# Syllabus

## 2021 - 22

**CLASS - XII**

**DAV PUBLIC SCHOOLS**

### ODISHA ZONE-II

**Managed by : DAV College Managing Committee, New Delhi**

# FORWORD

A syllabus helps every teacher and student to know clearly the topics to be taught and the concepts to be learnt. And a Split-up of Syllabus helps everyone to plan ahead and to work systematically. This split up of syllabus is presented to all the stakeholders (students, teachers & parents) to help them to accomplish their goals. Each school is at the liberty to bring changes in it according to their requirement sticking to the suggested guidelines.

Hope this will help the teachers in designing and planning lessons for transacting syllabus and assessing students effectively during the current Academic Session.

# DAV PUBLIC SCHOOLS, ODISHA, ZONE-II
## SPLIT-UP O SYLLABUS 2021-22
### CLASS-XII, SUB-ENGLISH CORE (301)
**BOOKS PRESCRIBED: 1- Flamingo – English Reader (NCERT)**
**2- Vistas- Supplementary Reader (NCERT)**

| | MONTH | CHAPTERS/TOPICS TO BE TAUGHT | MARK DISTRIBUTION FOR HALF YEARLY, PRE- BOARD & BOARD EXAMINATION |
|---|---|---|---|
| UNIT TEST – I(May-June) ... UNIT TEST - II (July-August) | APRIL TO JULY | **Reading**<br>Unseen Passage for Comprehension<br>Note making & Summarizing<br>**Writing**<br>Notice, Advertisement, Report Writing<br>**Flamingo**<br>My Mother at Sixty-Six<br>The Last Lesson<br>Lost Spring<br>An Elementary School Classroom in a Slum<br>Deep Water<br>The Rattrap<br>**Vistas**<br>The Third Level<br>The Tiger King<br>The Journey to the End of the Earth<br>The Enemy<br>**Writing**<br>Poster Designing<br>**Literature**<br>**Flamingo**<br>Keeping Quiet<br>Poets and Pancakes<br>**WRITING**<br>Article Writing, Official Letters<br>**Literature**<br>**Flamingo**<br>Indigo<br>The Interview<br>A Thing of Beauty<br>A Roadside Stand | **PART – A 40 Marks**<br>Reading comprehension- 20 Marks<br>Literature – 20 Marks<br>**PART –B (Subjective Questions)- 40 Marks**<br>Writing skills – 16 Marks<br>Literature – 24 Marks<br>**Assessment of Speaking and Listening - 20 Marks**<br><br>## QUESTION PATTERN FOR HYL /PBs /BOARD<br>### PART A - 40 Marks<br>**Reading comprehension- 20 Marks**<br>1. Unseen passage [ MCQs] = 1x10= 10 Marks<br>2. Unseen passage [ MCQs] = 1x10= 10 Marks<br>**Literature- 20 Marks**<br>3. Two Prose Extracts [ MCQs] = 1x8= 8 Marks (Flamingo and Vistas)<br>4. One Poetry Extract [ MCQs] = 1x4= 4 Marks (Flamingo)<br>5. Text Based Questions [SA type] =1x8=8 Marks (Flamingo and Vistas)<br>### PART – B (Subjective Questions) - 40 Marks<br>**Writing Section – 16 Marks**<br>1. Short writing task- Notice / Adv.= 3x1= 3 Marks<br>2. Short writing task- Formal/ Informal Invitation and Reply = 3x1= 3 Marks<br>3. Letters – Application for a job/ Letter to editor = 5X1=5 Marks<br>4. Article / Report writing = 5x1 = 5 Marks<br>**Literature Section – 24 Marks**<br>5. FIVE SA type questions from prose & poetry from the text book FLAMINGO = 2x5 = 10 Marks<br>6. TWO SA type questions from prose from the text book VISTAS = 2x2 = 4 Marks<br>7. ONE LA type questions from prose/ poetry from the text book FLAMINGO =5x1 = 5 Marks<br>8. ONE LA type questions from prose from the text book VISTAS =5x1 = 5 Marks |
| HALF YEARLY | AUG. | **Writing**<br>Letter to Editor, Speech Writing, Business Letters<br>**Literature**<br>**Flamingo**<br>Aunt Jennifer's Tigers<br>**Vistas**<br>Should Wizard Hit Mommy ? | |
| HALF YEARLY | SEPT. | **Reading**<br>Note making & Summarizing<br>**Writing**<br>Formal & Informal Invitation & Replies<br>**Flamingo**<br>Going Places<br>**Revision**<br>HALF YEARLY EXAMINATION | **Assessment of Speaking & Listening Skills:20 Marks**<br>1. **Speaking Skills**      **10 Marks**<br>2. **Listening Skills**      **10 Marks** |
| | OCT. | **Vistas**<br>On the Face of It<br>**Writing**<br>Job Application | |
| | NOV. | Revision of all Writing Skills<br>**Vistas**<br>Evans Tries An O-Level<br>Memories of Childhood | ❖ **The allotment of marks against Note-making will be notified later as per CBSE instructions**<br>❖ **Clarity on manner of inclusion of poster designing, speech/debate writing will be done as per CBSE guidelines** |
| | DEC. | **Revision &PRE-BOARD-I** | |
| | JAN. | **Revision &PRE-BOARD-II** | |
| | FEB | **REVISION** | |

| Section | Competencies | Total Marks | % Weightage |
|---|---|---|---|
| **Reading Comprehension** | Conceptual understanding, decoding, analysing, inferring, interpreting, appreciating, literary, conventions and vocabulary, summarizing and using appropriate format/s | 20 | 25% |
| **Writing Skill** | Reasoning, appropriacy of style and tone, using and tone, using appropriate format and fluency, inference, analysis, evaluation and creativity | 16 | 20% |
| **Literature Textbook and Supplementary Reading Text** | Recalling, reasoning, appreciating literary convention, inference, analysis, creativity with fluency | 44 | 55% |
| | **TOTAL** | **80** | 100% |
| **Assessment of Speaking and Listening Skills** | | 20 | |
| | **Grand Total** | **100** | |

# DAV PUBLIC SCHOOLS, ODISHA ZONE-II
# SPLIT-UP SYLLABUS 2021-22
### CLASS: XII
### SUB: Mathematics (041)

**BOOKS PRESCRIBED:** **1. MATHEMATICS: A TEXT BOOK FOR CLASS – XII (PART – I &II) (NCERT)**

**2. MATHEMATICS (EXEMPLAR PROBLEMS) (NCERT)**

**3 .MATHS LAB MANUAL (NCERT)**

| | MONTH | CHAPTERS/TOPICS TO BE TAUGHT | CHAPTER WISE WEIGHTAGE | |
|---|---|---|---|---|
| | | | Half Yearly | Pre Board/ Annual |
| **UNIT TEST – I** | APRIL | Ch – 1: Relation & Function | 07 | 08 |
| | | Ch – 2: Inverse Trigonometric Function. | 04 | |
| | | CH – 3 & 4: Matrix & Determinants | 13 | 10 |
| | JUNE | Ch – 5: Continuity & Differentiability | | 35 |
| **UNIT TEST – II** | JULY | Ch – 6: Applications of Derivatives | 19 | |
| | | Ch – 7: Integrals | | |
| | AUGUST | Ch – 8: Application of Integrals | 17 | |
| | | Ch – 9: Differential Equation | 07 | |
| | SEPTEMBER | Ch – 12: Liner Programming Problem | 05 | 05 |
| | | Ch – 13: Probability | 08 | 08 |
| | | **Revision for HALF YEARLY EXAMINATION** | **Total: 80** | |
| | OCTOBER | Ch – 10: Vectors | | 14 |
| | | Ch – 11: Three-Dimensional Geometry | | |
| | NOVEMBER | **Revision for PRE BOARD EXAMINATION** | | |
| | DECEMBER | PRE BOARD – I | | |
| | JANUARY | PRE BOARD – II | | |
| | | | | **Total: 80** |

| TYPE OF QUESTION(S) | MARK(S) PER QUESTION | TOTAL NO. OF QUESTIONS | TOTAL MARKS |
|---|---|---|---|
| **PART-A**<br>**SEC-I       VSA** | 1 | 16 | 16 |
| **SEC-II       CBS** | 4 (1X4=4) | 2 | 08 |
| **PART-B**<br>**SEC-III       SA** | 2 | 10 | 20 |
| **SEC-IV       LA-I** | 3 | 7 | 21 |
| **SEC-V       LA-II** | 5 | 3 | 15 |
| | **Total:** | **38** | **80** |

## BLUE PRINT OF QUESTION PAPER
## HALF-YEARLY   EXAMINATION (2021-22)

**CLASS-XII          SUB: MATHEMATICS                         M.M-80**

| SL.NO | TOPIC | 1Mark | 2Marks | 3Marks | 5Marks | TOTAL |
|---|---|---|---|---|---|---|
| 1 | **RELATIONS, FUNCTIONS** | 2 | 1 | 1 | | 07 |
| 2 | **INVERS TRIGNOMATRIC FUNCTION** | 1 | - | 1 | - | 04 |
| 3 | **MATRICES  AND  DETERMINANTS** | 3 | 1 | 1 | 1 | 13 |
| 4 | **CONTINUITY,DIFFERENTIABILITY** | 2 | 2 | 1 | - | 09 |
| 5 | **APPLICATION OF DERIVATIVES** | 1<br>CBQ<br>(1X4) | 1 | 1 | - | 10 |
| 6 | **INTEGRAL** | 2 | 2 | - | 1 | 11 |
| 7 | **APPLICATION OF INTEGRAL** | 1 | 1 | 1 | - | 06 |
| 8 | **DIFFERENTIAL EQUATIONS** | 2 | 1 | 1 | - | 07 |
| 9 | **LPP** | - | - | - | 1 | 05 |
| 10 | **PROBABILITY** | 2<br>CBQ<br>(1X4) | 1 | - | - | 08 |
| | **TOTAL** | **1X16=16**<br>**1X8=8** | **10X2=20** | **7X3=21** | **3X5=15** | **80** |

- There will be no overall choice in the question paper .However33% internal choice will be  given in all the sections.
- Blue Printof Question Papers for PRE-BOARD/ Annual Examination will be as per CBSE guidelines.

### WEIGHTAGE TO LEARNING OBJECTIVES

| S.NO | TYPOLOGY OF QUESTIONS | MARKS | WEIGHTAGE |
|---|---|---|---|
| 1. | Remembering  and   Understanding | 44 | 55% |
| 2 | Application | 20 | 25% |
| 3 | Analysing,creatingand evaluating | 15 | 20% |
| | Total : | 80 | 100% |

### ForInternalAssessment:20Marks

Throughout the year any ten activities shall be performed by the student from the activities given in the NCERT Laboratories Manual(XII)

### Weightage :

1.  Activities performed by the student throughout the year and recordkeeping– 5 marks
2. Assessment of the activities performed during year end test– 3 marks
3. Viva Voce-2marks
4. Pen &Paper test-10marks (Average of best two out of three)

# LEARNING OUTCOMES
## SUBJECT: MATHEMATICS (XII)

| SL.NO | CLASS | NAME OF THE TEXT BOOK | CHAPTER /LESSON | LEARNING OUTCOMES |
|---|---|---|---|---|
| 1 | XII | **MATHEMATICS TEXT BOOK FOR CLASS-XIIPART-I** | CH-1 – RELATION &FUNCTION | **The learners will be able to** <br> *Identify/ Classify** different types of relations and functions. <br> *Analyse**the conditions involved infinding composite functions and inverse of a function. <br> *Apply** the strategies required to check equivalence relation and to find the compositionof two functions and inverse of afunction. |
| 2 | XII | MATHEMATICS TEXT BOOK FOR CLASS- XII PART-I | CH-2 – INVERSE TROGONOMETRIC FUNCTION | **The learners will be able to** <br> *Derive** different properties of invers trigonometric functions. <br> *Apply** the properties of inverse trigonometric functions to solve the problems. <br> *Draw** the graphs of inverse trigonometric functions in Geo gebra and demonstrate theproperties. |
| 3 | XII | MATHEMATICS TEXT BOOK FOR CLASS- XII PART-I | CH-3 - MATRICES | **The learners will be able to** <br> *Identify/ Classify** different types of matrices. <br> *Add, Subtract, Multiply** matrices. <br> *Find** the transpose of a matrix. <br> *Demonstrate** the algebraic properties of matrix <br> *Apply** the properties of matrix algebra to solve problems. <br> *Apply** the elementary operations to find inverse of a matrix. |
| 4 | XII | MATHEMATICS TEXT BOOK FOR CLASS- XII PART-I | CH-DETERMINANTS | **The learners will be able to** <br> *Evaluate** determinants up to $3^{rd}$ order. <br> *Apply** Properties of determinants to evaluate determinants/ to prove identities or expression involving determinants. <br> *Find** the adjoint and inverse of a matrix. <br> *Analyse**theconditionsrequiredtofindinverseof a matrix and the properties of adjoint and inverse ofmatrices. <br> *Solve** the system of linear equations usingmatrix method. <br> *Use**matricestosolvereallifeproblems |
| 5 | XII | MATHEMATICS TEXT BOOK FOR CLASS- XII PART-I | CH-5 – CONTINUITY AND DIFFERENTIABILITY | **The learners will be able to** <br> *Discuss** continuity and differentiability of a function. <br> *Analyse**the relation between continuity and differentiability. <br> *Compute** differentiation of different functions. <br> *Solve** different problems based on differentiation. <br> *Verify** Rolle's theorem and Mean value problem for different functions in different intervals. |
| 6 | XII | MATHEMATICS TEXT BOOK FOR CLASS- XII PART-I | CH-6 – APPLICATION OF DERIVATIVES | **The learners will be able to** <br> *Apply** differentiation to **find** the rate of change. <br> *Check** increasing and decreasing function. <br> *Find** equation of tangents and normal to a curve and angle between two curves. <br> *Check** orthogonality of two curves. <br> *Approximate** functions. <br> *Demonstrate** the behaviour of a function using Geogebra. |

