x 3)	12
✓ Unit 2: Model Lifecycle			
✓ Unit 3: Story- telling Through Data			
	Total		50
❖ Second Term Exam			
✓ Part A: Employability Skills	Blue Print	Second Term	Marks
✓ Unit 2: Self-Management Skills-IV	Objective type Questions (1 X 24)		24
✓ Unit 4: Entrepreneurial Skills-IV	Short Question	(2 x 7)	14
✓ Unit 5: Green Skills-IV	Long Questions	(4 x 3)	12
✓ Part B: Subject Specific Skills-THEORY	Total		50
✓ Unit 1: Capstone Project			
✓ Unit 2: Model Lifecycle			
✓ Unit 3: Story- telling Through Data			
Preboard-1 (Full Syllabus)			
Preboard-2 (Full Syllabus)			
Final Board Practicals			

Marks Distribution

Total Marks:100 (Theory: 50 + Practical: 50)

Part-A (Employability Skills)	MAX. MARKS
Unit 1: Communication Skills-IV	2
Unit 2: Self-Management Skills-IV	2
Unit 3: ICT Skills-IV	2
Unit 4: Entrepreneurial Skills-IV	2
Unit 5: Green Skills-IV	2
Total	10
Part-B (Subject Specific Skills-THEORY)	
Unit 1: Capstone Project	10
Unit 2: Model Lifecycle	10
Unit 3: Storytelling Through Data	20
Total	40
Part-C (Student Capstone Project -PRACTICAL)	
Student AI project Development & Presentation (Team work): Submission of Project Logbook and Video presentation	50
Total	50
GRAND TOTAL	100

Month wise Syllabus

Month	Content
April	<p>Part-A Unit-1 ICT Skills-IV</p> <p>Part-B Unit 1: Capstone Project</p> <ul style="list-style-type: none"> • Understanding the problem • Decomposing the problem through DT framework
May	<p>Unit 1: Capstone Project(Contd..)</p> <ul style="list-style-type: none"> • Analytic Approach • Data Requirements • Data Collection • Modelling approach • How to validate model quality <ul style="list-style-type: none"> ➤ By test-train split ➤ Introduce concept of cross validation <p>Metrics of model quality by simple Maths and examples from small datasets – scaled up to capstone project (Apply)</p> <ul style="list-style-type: none"> ➤ RMSE- Root Mean Squared Error ➤ MSE – Mean Squared Error

June	Summer Vacations
July	<p>Unit 1: Capstone Project(Contd..)</p> <ul style="list-style-type: none"> ➤ MAPE – Mean Absolute Percent Error • Introduction to commonly used algorithms and the science behind them • Showcase through a compelling story <p>Unit 2: Model lifecycle</p> <ul style="list-style-type: none"> • Different aspects of Model <ul style="list-style-type: none"> ➤ Train, test, validate, ➤ What are hyper parameters ➤ Commonly used platforms to build and run models (Introduction) ➤ Recommended tools ➤ Links to different platforms <ul style="list-style-type: none"> ▪ Watson • Lifecycle of an AI model <ul style="list-style-type: none"> ➤ Build Deploy Retrain
August	<p>Unit 3: Story- telling through data</p> <ul style="list-style-type: none"> • The Need for Storytelling <ul style="list-style-type: none"> ➤ Information processing and recalling stories ➤ Why is storytelling important? ➤ Structure that story! • How to create stories? <ul style="list-style-type: none"> ➤ Begin with a pen-paper approach ➤ Dig deeper to identify the sole purpose of your story ➤ Use powerful headings ➤ Design a Road-Map ➤ Conclude with brevity • Ethics of storytelling • Types of Data and Suitable Charts <ul style="list-style-type: none"> ➤ Text [Word clouds] ➤ Mixed [Facet Grids] ➤ Numeric [Line Charts/ Bar Charts] ➤ Stocks [Candlestick Charts] ➤ Geographic [Maps] <p>Project Work</p>
September- First Term Examination	
October	<p>Unit 3: Story- telling through data (contd..)</p> <ul style="list-style-type: none"> ➤ Data Exploration Feature Visualizing ➤ Model Creation Model Comparisons <p>Part -A Unit 1 : Communication Skills- IV</p> <p>Project Work</p>
November	<p>Part -A Unit 2 : Self-Management Skills- IV Unit 4 : Entrepreneurial Skills- IV Unit 5 : Green Skills- IV</p> <p>Project Work</p>
December	Revision of Part B + Second Term Examination
January	Revision of Part A + Pre Board- 1 + Final Practical
February	Revision + Pre Board 2 + Final Practical
March- Final Term Examination	