| | | | | |
|---|---|---|---|---|
| 7 | XII | MATHEMATIC S TEXT BOOK FOR CLASS- XII PART-II | CH-7 – INTEGRALS | **The learners will be able to** **\*Evaluate** indefinite integrals, definite integrals using limit of sum and definite integrals. **\*Apply** properties of definite integrals in evaluation **\*Use** integrals to solve area problems. |
| 8 | XII | MATHEMATIC S TEXT BOOK FOR CLASS- XII PART-II | CH-8 – APPLICATION OF INTEGRALS | **The learners will be able to** \*Area of simple curve \*Find the area under curve \* Find the between two curves |
| 9 | XII | MATHEMATIC S TEXT BOOK FOR CLASS- XII PART-II | CH-9 – DIFFERENTIAL EQUATION | **The learners will be able to** **\*Form** differential equations for a given family of curves. **\*Solve** differential equations of first order and first degree. **\*Apply** differential equations to solve real life problems. |
| 10 | XII | MATHEMATIC S TEXT BOOK FOR CLASS- XII PART-II | CH-10 – VECTOR ALGEBRA | **The learners** **\*Identify** different types of vectors. **\*Demonstrate** the ideas to be used in vector algebra (addition, subtraction, scalar multiplication and multiplication of vectors) **\*Establish** the properties of vector algebra and the ideas of direction cosines and direction ratios of a vector. **\*Demonstrate** the conditions of co-linearity of vectors, coplanarity of three vectors and coplanarity of four points.. |
| 11 | XII | MATHEMATIC S TEXT BOOK FOR CLASS- XII PART-II | CH-11 – THREE DIMENSIONAL GEOMETRY | **The learnerswill be able to** **\*Determine** direction cosines and direction ratios of a line. **\*Demonstrate** the relation between direction cosines and direction ratios of a line, conditions of co-linearity of three points and co-planarity of two lines. **\*Find** equation of a line and a plane in different conditions, angle between two lines, shortest distance between two lines. **\*Apply** the ideas of line and plane in 3D to solve variety of related problems. |
| 12 | XII | MATHEMATIC S TEXT BOOK FOR CLASS- XII PART-II | CH-12 – LINEAR PROGRAMMING | **The learners will be able to** \*Concept of Linear Programming \*Test of optimal \* Solve Linear Programming problems by graphical method |
| 13 | XII | MATHEMATIC S TEXT BOOK FOR CLASS- XII PART-II | CH-13 – PROBABILITY | **The learners will be able to** **\*Solve** problems on probability. **\*Analyse**a question on probability to decide the strategy to be used to solve the problem. **\*Find** mean variance and standard deviation of a probability distribution |

# DAV PUBLIC SCHOOLS, ODISHA,ZONE-II
## SPLIT-UP SYLLABUS (2021-22)
### CLASS: XII
### SUB: PHYSICS (042)

**BOOK PRESCRIBED:**
Text Book of Physics, NCERT, CLASS—XII (VOLUME – I&II)

| TEST/EXAM | MONTH | CHAPTER TO BE TAUGHT | H.Y. WEIGHTAGE | PRE-BOARD WEIGHTAGE |
|---|---|---|---|---|
| U.T.-I | APRIL | 1: Electric Charge | 20 | 16 |
| | | 2.Electrostatic Potential and Capacitance | | |
| | | 3: Current Electricity | | |
| | MAY & JUNE | 4: Moving Charges and Magnetism | 22 | 17 |
| | | 5: Magnetism and Matter | | |
| U.T.-II | JULY | 6: Electromagnetic Induction | | |
| | | 7: Alternating Current | | |
| | AUGUST | 8: Electromagnetic Waves | 22 | 18 |
| | | 9: Ray Optics and Optical Instruments | | |
| | | 10: Wave Optics | | |
| H.Y. | SEPTEMBER | 11: Dual Nature of Radiation and Matter | 06 | 04 |
| | | **REVISION FOR HALF YEARLY EXAM** | | |
| PB-I | OCTOBER | 12: Atoms | | 15 |
| | | 13: Nuclei | | |
| | | 14: Semiconductor and Electronics devices(partly) | | |
| | NOVEMBER | 14: Semiconductor and Electronics devices (remaining part) | | |
| | | **REVISION FOR IST PRE-BOARD EXAMINATION** | | |
| | DECEMBER | **REVISION FOR 2ND PRE-BOARD EXAMINATION** | | |
| PB-II | JANUARY | **REVISION FOR BOARD EXAMINATION** | | |
| TOTAL | | | **70** | **70** |

| TYPE OF QUESTIONS | MARK(S) PER QUESTION | TOTAL NO OF QUESTIONS | TOTAL MARKS |
|---|---|---|---|
| VSA I | 01 | 10 | 10 |
| VSA II (AR) | 01 | 04 | 04 |
| VSA III(Case study) | 04 | 02 | 08 |
| SA I | 02 | 09 | 18 |
| SA -II | 03 | 05 | 15 |
| LA | 05 | 03 | 15 |
| TOTAL | ----- | 33 | 70 |

**Note:** There is no overall choice in the paper. However, there will be internal choice for different sections, i.e. there is an internal choice in four questions of 1mark weightage, three questions of 2 marks weightage, two questions of 3 marks weightage and all the three questions of 5 marks weightage.

## PRACTICAL SYLLABUS

### PRACTICALS

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

♣Record of at least 12 Experiments [with 6 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 to be carried out by the students.

# Evaluation Scheme

**Time Allowed: Three hours**                                              **Max. Marks: 30**

| | |
|---|---|
| Two experiments one from each section | 7+7 Marks |
| Practical record [experiments and activities] | 5 Marks |
| One activity from any section | 3 Marks |
| Investigatory Project | 3 Marks |
| Viva on experiments, activities and project | 5 Marks |

**Total - 30 marks**

## SECTION A

| SI.NO. | MONTH | DETAILS OF THE EXPERIMENTS TO BE PERFORMED |
|---|---|---|
| 1 | April | To determine resistivity of two / three wires by plotting a graph for potential difference versus current. |
| 2 | April | To find resistance of a given wire / standard resistor using metre bridge. |
| 3 | April | To verify the laws of combination (series) of resistances using a metre bridge. **OR** To verify the laws of combination (parallel) of resistances using a metre bridge. |
| 4 | June | To compare the EMF of two given primary cells using potentiometer. |
| 5 | July | To determine the internal resistance of given primary cell using potentiometer. |
| 6 | July | To determine resistance of a galvanometer by half-deflection method and to find its figure of merit. |
| 7 | | To convert the given galvanometer (of known resistance and figure of merit) into a voltmeter of desired range and to verify the same. **OR** To convert the given galvanometer (of known resistance and figure of merit) into an ammeter of desired range and to verify the same. |
| 8 | | To find the frequency of AC mains with a sonometer. |

N.B: At least 6 experiments must be performed from this group. Any of experiment from Sl .No 1 to 6 can be replaced by Sl .No 7 to 8 depending on suitability of school

**Activities** *(For the purpose of demonstration only)*

1. To measure the resistance and impedance of an inductor with or without iron core.
2. To measure resistance, voltage (AC/DC), current (AC) and check continuity of a given circuit using multimeter.
3. To assemble a household circuit comprising three bulbs, three (on/off) switches, a fuse and a power source.
4. To assemble the components of a given electrical circuit.
5. To study the variation in potential drop with length of a wire for a steady current.
6. To draw the diagram of a given open circuit comprising at least a battery, resistor/rheostat, key, ammeter and voltmeter. Mark the components that are not connected in proper order and correct the circuit and also the circuit diagram.

**N.B: At least 3activities must be demonstrated from this group**

## SECTION-B

| SI.NO. | MONTH | DETAILS OF THE EXPERIMENTS TO BE PERFORMED |
|--------|-------|--------------------------------------------|
| 1 | July | To find the value of v for different values of u in case of a concave mirror and to find the focal length. |
| 2 | August | To find the focal length of a convex mirror, using a convex lens. |
| 3 | August | To find the focal length of a convex lens by plotting graphs between u and v or between 1/u and 1/v |
| 4 | August | To find the focal length of a concave lens, using a convex lens. |
| 5 | August | To determine angle of minimum deviation for a given prism by plotting a graph between angle of incidence and angle of deviation. |
| 6 | October | To determine refractive index of a glass slab using a travelling microscope. |
| 7 | October | To find refractive index of a liquid by using convex lens and plane mirror. |
| 8 | November | To draw the I-V characteristic curve for a p-n junction diode in forward bias and reverse bias. |
| 9 | | To draw the characteristic curve of a zener diode and to determine its reverse breaks down voltage. |

N.B: At least 6 experiments must be performed from this group. Any of experiment from Sl .No 1 to 6 can be replaced by Sl .No 8 or 9 depending on suitability of schoo

## SECTION B

1. To identify a diode, an LED, a resistor and a capacitor from a mixed collection of such items.

2. Use of multimeter to see the unidirectional flow of current in case of a diode and an LED and check whether a given electronic component (e.g., diode) is in working order.

3. To study effect of intensity of light (by varying distance of the source) on an LDR.

4. To observe refraction and lateral deviation of a beam of light incident obliquely on a glass slab.

5. To observe polarization of light using two Polaroids.

6. To observe diffraction of light due to a thin slit.

7. To study the nature and size of the image formed by a (i) convex lens, (ii) concave mirror, on a screen by using a candle and a screen (for different distances of the candle from the lens/mirror).

8. To obtain a lens combination with the specified focal length by using two lenses from the given set of lenses.

**N.B: At least 3activities must be demonstrated from this group**

# Suggested Investigatory Project

1. To study various factors on which the internal resistance/EMF of a cell depends.

2. To study the variations in current flowing in a circuit containing an LDR because of a variation in (a) the power of the incandescent lamp, used to 'illuminate' the LDR (keeping all the lamps at a fixed distance). (b) the distance of a incandescent lamp (of fixed power) used to 'illuminate' the LDR.

3. To find the refractive indices of (a) water (b) oil (transparent) using a plane mirror, an equi convex lens (made from a glass of known refractive index) and an adjustable object needle.

4. To design an appropriate logic gate combination for a given truth table.

5. To investigate the relation between the ratio of (i) output and input voltage and (ii) number of turns in the secondary coil and primary coil of a self-designed transformer.

6. To investigate the dependence of the angle of deviation on the angle of incidence using a hollow prism filled one by one, with different transparent fluids.

7. To estimate the charge induced on each one of the two identical styrofoam (or pith) balls suspended in a vertical plane by making use of Coulomb's law.

8. To study the factor on which the self-inductance of a coil depends by observing the effect of this coil, when put in series with a resistor/(bulb) in a circuit fed up by an A.C. source of adjustable frequency.

9. To study the earth's magnetic field using a tangent galvanometer.

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# LEARNING OUTCOMES

## SUBJECT: PHYSICS

| Sl.No | Class | Name of the Text Book | Chapter/ Lesson | Learning Outcomes |
|---|---|---|---|---|
| 1 | XII | NCERT- VOIUME-I | Chapter–1: Electric Charges and Fields | 1. Derives formulae ,equations, and laws, such as, torque on a dipole in uniform electric field,<br>2. Explain relationship between nature and matter on scientific basis, such as, force between charges ,electric field and potential<br>3. Find force on charges in an electric field. |
| 2 | XII | NCERT- VOIUME-I | Chapter–2: Electrostatic Potential and Capacitance | 1. Applies concepts of physics in daily life while decision-making and solving problems, such as, if a certain capacitance is required in a circuit across a certain potential difference then suggesting a possible arrangement using minimum number of capacitors of given capacity which can withstand a given potential difference.<br>2. Derive effective capacitance of combination of capacitors in series and in parallel, energy stored in a capacitor<br>3. Take initiate research on the possibility of static electricity charging electronic devices. |
| 3 | XII | NCERT- VOIUME-I | Chapter–3: Current Electricity | 1. Derive the expression of drift velocity for electron and its dependence on potential and field.<br>2. Resistance of a stranded resistance available in market and able to find its value by using colour code.<br>3. Explain why 12v battery used in a car is different from 12 volt 8 pencil battery of 1.5 volt connected in series,<br>4. Apply the principle of potentiometer and meter bridge in Laboratory to find resistivity and compare emf of cell and internal resistance of cell |
| 4 | XII | NCERT- VOIUME-I | Chapter–4: Moving Charges and Magnetism | 1. Explain the phenomenon like AURORA BOREALIS and AURORA AUSTRILIES that takes place due to charge particle coming from sun.<br>2. Able to convert A galvanometer to voltmeter and ammeter of desired range.<br>3 Interpret how a charge moves in presence of both electric and magnetic field<br>4. Derive formula of magnetic field of current caring wire of different shape like straight , circular, solenoid (straight and toroidal)<br>5. Explain why two current caring wire can attract each other hence define one ampere of current.<br>6 Analyse the orientation of current carrying loop in external magnetic field.<br>7. Find the magnetic moment of a smallest magnet. |

| 5 | XII | NCERT-VOIUME-I | Chapter 5: Magnetism and matter | 1. Explain why magnet has always two pole<br>2. Compare electromagnet with permanent magnet and their direction of magnetic field.<br>3. Can interpret the term magnetic intensity, magnetic induction, permeability and susptibility.<br>4. Differentiate between di, para , and ferromagnetic materials.<br>5. Able to find materials suitable transfer core and permanent magnet as on the basis of energy loss. |
|---|---|---|---|---|
| 6 | XII | NCERT-VOIUME-I | Chapter–6: Electromagnetic Induction | 1.Explain the Faradys law of electromagnetic induction and predict the direction of induced emf by using Lantz law.<br>2. Understand the principle of generating electricity in hydropower station /thermal power station and use it to construct a dynamo which can produce current in small scale.<br>3 Explain why a bulb glow slowly to take more time when a induction coil is connected across it in series<br>4 Able to glow a bulb from a distance without touching to the source on the basis of mutual induction. |
| 7 | XII | NCERT-VOIUME-I | Chapter–7: Alternating Current | 1 .Explain that net charge flow in one complete cycle of A C is zero and able to find the rms value of voltage or current.<br>2. Analyse the behaviour of inductor and capacitor in an AC which is different from resistor .<br>3. Understand the importance of Phase diagram in AC and using it able to explain the LR, RC, and LCR circuit.<br>4 .Explain the mechanism of signal receiving by TV, Radio or any other device having LCR circuit and hoe we are able to change channel by using remote control.<br>5 Understand the principle of Transformer and able to analyse the role of Transformer near our locality or some where else ,find lose of energy due to transportation of electrical energy |
| 8 | XII | NCERT-VOIUME-I | Chapter–8: Electromagnetic Waves | 1. Undestand the mechanism of production of Electro magnetic wave and application of it components .<br>2. Importance of E M W in our day today life for communication , water purifier, medical field etc.<br>3. Differentiate between current and displacement current. |
| 9 | XII | NCERT-VOIUME-II | Chapter–9: Ray Optics and Optical Instruments | 1. Derive relation for lens ,mirror . prism and their application in different situation.<br>2.Explain different phenomenon like formation of rain bow, mirage, sparkling of diamond.<br>3 Use the principle of refraction for making of telescope, microscope, optical fibre etc.<br>4. Explain the principle of dispersion, scattering and why sun appear red at morning and evening or why sky appear blue . |

| | | | | |
|---|---|---|---|---|
| 10 | XII | NCERT-VOIUME-II | Chapter–10: Wave Optics | 1.Understand the propagation of wave and formation of wave front by using Huygens principle . <br> 2 .Explain the necessary condition for interference and derive the relation for same,also explain why soap bubbles or oil layer appear colour when sun light falls on it. <br> 3. Understand the concept of diffraction and predict why sound can bend but light do not from one room to another. <br> 4. Know the phenomenon of polarization and its application on sun glasses |
| 11 | XII | NCERT-VOIUME-II | Chapter–11: Dual Nature of Radiation and Matter | 1. Explain the dual nature of radiation on the basis of Einstein photo electric effect. <br> 2 .Find the wave length associated with moving particle by Using De Broglie equation and its application in Electron microscope. <br> 3. Derive relation of wave length and energy of photons and elementary particles like electrons and protons. |
| 12 | XII | NCERT-VOIUME-II | Chapter–12: Atoms | 1 . Find velocity ,radius and energy of electron by using Bohr atomic models. <br> 2. Explain different spectra and predict the origin of component of radiation produced due to transition of electros in various orbit. <br> 3. Explain the spectra of sun rediation and composition of star on the badsis of spectra. |
| 13 | XII | NCERT-VOIUME-II | Chapter–13: Nuclei | 1. Acquire the fact about nuclear force ,its stability and their radioactivity nature which is used for betterment of humanity. <br> 2. Explain how energy is produced in sun ,nuclear reactor and develop curiosity to produce clear fuel in future. <br> 3.Know the properties of α,ßand γ radiation and their souce and use. |
| 14 | XII | NCERT-VOIUME-II | Chapter–14: Semiconductor Electronics: Materials, Devices and Simple Circuits | 1.Aquire the knowledge of behaviour of semiconductor which is different from conductor and use it in to develop new material by doping lower and higher valance materials for our suitability. <br> 2. Know the working of P-N junction diode and use it to make rectifier to convert AC to DC and different types of GATES. <br> 3. Acquire the knowledge of different type of diode and able make simple electronics circuits. |

# DAV PUBLIC SCHOOLS, ODISHA ZONE-II

## SPLIT-UP OF SYLLABUS 2021-22

**CLASS: XII**                                                  **SUB: Chemistry (043)**

### Text Book Prescribed: Text Book for class-XII Chemistry (Part-I, II)(NCERT)

| | MONTH | CHAPTER/TOPIC TO TAUGHT | CHAPTER WISE WEIGHTAGE | |
|---|---|---|---|---|
| | | | HALF YEARLY | PRE BOARD/ANNUAL |
| | APRIL | Unit-I: Solid State<br>Unit-II Solutions<br>Unit-III: Electrochemistry | 18 | Unit-I<br>Unit-II<br>Unit-III<br>Unit-IV<br>Unit-V<br><br>23 |
| UNIT TEST-I | MAY-JUNE | Unit-IV: Chemical Kinetics | 05 | |
| UNIT TEST-II | JULY | Unit-V: Surface Chemistry<br>Unit-X: Haloalkanes& Haloarenes<br>Unit-XI: Alcohols, Phenols &Ethers | 06<br>07<br><br>07 | |
| | AUGUST | Unit-XII: Aldehydes, Ketones& Carboxylic acid<br>Unit-XIII: Amines<br>Unit-XIV: Biomolecule | 08<br>06<br>05 | |
| | SEPT | Unit-XV: Polymers<br>Unit-VI :General principles & processes of isolation of elements | 04<br>04 | |
| | | **REVISION & HALF YEARLY EXAMINATION** | Total: 70 | Unit-VI<br>Unit-VII<br>Unit-VIII<br>Unit-IX<br><br>19 |
| | OCT | Unit-XVI: Chemistry in Everyday Life<br>Unit-VII: P-Block elements | | Unit-X<br>Unit-XI<br>Unit-XII<br>Unit-XIII<br>Unit-XIV<br>Unit-XV<br>Unit-XVI<br><br>28 |
| | NOV | Unit-VIII: d & f-Block elements<br>Unit-IX: Co-ordination compounds<br>REVISION FOR 1ST PRE BOARD EXAMINATION | | |
| | DEC | **REVISION &**<br><br>**1ST PRE-BOARD EXAMINATION** | | Total: 70 |
| | JAN | **REVISION &**<br><br>**2ND PRE BOARD EXAMINATION** | | |
| | FEB | **REVISION** | | |

## QUESTION PATTERN

| TYPE OF QUESTION(S) | MARK(S) PER QUESTION | TOTAL NO. OF QUESTIONS | TOTAL MARKS |
|---|---|---|---|
| Objective | 1 | 14 | 14 |
| Case based | 4 | 2 | 08 |
| SA-I | 2 | 9 | 18 |
| SA-II | 3 | 5 | 15 |
| LA | 5 | 3 | 15 |
| TOTAL | | 33 | 70 |

**NB:** No chapter wise weightage. There will be no overall choice in the question paper. However, 33% internal choices will be given .Question for Pre-Board/Annual Exam will be as per CBSE Guidelines.

## CHEMISTRY (PRACTICAL)

**MAX MARKS : 30**          **60 PERIODS**          **TIMES : 3 HOURS**

| SL,NO, | MONTH | DETAILS OF THE EXPERIMENTS TO BE PERFORMED |
|---|---|---|
| 1 | April-July | ❖ QUALITATIVE ANALYSIS:<br>Determination of one cation and one anion in the given salt.(Insoluble salt excluded) |
| 2 | Aug | ❖ Determination of concentration / molarity of $KMnO_4$ solution by titrating it against a standard solution of (a) oxalic acid<br> b) Ferrous ammonium sulphate<br>❖ Preparation of Inorganic Compounds<br>❖ Preparation of Organic Compounds |
| 3 | Sep. | ❖ Chromatography<br>❖ Surface Chemistry<br><br>HALF YEARLY EXAMINATION |
| 4 | Oct. | ❖ Test for the functional groups present in the organic compounds<br>❖ Characteristic tests of carbohydrates, fats and proteins in pure samples and their detection in given food stuffs. |
| 5 | Nov. | ❖ Chemical Kinetics<br>❖ Electrochemistry<br>❖ Thermochemistry |
| 6 | Dec. | 1ST PRE-BOARD EXAMINATION |
| 7 | JAN | 2ND PRE-BOARD EXAMINATION |

## EVALUATION SCHEME FOR PRACTICAL EXAMINATION

| SL NO, | EVALUATION SCHEME FOR PRACTICAL EXAMINATION | MARKS |
|---|---|---|
| 1 | Volumetric Analysis | 08 |
| 2 | Salt Analysis | 08 |
| 3 | Content Based Experiment | 06 |
| 4 | Project Work | 04 |
| 5 | Class record and viva | 04 |
| | Total: | 30 |

**N.B.:**Project : Scientific Investigation involving laboratory testing and collecting information from other sources. Any investigatory project, which involves about 10 periods of work, can be chosen with the approval of the teacher.

## BLUE PRINT FOR HALF YEARLY EXAMINATION QUESTION PAPER

| Unit No. | Unit | VSA (1 mark) | SA-I (2 marks) | SA-II (3marks) | LA (5marks) | Total |
|---|---|---|---|---|---|---|
| Unit I | Solid State | 1 | 1 | 1 | | |
| Unit II | Solutions | 1 | --- | --- | 1 | 18 |
| Unit III | Electrochemistry | 1 | --- | --- | 1 | |
| Unit IV | Chemical Kinetics | 5 | --- | --- | --- | 05 |
| Unit V | Surface Chemistry | 1 | 1 | 1 | | 06 |
| Unit X | Haloalkanes& Haloarenes | 2 | 1 | 1 | | 07 |
| Unit-XI | Alcohols, Phenols &Ethers | 4 | | 1 | | 07 |
| Unit-XII | Aldehydes, Ketones& Carboxylic acid | 1 | 1 | | 1 | 08 |
| Unit-XIII | Amines | 1 | 1 | 1 | | 06 |
| Unit-XIV | Biomolecule | 1 | 2 | | | 05 |
| Unit XV | Polymers | 2 | 1 | 1 | | 04 |
| Unit-VI | General principles & processes of isolation of elements | 2 | 1 | | | 04 |
| TOTAL | | 22x1 | 9x2 | 5x3 | 3x5 | 70(33) |

# LEARNING OUTCOMES

## SUBJECT: CHEMISTRY (XII)

| Sl.No | Class | Name of the Text Book | Chapter/ Lesson | Learning Outcomes |
|-------|-------|----------------------|-----------------|-------------------|
| 1 | XII | NCERT CHEMISTRY PART-I | **Solid State** | The learner will be able to:<br>• Describe importance of solid state in daily life<br>• Classifies crystalline solids on the basis of nature of binding force<br>• Distinguish between unit cells of different type of crystal lattice<br>• Calculate packing efficiency of different types of cubic unit cell<br>• Correlates density of substance with its unit cell<br>• Describe the imperfection in solids & their effects<br>• Identify nature of substancebased on magnetic properties |
| | XII | NCERT CHEMISTRY PART-I | **Solutions** | The learner will be able to:<br>• Define Mass Percentage, volume percentage, mass by volume percentage, ppm, mole fraction, molarity and molality of solution in different units and solve numericals based on it<br>• Correlate Henry's law and Raoult's law<br>• Compare between ideal and non ideal solution<br>• Demonstrate formula for all colligative properties,relative lowering of vapour pressure and solve numerical<br>• Solve numericals using Vant's Hoff factor and calculate degree of dissociation and association<br>• Compare isotonic, hypertonic,hypotonic Solutions and their importance |
| 3 | XII | NCERT CHEMISTRY PART-I | **Electrochemistry** | The learner will be able to :<br>• Compare between galvanic cell and electrolytic cell, know the role of salt bridge<br>• Represent cell, write half cell reactions and calculate emf of the cell ($E°$cell).<br>• Apply Nernst equation of calculating the emf of galvanic cell and |

| | | | | differentiate between emf of the cell and potential difference and describe standard potential of cell and working of standard hydrogen electrode. |
|---|---|---|---|---|
| | | | | • Explain the variation of conductivity and molar conductivity with concentration |
| | | | | • Define Kohlrausch law &apply it to calculate ^m of weak electrolyte |
| | | | | • Apply Faraday's law of electrolysis (First and second law)and to solve numericals based on themEnlist construction of dry cell,mercury cell(primary cell), secondary cell like nickel- cadmium cell,lead storage battery and fuel cell |
| | | | | • Apply knowledge on corrosion of metals in day to day life |
| 4 | XII | NCERT CHEMISTRY PART-I | **Chemical Kinetics** | The learner will be able to <br><br> • Define rate of reaction and compare between average & instantaneous reaction <br><br> • Know the rate of reaction in terms of disappearance of reactant & appearance of product <br><br> • Compare between simple and complex reaction,order and Molecularity of reaction <br><br> • Enlist the factors affecting the rate of reaction <br><br> • Demonstrate integrated rate equation for zero and first order reaction and solve numerical based on these & plot graph <br><br> • Enlist activation energy, collision theory, Arrhenius equation and apply it in numericals and plot graph |
| 5 | XII | NCERT CHEMISTRY PART-I | **Surface chemistry** | The learner will be able to : <br><br> • Compare between adsorption and absorption, physorption&chemisorptions <br><br> • Enlist factors affecting adsorption <br><br> • Explain Freundlich adsorption isotherm and derive it's expression &it's application <br><br> • Compare between homogeneous and heterogeneous catalyst, activity and selective of catalyst , shape selective catalysis,true Solutions,colloid and suspension <br><br> • Classify colloids on the basis of physical |

| | | | | states, interaction with dispersion medium and based on the types of particles |
|---|---|---|---|---|
| | | | | • Enlist preparation and properties of Colloids & emulsion |
| | | | | • Enlist the application of colloids in our everyday life |
| 6 | XII | NCERT CHEMISTRY PART-I | **General principles & processes of isolation of elements** | The learner will be able to : <br> • Compare between ores and minerals Enlist the method of concentration of ores <br> • Know the thermodynamic principle &ellingham diagram <br> • know the principles of extraction of Al,Cu,Zn&Fe <br> • Enlist the method of refining & write some metals refined under these methods apply knowledge on use ofalloys in our daily lif |
| 7 | XII | NCERT CHEMISTRY PART-I | **Some p block elements** | The learner will be able to : <br> • Enlist electronic configuration, oxidation state, atomic and ionic size, ionisation enthalpy, electronegativity, melting point and boiling point ,electron gain enthalpy in group15, 16,17,18   Know the various methods of  preparation and properties of different compounds <br> • Draw the structure of oxides ofoxoacids of  Nitrogen , phosphorous ,sulphur&chlorine <br> • Explain the anamolousbehaviour of Oxygen and Flourine <br> • Know about compounds of xenon & the uses of noble gas |
| 8 | XII | NCERT CHEMISTRY PART-I | **The d & f block elements** | The learner will be able to <br> • Write electronic configuration of d&fbolck elements <br> • Analyse the variation of atomic size,I.E, electrode potential, melting and boiling point,high enthalpy of atomisation, formation of coloured ions,paramagnetism,alloy &interistial compound ,complex formation , catalytic properties ,oxides and halides of transition metals <br> • Know the preparation , properties , structure and uses of pottasium dichromate , potassium permanganate |

| | | | | Compare the oxidation state, electronic configuration, chemical behaviour of lanthanoids and actinoids |
|---|---|---|---|---|
| 9 | XII | NCERT CHEMISTRY PART-I | **Co -Ordination compounds** | • The learner will be able to<br>• Enlist the postulates of Werner's coordination theory<br>• Identify the types of ligand<br>• Know the rules of nomenclature &apply them in naming of complex compound<br>• Identify types of isomers from their structure   Apply valence bond theory & crystal field theory in different complex compounds<br>• Analyse the stability of complex compounds &colour of complex<br>• Enlist the application of complex compounds in day to day life |
| 10 | XII | NCERT CHEMISTRY PART-II | **HALOALKANES AND HALOARENES** | The learner will be able to:<br>• Classify haloalkanes and haloarenes as primary, secondary or tertiary  and also alkyl halides, allylic halides, benzylic halides, vinylic halides and aryl halides with example.<br>• Draw the structure and identify  the name Haloalkanes and haloarenes according to the IUPAC system.<br>•  Understand the various methods involved in the preparation of Haloalkanes and haloarenes.<br>• Correlate the structures of haloalkanes and haloarenes with various types of reactions.<br>• Describe the various types of name reactions such as Frankenstein Reaction, Swart reaction, Sandmeyer's reaction, Wurtz reaction, Fittig reaction.<br>• Use of stereochemistry as a tool for understanding the SN1 and SN2 reaction mechanism.<br>•  Enlist the application of organo-metallic compounds. |
| 11 | XII | NCERT CHEMISTRY PART-II | **ALCOHOLS, PHENOLS AND ETHERS** | The learner will be able to:<br>• Enlist the different types of alcohols such as primary, secondary and tertiary alcohols.<br>• Demonstrate how alcohol is  prepared from alkenes, aldehydes, ketones and carboxylic acids. |

| | | | | • Understand the reactions involved in the preparation of phenols from haloarenes, benzene sulphonic acids, diazonium salts and cumene.<br>• Compare the physical properties of alcohols, phenols and ethers with their structures.<br>• Demonstrate and differentiate between alcohol and phenol on the on the basis of suitable chemical test. |
|---|---|---|---|---|
| 12 | XII | NCERT CHEMISTRY PART-II | ALDEHYDES, KETONES AND CARBOXYLIC ACIDS. | The learner will be able to:<br>• Understand the basic ideas about how to write the common and IUPAC names of aldehydes, ketones and carboxylic acids.<br>• Draw and identify the structures of the compounds containing functional groups namely carbonyl and carboxyl groups.<br>• Know about various methods of preparation of aldehydes, ketones and carboxylic acids.<br>• Enlist the various physical properties and chemical reactions of aldehydes, ketones and carboxylic acids, with their structures.<br>• Understand the mechanism of a few selected reactions of aldehydes and ketones.<br>• Understand and explain the acidic character of carboxylic acids.<br>• Enlist the uses of aldehydes, ketones and carboxylic acids. |
| 13 | XII | NCERT CHEMISTRY PART-II | AMINES | The learner will be able to:<br>• Classify amines as primary, secondary and tertiary with examples.<br>• Understand the basic ideas about how to write the common and IUPAC names of amines.<br>• Know about various the methods of preparation of amines<br>• Compare the properties of different types of amines.<br>• Differentiate between primary, secondary and tertiary amines by Hinserg's test.<br>• Understand the importance of diazonium salts and their importance in the synthesis of a series of aromatic compounds including azo dyes by coupling reactions. |

| 14 | XII | NCERT CHEMISTRY PART-II | BIOMOLECULES | The learner will be able to: <br> • Classify carbohydrates, proteins, nucleic acids and vitamins on the basis of their structures. <br> • Compare the structural difference between DNA and RNA. <br> • Understand the role of biomolecules in biosystem. <br> • Know the characteristics of biomolecules like carbohydrates, proteins and nucleic acids and hormones. <br> • Differentiate between primary, secondary and tertiary structure of proteins. <br> • Define nucleotide ,nucleoside. |
|----|-----|------|------|------|
| 15 | XII | NCERT CHEMISTRY PART-II | POLYMERS | The learner will be able to: <br> • Define the terms - monomer, polymer and polymerisation and appreciate their importance. <br> • Distinguish between addition polymers and condensation polymer with suitable example. <br> • Classify the polymers on the basic of polymerisation processes. <br> • Know about various methods of some important synthetic polymers and their properties. <br> • Enlist the uses of polymers in daily life. |
| 16 | XII | NCERT CHEMISTRY PART-II | CHEMISTRY IN EVERYDAY LIFE | The learner will be able to: <br> • Enlist the importance of Chemistry in daily life. <br> • Define the term 'chemotherapy'. <br> • Classify the drugs on the basis of its use. <br> • Understand the mechanism of drug-target interaction of enzymes and receptors. <br> • Compare how various types of drugs function in the body; <br> • Know about artificial sweetening agents and food preservatives; <br> • Compare the chemistry of cleansing actions of soap and detergent in hard water and soft water. |

# DAV PUBLIC SCHOOLS, ODISHA ZONE-II
## SPLIT-UP SYLLABUS 2021-22
### CLASS:  XII BIOLOGY (044)
## TEXT BOOK PRESCRIBED: TEXTBOOK FOR CLASS XII, BIOLOGY, NCERT, COMPREHENSIVE PRACTICAL

| | MONTH | CHAPTERS/TOPICS TO BE TAUGHT | CHAPTER WISE HALF YEARLY | WEITAGE ANNUAL |
|---|---|---|---|---|
| | APRIL | UNIT-VI: REPRODUCTION<br>CH-1: Reproduction in organisms<br>CH-2: Sexual reproduction in flowering plants<br>CH:3 Human Reproduction<br>CH: 4 Reproductive Health | 16 | 14 |
| UNIT TEST-I | MAY/JUNE | UNIT: VII GENETICS AND EVOLUTION<br>CH: 5 Principles of Inheritance and Variation | 17 | 18 |
| UNIT | JULY | CH:6 Molecular Basis of Inheritance<br>CH: 7 Evolution<br>UNIT: VIII BIOLOGY IN HUMAN WELFARE<br>CH: 8 Human Health and Diseases | 20 | 14 |
| | AUGUST | CH:9 Strategies for Enhancement in Food Production<br>CH:10 Microbes in Human Welfare<br>UNIT: IX BIOTECHNOLOGY<br>CH:11 Biotechnology: Principles and Processes<br>CH:12 Biotechnology and its Application | 17 | 12 |
| | SEPTEMBER | **REVISION AND HALF-YEARLY EXAMINATION** | | |
| | OCTOBER | UNIT: X: ECOLOGY AND ENVIRONMENT<br>CH:13 Organisms and Population<br>CH:14 Ecosystem<br>CH: 15 Biodiversity and Conservation | | 12 |
| | NOVEMBER | CH:16 Environmental issues<br>**REVISION FOR PRE-BOARD-I** | | |
| | DECEMBER | **PRE-BOARD-I** | | |
| | JANUARY | **PRE-BOARD- II** | | |
| | | TOTAL | 70 | 70 |

## QUESTION PATTERN

| TYPE OF QUESTIONS | MARK(S)PER QUESTION | TOTAL NO OF QUESTIONS | TOTAL MARKS |
|---|---|---|---|
| VSA | 01 | 10 | 10 |
| VSA(AR) | 01 | 04 | 04 |
| CASE-BASED SA | 04 | 02 | 08 |
| SA-I | O2 | 09 | 18 |
| SA-II | 03 | 05 | 15 |
| LA | 05 | 03 | 15 |
| | TOTAL | 33 | 70 |

**SCHEME OF OPTIONS:** There is no overall choice in the paper. However, there is an internal choice in one question of one mark, two questions of 2 marks weightage, one question of 3 marks and all the three questions of 5 marks weightage.

## BLUEPRINT (HALF-YEARLY)

| SL NO | CONTENTS UNIT/forms of questions | VSA (1) | VSA (AR) (1) | CASE-STUDY BASED (4) | SA-I (2) | SA-II (3) | LA (5) | TOTAL MARKS |
|---|---|---|---|---|---|---|---|---|
| 1 | Unit VI Reproduction | 1X3=3 CH-2,3,4 | 1x2=2 CH-1,4 | 4x1=4 CH-4 | 2X2=4 CH-2,3 | 3X1=3 CH-3 | - | 16 |
| 2 | Unit VII Genetics and evolution | 1X3=3 CH-5,7 | 1x1=1 CH-6 | | 2x1=2 CH-6 | 3X2=6 CH-5,7 | 1X5=5 CH-6 | 17 |
| 3 | Unit VII Biology in human welfare | 1X3=3 CH-8,9 | 1x1=1 CH-8 | 4x1=4 CH-10 | 2X2=4 CH-8,10 | 3X1=3 CH-9,10 | 1X5=5 CH-9 | 20 |
| 4 | Unit IX Biotechnology | 1X1=1 CH-11 | | | 2X4=8 CH-11,12 | 3X1=3 CH-11,12 | 1X5=5 CH-12 | 17 |
| | TOTAL | 1X10=10 | 1x4=4 | 4x2=8 | 2X9=18 | 3X5=15 | 5X3=15 | 70 |

## WEIGTAGE TO CONTENT /SUBJECT UNITS

| UNIT | TITLE | MARKS |
|---|---|---|
| VI | REPRODUCTION | 14 |
| VII | GENETICS AND EVOLUTION | 18 |
| VIII | BIOLOGY IN HUMAN WELFARE | 14 |
| IX | BIOTECHNOLOGY AND ITS APPLICATION | 12 |
| X | ECOLOGY AND ENVIRONMENT | 12 |
| | TOTAL | 70 |

## PRACTICAL QUESTION PATTERN

SUBJECT-BIOLOGY PRACTICAL                                    CLASS-XII

| SECTION | EXPERIMENT | MARK |
|---|---|---|
| A | One major experiment | 5 |
| | One minor expt. | 4 |
| B | Slide preparation | 5 |
| C | Spotting | 7 |
| D | Practical record + viva voce | 4 |
| E | Project + viva voce | 5 |
| | TOTAL | 30 |

# BIOLOGY PRACTICAL SYLLABUS (CLASS-XII)

**MAX. MARKS: - 30**                                          **TIME: 3 HRS**

| SL NO. | MONTH | DETAILS OF THE EXPERIMENTS TO BE PERFORMED | DETAILS OF THE SPOTTINGS TO BE PERFORMED |
|---|---|---|---|
| 1. | June | 1. Study pollen germination on a slide. | 1. **Flowers adapted to pollination by different agencies (wind, insect)**<br><br>2. Pollen germination on stigma through a permanent slide. |
| 2 | July | 2. Collect and study soil from at least two different soils and study them for texture, moisture content, PH and water holding capacity of soil. Correlate with the kinds of plants found in them<br>3. Collect water from two different water bodies around you and study them for PH, clarity and presence of any living organism. | 3.Identification of stages of gamete development i.e. T.S of Testis and T.S of ovary through permanent slides (from any mammal<br><br>4. Meiosis in onion bud cell andgrasshopper testes throughpermanent slides. |
| 3 | Aug. | 4. Study the presence of suspended particulate matter in an at twowidely different sites<br>5. Study of plant population density by quadrat method.<br>6. Study of plant population frequency by quadrat method. | 5. T.S of blastula through permanentslides<br>6. Mendelian Inheritance using seeds of different colours/ sizes of any plant. . |
| 4 | Sep. | 7. Prepare a temporary mount of onion root tip to study mitosis. 8. Study the effect of different temperatures and three different PH on the activity of salivary amylase on starch. | 7.Study prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, earlobes, widow's peak and colourblindness.<br>8. Exercise on controlled pollination-emasculation tagging and bagging. .. |
| 5 | Oct. | | 9.Identification of common disease-causing organisms like Ascaris,Entamoeba, Plasmodium, ringwormthrough permanent slides or specimens. Comment on symptomsof disease that they cause. |
| | Nov | 9. Isolation of DNA from plant materials such as Spinach, Green Pea seed, Papaya etc | 10. Two plants and two animals found in Xeric conditions. Comment upon the morphological adaptations.<br><br>11. Plants and animals are found in aquatic condition upon their morphological adaptations |

# LEARNING OUTCOMES

## SUBJECT: BIOLOGY

| Sl.No | Class | Name of the Text Book | Chapter/ Lesson | Learning Outcomes |
|---|---|---|---|---|
| 1 | XII | Biology Textbook for Class 12 | ch-1. Reproduction in Organisms | **Learner will be able to :** |
| | | | | i)Analyse the concept of lifespan of an organism and its sustenance by the process of reproduction. |
| | | | | ii) Comprehend and explain the processes of asexual and sexual reproduction. |
| | | | | iii) Describe the various strategies adapted by different organisms for a sexual reproduction. |
| | | | | iv) Define the process of gametogenesis and embryogenesis. |
| | | | | v)Enumerate the pre and post Fertilisation events of Flowering plants. |
| | | | | vi)  Create an idea about a oviparity and  viviparity among the animals. |
| 2 | XII | | Ch.2. Sexual Reproduction in Flowering Plants. | **Learner will be able to :** |
| | | | | i)  Identify the different parts of a flower and their functions. |
| | | | | ii) Explain the different parts of stamen and carpel and their functions. |
| | | | | iii) Define Triple fusion, Double fertilisation, Monosporic development . |
| | | | | iv) Analyse the significance of apomixis in the field of plant breeding. |
| | | | | v)  Enlist different mechanism of Pollination and their advantages and disadvantages. |
| | | | | vi)Describe Microsporogenesis and Megasporogenesis. |
| 3 | XII | | Ch.3. Human reproduction | **Learner will be able to :** |
| | | | | i) Define the term spermatogenesis  ,oogenesis menstrual cycle , implantation and fertilization. |
| | | | | ii) Discuss the changes in women's body during and after fertilization. |
| | | | | iii) Differentiate between follicular phase and luteal phase , blastula and gastrula , spermatogenesis and oogenesis. |
| | | | | iv) Describe the characteristics of each trimester. |
| | | | | v) Explain the process of Human fertilization. |
| | | | | vi) Describe the development of Placenta and the events in pregnancy. |
| 4 | XII | | Ch.4. Reproductive Health | **Learner will be able to :** |

| | | | | i) Define the term amniocentesis, MTP ,invitro fertilization ,population explosion. |
|---|---|---|---|---|
| | | | | ii) Explain the different methods of birth control. |
| | | | | iii) Differentiate between ZIFT and GIFT. |
| | | | | iv) Design some methods to assist infertile couples to have children. |
| | | | | v) State the availability of corrective measures for male and female infertility. |
| | | | | vi)Decribe Amniocentesis , its usefulness ,misuse and the reasons for its statutary ban. |
| 5 | XII | | Ch.5. Principles of Inheritance and Variation. | Learner will be able to : |
| | | | | i) Define the term Alleles, phenotype ,genotype , dominant recessive , monohybrid cross and dihybrid cross etc. |
| | | | | ii) Explain the deviations from Mandelian ratios due to Incomplete dominance , Co-dominance and Multiple Allelism. |
| | | | | iii) Compare pleiotropy , polygenic inheritance and differentiate each of them from Mendelian Inheritance of traits. |
| | | | | iv) Analyse the Pedigree analysis and construct Pedigree charts. |
| | | | | v )Explain genetic disorders and mendelian disorders and distinguish between them. |
| | | | | vi) Explain the different mechanisms of sex determination in animals. |
| 6 | XII | | Ch.6. Molecular basis of Inheritance | Learner will be able to : |
| | | | | i) Analyse the mechanism of DNA replication. |
| | | | | ii) Describe the structure of nucleosides, nucleotides ,DNA and RNA. |
| | | | | iii) Enlist the silent features of genetic code. |
| | | | | iv) Explain DNA fingerprinting and its applications. |
| | | | | v )Describe the Human Genome Project (HGP)and the salient features of Human genome. |
| | | | | vi) Explain the regulation of gene expression and operon concept. |
| 7 | XII | | Ch7. Evolution | Learner will be able to : |
| | | | | i) Compare Divergent evolution and convergent evolution with examples. |
| | | | | ii) Describe the evidences for evolution from paleontology , embryology ,biogeography and comparative anatomy. |
| | | | | iii) Give a brief account of evolution of plants and animals through the geological time scale. |
| | | | | iv) Explain Hardy Weinberg's principle and the factors affecting the genetic equilibrium. |
| | | | | v)State and explain Darwin's theory of Evolution. |
| | | | | vi) Enlist the different stages of evolution of man. |

| 8 | XII | | Ch8. Human Health and Diseases. | **Learner will be able to :** |
|---|---|---|---|---|
| | | | | i) Understand the different barriers of innate immunity. |
| | | | | ii) Explain the different characteristics ,causes , detection and treatment of cancer. |
| | | | | iii) Construct a mind map on immunity and its classification. |
| | | | | iv) Draw a well labelled diagram of an antibody molecule. |
| | | | | v) Classify the infectious diseases on the basis of the type of causative organism and the mode of transmission. |
| | | | | vi)Describe the components of our immune system. |
| 9 | XII | | Ch9. Strategies for Enhancement in Food Production. | **Learner will be able to :** |
| | | | | i) Describe the different methods of animal breeding , advantages and disadvantages of each of them. |
| | | | | ii)  Enlist the factors leading to green revolution. |
| | | | | iii) Explain single cell protein , its advantages with examples. |
| | | | | iv) Define explant , totipotency of cells , tissue culture , micropropagation and somatic hybridization. |
| | | | | v)State the advantages of Tissue culture,meristem culture and Biofortification. |
| | | | | vi) Create an idea about various  steps in plant breeding for disease resistance and Mutation breeding |
| 10 | XII | | Ch 10. Microbes in Human welfare | **Learner will be able to :** |
| | | | | i) Describe how theMicrobes are involved in food products. |
| | | | | ii) Mention the sources and uses of Bioactive molecules in medical field. |
| | | | | iii) Explain the role of Baculoviruses as biocontrol agents. |
| | | | | iv) Differentiate between primary and secondary treatment of sewage. |
| | | | | v) Classify the different microbes based on their use in human welfare. |
| | | | | vi) Give a brief account of discovery of Antibiotics and their uses in medicinal field. |
| 11 | XII | | Ch.11. Biotechnology : Principles and Processes | **Learner will be able to :** |
| | | | | i) Explain the process of Gel Electrophoresis. |

| | | | | |
|---|---|---|---|---|
| | | | | ii) Mention the basic techniques in creation of recombinant DNA. |
| | | | | iii) Describe in details about the naming and functioning of restriction Endonucleases. |
| | | | | iv) Enlist the different steps of r DNA technology. |
| | | | | v) Enumerate the tools of recombinant DNA technology. |
| | | | | vi) Describe the structure and functioning of Bioreactors and their use in producing desired gene products. |
| 12 | XII | | **Ch.12. Biotechnology and its Applications.** | **Learner will be able to :** |
| | | | | i) Define the term GMO , gene therapy , ELISA and biopiracy. |
| | | | | ii ) Differentiate between gene therapy and gene cloning. |
| | | | | iii ) Analyse the role of PCR for early diagnosis of an infectious disease. |
| | | | | iv) Explain how *Bacillus thuringiensis* contributed in developing resistance to cotton bollworms. |
| | | | | v) Describe the steps in the production of genetically engineered insulin. |
| | | | | vi)State the importance of Gene Therapy and its use in ADA deficiency. |
| 13 | XII | | **Ch.13. Organisms and populations** | **Learner will be able to :** |
| | | | | i )Define the various types of population interactions such as the competition , parasitism , commensalism , mutualism and amensalism along with suitable examples. |
| | | | | ii ) Describe the population growth models and their growth curves along with the equations describing them. |
| | | | | iii ) Create an idea about Ecology and the basic levels of organisation in ecology. |
| | | | | iv)Describe the influence of major abiotic factors on organisms and the adaptations the organisms have to live and reproduce in a given habitat. |
| | | | | v) Enlist the four basic processes which cause increase or decrease in population density in a given period of time. |
| | | | | vi)Give a brief idea about Attributes of population. |
| 14 | XII | | **Ch.14. Ecosystem** | **Learner will be able to :** |
| | | | | i) Define the terms : Ecosystem ,GDP and NPP , decomposition , food chain and food Web ,energy flow ecological pyramid and ecological succession. |
| | | | | ii) Outline salient features of Carbon cycling in an ecosystem. |

| | | | | |
|---|---|---|---|---|
| | | | | iii) Justify the importance of Decomposers in an ecosystem . |
| | | | | iv) Draw a simplified model of Phosphorus cycle. |
| | | | | v) Construct a grazing food chain and detritus food chain using different examples. |
| | | | | vi)Describe different types of Ecological Successions and differentiate them. |
| 15 | XII | | **Ch.15. Biodiversity and Conservation** | **Learner will be able to :** |
| | | | | i) Describe the patterns of biodiversity. |
| | | | | ii) Explain the species area richness. |
| | | | | iii ) Enumerate the causes and effect of biodiversity loss. |
| | | | | iv) Create an idea about two major approaches of in situ and ex situ conservation of biodiversity with examples. |
| | | | | v) Define Endemism , Hotspot ,Sacred grove , Cryopreservation. |
| | | | | vi)Describe the conventions on Biological Diversity. |
| 16 | XII | | **Ch.16. Environmental Issues** | **Learner will be able to :** |
| | | | | i) Describe the major pollutants in sewage water and their effects on aquatic organisms. |
| | | | | ii)Enumerate the causes and ill effects of deforestation and methods to conserve forest along with examples of human participation . |
| | | | | iii) Make a difference between good and bad ozone. |
| | | | | iv) Construct a flowchart to exhibit the events of eutrophication. |
| | | | | v ) Explain the causes of algal bloom in a water body and how does it affect an ecosystem. |
| | | | | vi) Draw a graph showing the relationship between Dissolved Oxygen and Biochemical Oxygen Demand. |

# DAV PUBLIC SCHOOLS, ODISHA ZONE II
## SPLIT UP OF SYLLABUS FOR THE SESSION 2021-22
### CLASS: XII COMPUTER SC. (083)
Book Prescribed: Computer Science with Python by SumitaArora, DhanpatRai& Co

| Unit Test | Months | | Chapters / Topics to be Taught | Chapter Wise Weightage | | |
|---|---|---|---|---|---|---|
| | | | | Half Yearly | Pre Board | Annual |
| | April | | • Revision of basic Python of XI<br>• Working with Function | 20<br>08 | 18<br>08 | |
| | | Unit-I | • Using Python Libraries | 03 | 02 | |
| | June | | • File Handling | | | |
| | July | | • File Handling<br>• Idea of Algorithmic Efficiency<br>• Recursion | 07 | 04 | 40 |
| UNIT TEST- I | August | | • Recursion<br>• Data Structure | 06<br>06 | 04<br>04 | |
| | September | Unit- III | Database Management System<br>• Database Concept & SQL<br>**Revision for Half Yearly Examination** | 20 | 20 | 20 |
| | October | | **HALF YEARLY EXAMINATION** | **Total: 70** | | |
| | November | Unit-IV | • Computer Networks | -- | 10 | 10 |
| UNIT TEST- II | December | | **Revision for Pre-Board - I**<br>**PREBOARD-I** | | | |
| | January | | **Revision for Pre-Board - II**<br>**PREBOARD-II** | | | |
| | | | **Total:** | **70** | **70** | |

## QUESTION PATTERN (HALF YEARLY)

| Q. NO. | NO. OF QUESTIONS | | | | TOTAL |
|---|---|---|---|---|---|
| | 1 MARK | 2MARK | 3 MARK | 4 MARK | |
| 1 | 04 | 03 | 01 | -- | 13 |
| 2 | 05 | 02 | 01 | 01 | 19 |
| 3 | 05 | 02 | -- | 01 | 13 |
| 4 | 05 | 03 | 01 | 01 | 18 |
| 5 | 02 | 04 | -- | -- | 10 |
| TOTAL | 21Nos. X 1=21 | 14Nos. X 2=28 | 3Nos. X 3=09 | 3Nos. X 4=12 | 70 |

## QUESTION PATTERN (PRE-BOARD)

| Q. NO. | NO. OF QUESTIONS | | | | TOTAL |
|---|---|---|---|---|---|
| | 1 MARK | 2MARK | 3 MARK | 4 MARK | |
| 1 | 03 | 03 | 01 | -- | 12 |
| 2 | 05 | 03 | 01 | 01 | 18 |
| 3 | 04 | 02 | 01 | 01 | 15 |
| 4 | 04 | 02 | 01 | 01 | 15 |
| 5 | 02 | 04 | -- | -- | 10 |
| TOTAL | 18Nos. X 1=18 | 14Nos. X 2=28 | 4Nos. X 3=12 | 3Nos. X 4=12 | 70 |

# COMPUTER SCIENCE PRACTICAL (30 Marks) – Session 2021-22

| SI. No. | Particulars | Marks |
|---|---|---|
| 1 | **Lab Test:**<br>1. Python program (60% logic + 20% documentation + 20% code quality)<br>2. Small Python program that sends a SQL query to a database and displays the result. A stub program can be provided. | **07**<br>**05** |
| 2 | **Report file:**<br>Minimum 20 Python programs. Out of this at least 4 programs should send SQL commands to a database and retrieve the result | **07** |
| 3 | **Project** (that uses the concepts that have been learnt in Class 11 and 12) | **08** |
| 4 | **Viva voce** | **03** |
| | **Total:** | **30** |

## GUIDELINES FOR PRACTICAL EXAMINATION 2022 CLASS XII

### Programming in python:

● Recursively find the factorial of a natural number.
● Write a recursive code to find the sum of all elements of a list.
● Write a recursive code to compute the nth Fibonacci number.
● Read a text file line by line and display each word separated by a #.
● Read a text file and display the number of vowels/ consonants/ uppercase/ lowercase characters in the file.
● Create a binary file with name and roll number. Search for a given roll number and display the name, if not found display appropriate message.
● Create a binary file with roll number, name and marks. Input a roll number and update the marks.
● Remove all the lines that contain the character 'a' in a file and write it to another file.
● Write a random number generator that generates random numbers between 1 and 6 (simulates a dice).
● Write a Python program to implement a stack and queue using a list data-structure.
● Take a sample of ten phishing e-mails (or any text file) and find most commonly occurring word(s)

### Data management:

● Create a student table and insert data. Implement the following SQL commands on the student table:
  ALTER table to add new attributes / modify data type / drop attribute
  UPDATE table to modify data
  ORDER By to display data in ascending / descending order
  DELETE to remove tuple(s)
  GROUP BY and find the min, max, sum, count and average
● Similar exercise may be framed for other cases.
● Integrate SQL with Python by importing the MySQL module.

### Project:

The aim of the class project is to create something that is tangible and useful. This should be done in Groups of 2 to 3 students, and should be started by students at least 6 months before the submission deadline. The aim here is to find a real world problem that is worthwhile to solve. Students are encouraged to visit local businesses and ask them about the problems that they are facing. For example, If a business is finding it hard to create invoices for filing GST claims, then students can do a project that takes the raw data (list of transactions), groups the transactions by category, accounts for the GST tax rates and creates invoices in the appropriate format. Students can be extremely creative here. They can use a wide variety of Python libraries to create user friendly applications such as games, software for their school, software for their disabled fellow students, and mobile applications. Of course to do some  of this project some additional learning is required; this should be encouraged. Students should know how to teach themselves.

If three people work on a project for o months, at least 500 lines of code is expected. The committee has also been made aware about the degree of plagiarism in such projects. Teachers should take a very strict look at this situation, and take very strict disciplinary action against students who are cheating on lab assignments, or projects, or using pirated software to do the same. Everything that is proposed can be l achieved using absolutely free, and legitimate open source software.

# DAV PUBLIC SCHOOLS, ODISHA ZONE-II
## SPLIT-UP OF SYLLABUS 2021-22
### CLASS: XII
### SUB: Physical Education (Subject Code- 048)

**Books prescribed**: 1. Health and Physical Education, Saraswati Publication

**Reference Books :** 1. Introduction to Physical and Health Education, Class-XII, Avichal Publication
  2. A Text Book of Physical Education, Class-XII, Candid Publication
   3. Health and Physical Education, Goyal Publication

| | MONTH | CHAPTERS/TOPICS TO BE TAUGHT | MARK DIST.FOR HALF YEARLY EXAMINATION | MARK DIST.FOR ANNUAL EXAMINATION |
|---|---|---|---|---|
| UNIT TEST – I | APRIL | Unit 01:Planning in sports | 10 | 07 |
| | | Unit 02 : Sports & Nutrition | 08 | 06 |
| | MAY | Unit 03 : Yoga & Life style | 08 | 07 |
| UNIT TEST – II | JUNE JULY | Unit 04 : Physical Education & Sports for CWNS (Children With Special Needs-Divyang) | 08 | 06 |
| | | Unit 05 : Children & women in Sports | 09 | 08 |
| | AUGUST | Unit 06 : Test & Measurement in Sports | 08 | 07 |
| | | Unit 07 : Physiology & injuries in Sports | 10 | 08 |
| | SEPTEMBER | Unit 08 : Biomechanics & Sports | 09 | 06 |
| | | **Revision for HALF YEARLY EXAMINATION** | **Total : 70 Marks** | |
| | OCTOBER | **HALF YEARLY EXAMINATION** | | |
| | NOVEMBER | Unit 09 : Psychology & Sports | | 07 |
| | | Unit 10 : Training in Sports | | 08 |
| | DECEMBER | **Revision for PRE BOARD EXAMINATION PREBOARD-I** | | |
| | JANUARY | **Revision for BOARD EXAMINATION-II PREBOARD-II** | | **Total : 70 Marks** |

## QUESTION PATTERN (HALF YEARLY/PRE BOARD)

| Type of Question(s) | Mark(s) per Question | Total no. of Questions | Total Marks |
|---|---|---|---|
| MCQ/AR | 01 | 12 | 12 |
| SA-I | 02 | 04 | 08 |
| SA-2 | 03 | 10 | 30 |
| LA | 05 | 04 | 20 |
| **TOTAL** | | 30 | 70 |

| NAME OF THE UNIT | 1 MARK | 2 MARKS | 3 MARKS | 5 MARKS | TOTAL |
|---|---|---|---|---|---|
| Unit 01:Planning in sports | 2 | - | 1 | 1 | 10 |
| Unit 02 : Sports & Nutrition | 2 | - | 2 | - | 08 |
| Unit 03 : Yoga & Life style | 1 | 1 | - | 1 | 08 |
| Unit 04 : Physical Education & Sports for CWNS (Children With Special Needs- Divyang) | 1 | 1 | - | 1 | 08 |
| Unit 05 : Children & women in Sports | 1 | 1 | 2 | - | 09 |
| Unit 06 : Test & Measurement in Sports | 2 | - | 2 | - | 08 |
| Unit 07 : Physiology & injuries in Sports | 2 | - | 1 | 1 | 10 |
| Unit 08 : Biomechanics & Sports | 1 | 1 | 2 | - | 09 |
| | 12 | 04 | 10 | 04 | 70 |

## PHYSICAL EDUCATION (PRACTICAL)

**Max. Marks: - 30**          **60 periods**          **Time: 3 hrs.**

| SL NO. | PRACTICALS TO BE CONDUCTED | MARK |
|---|---|---|
| 1. | ▪ Physical Fitness Test | 6 |
| 2. | ▪ Proficiency in games and sports (Skill of any one Team Game of choice from the given list*) | 7 |
| 3. | ▪ Yogic Practices | 7 |
| 4. | ▪ Record File** | 5 |
| 5. | ▪ Viva Voce (Health/Games & Sports/Yoga) | 5 |

*Basketball, Football, Kabaddi, Handball, Volleyball, Hockey, KhoKho, Cricket, Bocce and unified Basketball [CWSN Children With Special Needs- Divyang] ***

**\*\*Record File shall include:**

Practical-1: Fitness tests administration for all items.

Practical-2: Procedures for Asanas, Benefits and Contraindication for any two Asanas for each lifestyle disease.

Practical-3: Procedure for administering Senior Citizen Fitness Test for 5 elderly family members.

Practical-4: Any one game of your choice out of the list above. Labelled diagram of field and equipment.(Rules, Terminologies and Skills).

**N. B:** Unit/ Weekly test will be held on Mondays

## LEARNING OUTCOMES SUBJECT: PHYSICAL EDUCATION

| SL. NO | CHAPTER/ LESSON | LEARNING OUTCOMES |
|---|---|---|
| 1 | Unit 01:Planning in sports | The Learners able … To understand the meaning and objective of planning. |
| | | To learn to how to organise a sports programme. |
| | | To know how to draw fixture of tournaments. |
| 2 | Unit 02 : Sports & Nutrition | The Learners able … To learn what is balanced diet and nutrition. |
| | | To understand nutritive and non-nutritive components. |
| | | To know the healthy weight, the pitfalls of dieting, food intolerance and myths |
| 3 | Unit 03 : Yoga & Life style | The Learners able … To understand the meaning and benefits of asana. |
| | | To learn how asanas can act as preventive measure. |
| | | To understand obesity, diabetes, asthma, hypertension, and their preventions |

| | | |
|---|---|---|
| 4 | Unit 04 : Physical Education & Sports for CWNS (Children With Special Needs-Divyang) | The Learners able … To understand the concept of disability and disorder. |
| | | To learn the types of disability and disorder and their causes and nature. |
| | | To understand the disability etiquettes. |
| | | To comprehend the strategies to make physical activities accessible for CWSN |
| 5 | Unit 05 : Children & women in Sports | The Learners able … To understand the motor development and factors affecting it. |
| | | To know the exercise guidelines at different stages of growth and development. |
| | | To know some common postural deformities. |
| | | To understand the sports participation of women in India |
| 6 | Unit 06 : Test & Measurement in Sports | The Learners able … To learn the measurement cardiovascular fitness Harvard Step test/ Rockport test. |
| | | To understand the computation of fitness index. |
| | | To learn the Rikli Jones Senior citizen fitness test |
| 7 | Unit 07 : Physiology & injuries in Sports | The Learners able … Understanding the effects of exercises on the cardio respiratory system and Muscular system. |
| | | Understanding the sports injuries classification and causes. |
| | | Understanding the management of injuries. |
| | | Understanding the soft tissue injuries, bone injuries and joint injuries. |
| 8 | Unit 08 : Biomechanics & Sports | The Learners able … To Understand the Meaning and importance of Biomechanics in sports. |
| | | To learn the types of movements (Flexion,Extension,Abduction and Adduction). |
| | | To know the Newton's law of Motion and its application in sports |
| | | To learn the types of Axes and planes. |
| 9 | Unit 09 : Psychology & Sports | The Learners able … To learn about personality its types –trait. |
| | | To learn about Stress and coping strategies (emotional and problem focused). |
| | | To learn about Motivation, its types and techniques. |
| | | Understand the meaning, concept and types of aggressions in sports. |
| 10 | Unit 10 : Training in Sports | The Learners able … To understand the meaning of strength, endurance and their types and learn various methods of improving. |
| | | To understand the meaning of speed and flexibility and their types and learn various methods of improving. |
| | | To understand meaning of coordinative abilities and its types. |

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## DAVPUBLICSCHOOLS,ODISHAZONE–II
## SPLITUPSYLABUS FORTHESESSION-2021-22
## CLASS-XII,  SUBJECT- ECONOMICS (030)

BOOKS  PRESCRIBED

**1. PART – A: INTRODUCTORY MACRO ECONOMICS (NCERT)**

**2. PART- B: INDIAN ECONOMIC DEVELOPMENT (NCERT)**

**3. SUPPLEMENTARY READING MATERIAL IN ECONOMICS (CBSE)**

| | MONTH | CHAPTER/TOPICSTOBETOUGHT5 | UNIT WISEWEIGHTAGE | |
|---|---|---|---|---|
| | | | HALF | PREBOARD |
| | APRIL | **MACROECONOMICS** <br> UNITI- National Income and Related Aggregates | 15 | 10 |
| | | **INDIANECONOMICDEVELOPMENT** <br> UNITVI-Ch. 1-Indian Economy on the eve of independence | 06 | 12 |
| | **MAY** | Revision for Unit Test I | | |
| | JUNE | UNIT II-Money and Banking | 10 | 06 |
| | | **INDIANECONOMICDEVELOPMENT** <br> UNITVI-Ch.2- Indian economy–1950to1990. | 06 | |
| **UNIT TEST-II** | JULY | **INDIANECONOMICDEVELOPMENT** <br> UNITVI-Economic reforms since 1991. <br> Ch. 3-Liberalisation, privatization and Globalisation: An Appraisal. GST and Demonetisation | 06 | 22 |
| | | UNIT-VII Current challenges-Ch. 4-Poverty <br> Chpt.5-HumancapitalformationofIndia <br>   Chpt.6-RuralDevelopment. | 05 <br> 04 <br> 07 | |
| | AUGUST | **INDIANECONOMICDEVELOPMENT** <br>   Ch.7-Employment:Growth, informalization, and      other issues <br> Ch.8-Infrastructure <br> Ch.9-Environment and Sustainable Development. | 06 <br> 04 <br><br> 03 | |
| **HALF YEARLY EXAMINATION** | SEPTEMBER | **MACROECONOMICS** <br> UNITIII-Determination of Income and Employment. | 08 | 12 |
| | OCTOBER | **REVISION FORHALF YEARLYEXAM.** | TOTALMARKS -80 | |
| | NOVEMBER | UNIT IV :Govt. Budget and the  Economy UNIT: V-Balance of Payment <br> **INDIANECONOMICDEVELOPMENT** <br> UNITVIII-Ch.10- ComparativeDevelopmentExperiencesof India and its neighbours. | | 06 <br><br> 06 |
| | DECEMBER | **REVISION FOR FIRST PREBOARDEXAMINATION** | | |
| **PRE BOARD II** | JANUARY | **REVISION FOR SECOND PREBOARDEXAMINATION** | | |
| | | | | **TOTAL-80** |

# QUESTIONPAPERDESIGN

Theory: 80Marks+project:20Marks

| Sl. No. | Typologyof questions | Veryshort answer/MCQ 1Mark | ShortAnswer(I)3marks | ShortAnswer(II)4Marks | LongAnswer6 Marks | Total Marks |
|---|---|---|---|---|---|---|
| 1 | Remembering | 5 | 1 | 2 | 1 | 22 |
| 2 | Understanding | 5 | 1 | 2 | 1 | 22 |
| 3 | Applicationbased | 5 | 1 | 1 | 1 | 18 |
| 4 | Analysingand Evaluating | 5 | 1 | 1 | 1 | 18 |
| | | 20X1=20 | 4X3=12 | 6X4=24 | 4X6=24 | THEORY80+20 PROJECT= 100 34Questions |

NOTE-There will be internalchoicesinquestionsof1mark, 3marks, 4marks and 6marks in both sections (A&B). In all, total 8 internal choices.

PROJECTWORK- Each student will prepare one project work using concepts from both part A and part B.

## MARKINGSCHEMEFORPROJECTWORKS

| SL.NO. | HEADING | MARKSALLOTED |
|---|---|---|
| 1 | RELEVANCEOFTHE TOPICS | 3 |
| 2 | KNOWLEDGECONTENT/RESEARCHWORKS | 6 |
| 3 | PRESENTATIONTECHNIQUE | 3 |
| 4 | VIVA | 8 |
| | TOTAL | 20 |

## LEARNING OUTCOMES SUBJECT: ECONOMICS

| SL. NO | CLASS | NAME OF THE TEXT BOOK | CHAPTER/ LESSON | LEARNING OUTCOMES |
|---|---|---|---|---|
| 1 | XII | IED | INDIAN ECONOMY ON THE EVE OF INDEPENDENCE | Understand about the Indian Economy's position before & after independence. |
| | | | | Understand different sectoral performances |
| | | | | Understand the positive &negative contributions of British rule. |
| 2 | XII | | INDIAN ECONOMY 1950-1990 | Understand the Indian Economy between 1950-1990 with central problem, economic planning with critical appraisal. |
| | | | | Understand the targeted& actual growth rates of different FYPs. |

| | | | | Understand the concept of Green Revolution, Industrial Licensing & foreign trade with critical appraisal. |
|---|---|---|---|---|
| 3 | XII | | LIBERATION, PRIVATISATION & GLOBALISATION: AN APPRAISAL | Understand the concept of LPG and reasons for economic reform. |
| | | | | Understand about the domestic market and foreign market, the role of WTO. |
| | | | | Understand various merits and demerits of LPG. |
| 4 | XII | IED | POVERTY | Understand the meaning and types of poverty it includes absolute and relative poverty between developing and developed countries. To know the differences between APL and BPL through poverty line. |
| | | | | Understand various causes of poverty with respect to its solution though govt approach |
| | | | | To know the differences between APL and BPL through poverty line. |
| | | | | Understand various PAPs. |
| 5 | XII | | HUMAN CAPITAL FORMITION | Understand the role of physical capital and human capital formation. |
| | | | | Understand human capital with economic growth, sources and importance. |
| | | | | To know the educational sector, future prospects of HCF. |
| 6 | XII | | RURAL DEVELOPMENT | Understand a deeper and broader process and prospective of rural development. |
| | | | | Understand various sources of rural credit and agricultural marketing system. |
| | | | | Understand diversification, on-farm areas of employment and sustainable development. |
| | | | | Understand organic farming its benefits and challenges. |
| 7 | XII | | EMPLOYMENT:GROWTH,INFORMALISATION AND OTHER ISSUES | Understand the concepts and peoples participation in employment |
| | | | | Understand the growth and changing structure of employment. |
| | | | | To understand the various issues of informalisation , unemployment, types and remedial measures. |
| | | | | Understand the role of govt policies. |
| 8 | XII | | INFRASTUCTURE | Understand the infrastructure in social and economic type in economics. |
| | | | | Understand the power and health infrastructure with data analysis. |
| | | | | Understand the role of public and private sector in infrastructure. |
| | | | | Infrastructure: Essential for economic development |
| 9 | XII | **IED** | ENVIRONMENT AND SUSTAIN-ABLE DEVELOPMENT | Understand the environment for sustainability. |
| | | | | Understand the reasons for environmental crisis.. |
| | | | | Understand the various challenges to India's environment. |
| | | | | Understand: 'sustainable development a need of hour'' and its strategies to achieve. |
| 10 | XII | | COMPARATIVE DEVELOPMENTEXPERIENCES OF INDIA | Understand the comparative development experiences of India and neighbours. |
| | | | | Understand the trends in various economic and human |

| | | | AND ITS NEIGHBOURS | development indicators of India,China and Pakistan. |
|---|---|---|---|---|
| | | | | Understand the appraisal of development strategies of three countries. |
| 1 | XII | **MACRO ECONOMICS** | CIRCURAL FLOW OF INCOME | Understand the various phases of circular flow of income. |
| | | | | Understand the concept of stock, flow, real flow and money flow. |
| | | | | Understand the circular flow in a simple economy. |
| 2 | | | BASIC CONCEPTS OF MACROECONOMICS : AN | Understand the various concepts of macroeconomics like domestic territory, normal residents, factor income, transfer income, final goods, intermediate goods, consumption goods, capital goods, gross investment, net investment and depreciation, NII and NFIA. |
| 3 | XII | | NATIONAL INCOME AND RELATED AGGREGATES | Understand various national income aggregates. |
| | | | | Understand the relationship between domestic and national concepts. |
| | | | | To solve small conceptual numerical. |
| 4 | XII | | MEASUREMENT OF NATIONAL INCOME | Understand the measurement of NY i.e. product method, income method and expenditure method. |
| | | | | Understand the various precautions of different methods. |
| | | | | To calculate various types of numerical. Treatment of different items in NY i.e. items included in NY or not. |
| | | | | Understand the GDP and welfare concept. |
| | | | | Understand the measurement of NY i.e. product method, income method and expenditure method. |
| 5 | XII | | MONEY | Understand the meaning of money and barter system. |
| | | | | Understand the money supply in India. |
| | | | | Understand the concept of money and high powered money. |
| 6 | XII | | BANKING:COMMERCIAL BANK AND THE CENTRAL BANK | Understand the meaning of functions of commercial banks and central bank. |
| | | | | Understand the role of credit creation of commercial banks. |
| | | | | Understand the various quantitative and qualitative instrument of RBI. |
| 7 | XII | | AGGREGATE DEMAND AND RELATED CONCEPTS | Understand the meaning and components of AD in a two sector model |
| | | | | Understand the meaning and components of AS and various consumption function i.e. APC, MPC, APS and MPS. |
| | | | | Understand the investment function. |
| 8 | XII | | INCOME DETERMINATION AND MULTIPLIER | Understand the AD-AS and S-I approach and calculation of multiplier. |
| | | | | Determination of equilibrium output under fixed price model. |
| | | | | Understand the concept of investment multiplier. |
| 9 | XII | | EXCESS DEMAND AND DEFICIENT DEMAND | Understand the concept of excess demand and deficient demand. |
| | | | | Understand the concept of inflationary and deflationary gap. |

| 10 | XII | | GOVERNMENT BUDGET AND THE ECONOMY | Understand to measures excess and deficit demand. |
|----|-----|--|------|------|
| 10 | XII | | GOVERNMENT BUDGET AND THE ECONOMY | Understand the master plan govt role i.e. budget and its objectives. |
| | | | | Understand the various components of budget. |
| | | | | Understand the various measures of govt budget i.e. revenue deficit, fiscal deficit and primary deficit with implications. |
| 11 | XII | | FOREIGN EXCHANGE RATE | Understand easily the currencies of different countries. |
| | | | | Understand the various types of foreign exchange rate i.e. fixed, flexible and managed floating rate. |
| | | | | Understand gold standard and Bretton woods standard. |
| | | | | Understand the demand, supply and determination of exchange rate. |
| 12 | XII | | BALANCE OF PAYMENTS | Understand the record of transactions that take place between the country and Row. |
| | | | | Understand the differences between BOP and BOT, credit items and debit items. |
| | | | | Understand the equilibrium and disequilibrium of BOP and also autonomous and accommodating items. |

# DAV PUBLIC SCHOOLS, ODISHA, ZONE-II
## SPLIT-UP OF SYLLABUS 2021-22
### CLASS: XII
## SUB: Business Studies (054)
### BOOKS PRESCRIBED: 1. Business studies Part-I (NCERT)
### 2. Business studies Part-II (NCERT)

| | MONTH | CHAPTERS/TOPICS TO BE TOUGHT | CHAPTER WISE WEIGHTAGE | |
|--|-------|------|------|------|
| | | | HALF YEARLY | PRE BOARD/ ANNUAL |
| UNIT TEST-I | APRIL | Ch-1: Nature and significance of management<br>Ch-2: Principles of management. | 27 | 16 |
| UNIT TEST-I | MAY &JUNE | Ch-3: Business Environment | 20 | 14 |
| UNIT TEST-I | MAY &JUNE | Ch-4: Planning | 20 | 14 |
| UNIT TEST-II | JULY | Ch-5: Organizing | 33 | 20 |
| UNIT TEST-II | JULY | Ch-6: Staffing<br>Ch-7: Directing | 33 | 20 |
| | AUGUST | Ch-8: Controlling | | |
| | SEPTEMBER | **REVISION FOR HALF YEARLY EXAMINATION**<br>Ch-9: Financial management | Total: 80 | 50 |
| | OCTOBER | Ch-10: Financial market | | 15 |
| | OCTOBER | Ch-11: Marketing management | | 15 |
| | NOVEMBER | Ch-12: Consumer protection | | 15 |
| | NOVEMBER | Practical with Project Work | | 20 |
| | DECEMBER | PRE BOARD - I | | |
| | JANUARY | PRE BOARD - II | | |
| | | **Total:** | | **100** |

## QUESTION PATTERN (HALF YEARLY/PRE-BOARD/ANNUAL)

| TYPE OF QUESTION(S) | MARK(S) PER QUESTION | TOTAL NO. OF QUESTIONS | TOTAL MARKS |
|---|---|---|---|
| VSA | 1 | 20 | 20 |
| SA – I | 3 | 4 | 12 |
| SA – II | 4 | 6 | 24 |
| LA - II | 6 | 4 | 24 |
| **TOTAL(THEORY)** | | **34** | **80** |
| **PROJECT WORK** | | | **20** |
| **TOTAL** | | | **100** |

## BLUE PRINT (HALF-YEARLY)

| SL. NO | CONTENTS UNIT / FORMS OF QUESTIONS | VSA (1) | SA-1 (3) | SA-2 (4) | LA-2 (6) | TOTAL MARKS |
|---|---|---|---|---|---|---|
| 1 | Nature and significance of management | 2 | 1 | - | 1 | 11 |
| 2 | Principles of management | 3 | 1 | 1 | - | 10 |
| 3 | Business environment | 2 | - | 1 | - | 06 |
| 4 | Planning | 3 | - | 1 | - | 07 |
| 5 | Organizing | 3 | - | 1 | 1 | 13 |
| 6 | Staffing | 3 | - | 1 | 1 | 13 |
| 7 | Directing | 1 | 1 | 1 | 1 | 14 |
| 8 | controlling | 3 | 1 | - | | 06 |
| | **Total:** | **1(20)** | **3(4)** | **4(6)** | **6(4)** | **80** |

**N.B.:**

- There will be internal choice in questions of 1 mark (2 choice), 3marks (2 choice), 4 marks (2 choices) and 6 marks (2 choices).

- Blue print of question papers for Pre-board & Annual examination will be as per CBSE Guidelines.

# LEARNING OUTCOMES

## SUBJECT: BUSINESS STUDIES

| SL No. | CLASS | NAME OF THE TEXT BOOK | CHAPTER/ LESSON | LEARNING OUTCOMES |
|---|---|---|---|---|
| 1 | XII | BUSINESS STUDIES (PART –I) (NCERT Text Book) | CH-1 : Nature and Significance Of Management | The learners :<br>a. Understand the Concept of Management, Importance of management in Business Organizations.<br>b. State the nature of management as science, art and Profession.<br>C .Explain the role of different levels of management in the organization.<br>d. Analysis the usefulness of Co-ordination function in the organization |
| 2 | XII | BUSINESS STUDIES (PART –I) (NCERT Text Book) | CH-2  Principles of Management | The learners :<br>a. Analyse the concept of Principles of Management, Significance of Management Principles in Business units.<br>b. Application  of Henry Fayol's general principles of Management act as a guidelines to theTop level Managers and F.W.Taylor'sScientific principles and techniques of Management useful for lower level Managers. |
| 3 | XII | BUSINESS STUDIES (PART –I) (NCERT Text Book) | CH-3 :  Business Environment<br><br>. | The learners<br>a. Understand the Concept and importance of Business Environment<br>b. Analysethe various dimensions of Business Environment.<br>c. State the impact of government policy changes on business in India with reference to Liberalization, Privatization and Globalization since 1991 and Managerial response to Changes in Business Environment<br>d. Understand the concept of demonetization. |
| 4 | XII | BUSINESS STUDIES (PART –I) (NCERT Text Book) | CH-4 :  Planning | The learners :<br>a. Understand the Concept, features and usefulness of Planning in the organization.<br>b. State the limitations of planning function.<br>c. Describe the steps involved in the process of planning.<br>d. Develop an understanding of Single use and Standing plans i.e Objectives, Policies, Strategy, Procedure, Method, Rule, Budget and Program |
| 5 | XII | BUSINESS STUDIES (PART –I) (NCERT Text Book) | CH-5 : Organizing | The learners :<br>a. Analyse the concept of organizing as a structure and as a process.<br>b. Significance of Organizing functionin Business Units.<br>c. Explain the steps involved in the process of Organizing.<br>d. Develop an understanding of Functional and divisional structures of organization, formal and informal and its suitability. |

| | | | | |
|---|---|---|---|---|
| | | | | e. Understand the concept and elements of delegation in the organization.<br>f. Describe the concept of decentralization and its importance |
| 6 | XII | BUSINESS STUDIES (PART –I) (NCERT Text Book) | CH-6 : Staffing | The learners :<br>a. Understand the Concept and benefits of Staffing function in Management.<br>b. Analyse the specialized duties and activities performed by Human Resources Management.<br>c. Describe the steps in the process of Staffing.<br>d. Acquaint knowledge on elements/components of staffing :- Recruitment, Selection , Training |
| 7 | XII | BUSINESS STUDIES (PART –I) (NCERT Text Book) | CH – 7: Directing | The learners :<br>a. Aware about the Concept and usefulness of directing function in organization.<br>b. Analysethe various elements of directing function of Management i.e.<br>➢ Motivation and its benefits in the organization.<br>➢ Concept of leadership and various styles of leadership.<br>➢ Concept and elements of communication process<br>➢ Barriers to effective communication and measures to overcome barriers to communication |
| 8 | XII | BUSINESS STUDIES (PART –I) (NCERT Text Book) | CH – 8 : Controlling | The learners :<br>a. Analyse the Concept of controlling function of management and its significance in the organization.<br>b. Examine the relationship between planning and controlling.<br>c. Describe the steps involved in the process of controlling |
| 9 | XII | BUSINESS STUDIES (PART –I-) (NCERT Text Book) | CH –9 : Financial Management | The learners :<br>a. Understand the concepts, role and objectives of financial management.<br>b. Apply the learned skills, while taking financial decisions in the organization in different situations by considering various parameters<br>c. Define the concept of financial planning and its importance in the organization.<br>d. Analyse the concept of capital structure and the factors determining the choice of an appropriate capital structure of a company form of organization.<br>e. Understand the concept of fixed and working capital and determining the requirement of fixed and working capital in the organization |
| 10 | XII | BUSINESS STUDIES (PART –II) (NCERT Text Book) | CH – 10 : Financial Market | The learners :<br>a. Understand the concept and functions of financial market, Capital market and money market and types of financial markets<br>b. Describe the concept of money market and about various money market instruments.<br>c. Analyse the capital market in different ways like |

| | | | | • Primary and Secondary market.<br>• Capital and Money market.<br>• Methods of Floating new issues in the primary market.<br>d.  Understand the concept of stock exchange, Functions of stock exchange , trading procedure in stock exchange and meaning of depository services and demat account as used in the trading procedure of securities.<br>e.  Describe  the objectives and functions of SEBI |
|---|---|---|---|---|
| 11 | XII | BUSINESS STUDIES (PART –II) (NCERT Text Book) | CH –11 :Marketing Management | The learners :<br>a.  Define the concept of market, marketing and market management.<br>b.  Analysethe Characteristics, functions and philosophies of marketing .<br>c.  Understand the concept of marketing mix and elements of marketing mix i.e product, price , physical distribution and promotion.<br>d.  Explainthe concept of:<br>• Product mix , like branding , labeling and packaging.<br>•  Price mix and the factors determining price of a product.<br>• Physical distribution, components of physical distribution and about various channels of distribution.<br>• Promotion mix , elements of promotion mix<br>e.  Understand the concept of advertising, sales promotion and tools of sales promotion. |
| 12 | XII | BUSINESS STUDIES (PART –II) (NCERT Text Book) | CH –12 : Consumer Protection<br><br>. | The learners :<br>a.  Analyse the concept of consumer protection, importance of consumer protection and the scope of consumer protection Act, 1986.<br>b.  Describe the concept of a consumer according to the Consumer Protection<br>c.  Identify and apply the consumer rights while buying goods and availing services.<br>d.  Understand the responsibilities of consumers, who can file a complaint and against  whom?<br>e.  Discuss the legal redressal machinery under Consumer Protection Act, 1986.<br>f.  Examine the remedies available to the consumer under Consumer Protection Act, 1986, Role of consumer organizations and NGOs in protecting consumer's interest. |

# DAV PUBLIC SCHOOLS, ODISHA, ZONE-II
## SPLIT-UP OF SYLLABUS 2021-22
### CLASS:  XII
### SUB: Accountancy (055)

BOOKS PRESCRIBED:     1. Accounting for Partnership Firm & Companies (NCERT)
                                     2. Financial Statement Analysis (NCERT)

| | MONTH | CHAPTERS/TOPICS TO BE TAUGHT | CHAPTER WISE WEIGHTAGE | |
|---|---|---|---|---|
| | | | HALF YEARLY | PRE BOARD/ ANNUAL |
| | APRIL | Part A: **Accounting for non- profit organizations Partnership Firm and companies.** Ch.1  Accounting for NPOs Ch. 2   Accounting for partnership firm – (Fundamentals) | 12 12 | 10 10 |
| | | Goodwill: Nature and valuation Ch. 3   Accounting for partnership firm – Reconstitution and Dissolution • Change in profit sharing ratio among the existing partners • Admission of a partner | 28 | 20 |
| UNIT TEST-I | MAY &JUNE | • Retirement and death of a partner Ch. 4   Accounting for partnership firm – Reconstitution and Dissolution | | |
| | JULY | • Dissolution of partnership firm Ch. 5   Accounting for Share Capital • Share and share capital • Accounting for share capital | 18 | |
| UNIT TEST-II | AUGUST | • Forfeiture and re-issue of share Ch. 6   Accounting for Debentures • Debentures- issue of debentures • Redemption of debentures **(Except conversion and purchase from open market)** | 10 | 20 |
| | SEPTEMBER | Part B:  **Financial Statement Analysis** Ch. 7 financial statements of a company Ch. 8  Analysis of financial statements(theory) • Tools for financial analysis(comparative &common size statements) • Ratio analysis | | 12 |
| | OCTOBER | **REVISION  AND HALF YEARLY EXAMINATION** | **Total: 80** | |
| | NOVEMBER | Ch. 8    Analysis of Financial Statements (theory) • Cash Flow Statement • Project work Unit – 1 : Project file              4 marks Unit – 2 : Written Test            12 marks Unit – 3 : Viva Voice              4 marks | | 08 20 |
| | DECEMBER | **REVISION & PRE-BOARD-I EXAMINATION** | | |
| | JANUARY | **REVISION &PRE-BOARD – II EXAMINATION** | | |
| | FEBRUARY | **REVISION** | | |
| | | **Total:** | | **100** |

<h1 style="text-align:center">QUESTION PATTERN (HALF-YEARLY)</h1>

| TYPE OF QUESTION(S) | MARK(S) PER QUESTION | TOTAL NO. OF QUESTIONS | TOTAL MARKS |
|---|---|---|---|
| VSA | 1 | 20 | 20 |
| SA – I | 3 | 2 | 06 |
| SA – II | 4 | 5 | 20 |
| LA – I | 6 | 3 | 18 |
| LA - II | 8 | 2 | 16 |
| **Total:** | | **32** | **80** |

<h2 style="text-align:center">BLUE PRINT (HALF-YEARLY)</h2>

| SL NO | CONTENTS UNIT/FORMS OF QUESTIONS | VSA (1) | SA-1 (3) | SA-2 (4) | LA-1 (6) | LA-2 (8) | TOTAL MARKS |
|---|---|---|---|---|---|---|---|
| 1 | Part –A Accounting for partnership firm Accounting for NPOs | 2 | - | 1 | 1 | - | 12 |
| 2 | Accounting for Partnership firm-(Fundamental) | 5 | 1 | 1 | - | - | 12 |
| 3 | Accounting for Partnership firm- Reconstitution & Dissolution | 4 | - | 1 | 2 | 1 | 28 |
| 3 | Accounting for share Capital | 6 | - | 1 | | 1 | 18 |
| 4 | Accounting for Debentures | 3 | 1 | 1 | - | - | 10 |
| **Total:** | | **1(20)** | **3(2)** | **4(5)** | **6(3)** | **8(2)** | **80** |

<h2 style="text-align:center">QUESTION PATTERN (PRE-BOARD EXAMINATION)</h2>

| TYPE OF QUESTION(S) | MARK(S) PER QUESTION | TOTAL NO. OF QUESTIONS | | TOTAL MARKS |
|---|---|---|---|---|
| | | PART-A | PART-B | |
| VSA | 1 | 13 | 7 | 20 |
| SA – I | 3 | 1 | 1 | 06 |
| SA – II | 4 | 4 | 1 | 20 |
| LA – I | 6 | 2 | 1 | 18 |
| LA - II | 8 | 2 | - | 16 |
| **Total:** | | 22 | 10 | **80** |

**N.B**

- Blue print of question paper for Pre Board/Annual examination will be as per CBSE guidelines.
- There will be  internal choices in  two questions of 3 marks and two questions of 4 marks .
- All questions carrying 8 marks will have a mandatory internal choice.
- There will be a competency based question carrying 3 -4 marks as per latest CBSE Syllabus.

# LEARNING OUTCOMES

## SUBJECT: ACCOUNTANCY (055)

| SL No. | Class | Name of the Text Book | Chapter/ Lesson | Learning Outcomes |
|---|---|---|---|---|
| 1 | | **ACCOUNTANCY PART–I ACCOUNTANCY PART– II (NCERT)** | Financial Statements of NPO | 1.States the meaning of a NPO and its distinction from a profit-making entity. |
| | | | | 2.Explains the accounting treatment of items of NPO |
| | | | | 3.understands fund-based accounting |
| | | | | 4.develop skill to prepare the financial statements of NPO |
| 2 | | | Accounting for Partnership Firm (Fundamentals) | 1.states the meaning of partnership and Partnership firm. |
| | | | | 2.Understands the provisions of Indian Partnership Act |
| | | | | 3.Able to prepare P/L Appropriation Account and do necessary past adjustments |
| | XII | | | 4.Develops the understanding and skill of valuation of goodwill. |
| 3 | | | Accounting for Partnership Firm (Reconstitution) | 1.States the meaning of sacrificing and Gaining ratio. |
| | | | | 2.Understandstheprovisionsofadmission and retirement. |
| | | | | 3.Explains the effect of retirement of a partner on change in profit sharing ratio |
| | | | | 4.Develop skill to do the required Adjustments on admission and Retirement of a partner |
| 4 | | | Accounting for Partnership Firm (Dissolution) | 1.Differentiates between dissolution of firm and partnership. |
| | | | | 2.Understands the cases of dissolution |
| | | | | 3.Develop skill to prepare dissolution and other related accounts |
| 5 | | | Accounting for share capital | 1.States the meaning of share and Share Capital |
| | | | | 2.Distinguish between equity shares and preference shares. |
| | | | | 3.Understands the provisions of issue And forfeiture |
| | | | | 4.Develops the understanding of accounting treatment of issue, forfeiture and reissue of shares |
| | | | | 5.Describesthepresentationof Share capital in the balances heet of the company |

| | | | | |
|---|---|---|---|---|
| 6 | | | Accounting for Debenture | 1.Understands the rules of issue and redemption. |
| | | | | 2.Understandstheconceptofcollateral security and its presentation in the balance sheet. |
| | | | | 3.Explains the accounting treatment of issue of debentures |
| | | | | 4.Develop the understanding of interest on debentures. |
| 7 | | | Financial Statements of a Company | 1.States the meaning, objectives and limitations of financial statement. |
| | | | | 2.Explains the procedure of presentation. |
| | | | | 3.Develop the skill to prepare the statement of P/L and Balance Sheet. |
| | | | | |
| 8 | | | Analysis of Financial Statements | 1.States the meaning, objectives and limitations of financial statement analysis |
| | | | | 2.Understands the benefit of financial analysis. |
| | | | | 3.Explains the uses for different interested groups. |
| | | | | 4.Develop the skill to analyze the financial statements by using different tools. |

# DAV PUBLIC SCHOOLS, ODISHA, ZONE
## SPLIT-UP OF SYLLABUS 2021-22
### CLASS: XII
## SUB: Banking (811)

**BOOKS PRESCRIBED:** Banking (NCERT)

| | MONTH | CHAPTER/TOPICS TO BE TAUGHT | CHAPTERWISE WEIGHTAGE | |
|---|---|---|---|---|
| | | | HALF YEARLY | ANNUAL |
| | APRIL | **PART-A :Employability Skills** | | |
| | | Unit1.Communication Skills | 10 | 10 |
| UNIT TEST-I | JUNE & JULY | Unit2.Self-management Skills Unit3. Information and Communication Technology Skills | | |
| UNIT TEST-II | AUGUST | **PART-B :Vocational Skills** | | |
| | | Unit1.Ancillary Services of Banks | 15 | 10 |
| | | Unit2. Innovation in Banking Tech. | 10 | 07 |
| | SEPTEMBER | Unit3. Organization of a Bank Branch | 15 | 10 |
| | | Unit4.Basics of Business Math. | 10 | 10 |
| | | **PROJECT WORK** | 40 | |
| | OCTOBER | **REVISION AND HALF YEARLY EXAMINATION** | **Total: 100** | |
| | NOVEMBER | **PART-A :Employability Skills** Unit 4.Entrepreneurial Skills Unit5. Green Skills | | |
| | | **PART-B :Vocational Skills** Unit5.RBI Regulations on Banks Unit6.Proforma of Final Accounts **Project Work** | | 08 05 40 |
| | DECEMBER | **REVISION & PRE-BOARD-I EXAMINATION** | | |
| | JANUARY | **REVISION &PRE-BOARD – II EXAMINATION** | | |
| | FEBRUARY | **REVISION** | | |
| | | | **TOTAL:** | **100** |

## QUESTION PATTERN (HALF-YEARLY)

| TYPE OF QUESTION (S) | MARK(S) PER QUESTION | TOTAL NO. O QUESTIONS | TOTAL MARKS |
|---|---|---|---|
| VSA | 1 | 30 | 30 |
| SA-I | 2 | 6 | 12 |
| SA-II | 3 | 2 | 06 |
| LA-I | 4 | 3 | 12 |
| **Total:** | | **41** | **60** |

**NB : PROJECT WORK TOPIC – – 40 Marks**

**TOTAL- 100 Marks**

# BLUE PRINT(HALF-YEARLY)

| SL NO. | CONTENTS UNIT/FORMS OF QUESTIONS | VSA (1) | SA-1 (2) | SA-2 (3) | LA-1 (4) | TOTAL MARKS |
|--------|----------------------------------|---------|----------|----------|----------|-------------|
| 1 | **Part-A**<br>**Employability Skills** | 4 | 3 | | | 10 |
| 2 | **Part-B**<br>**Unit1.Ancillary Services of Banks** | 6 | 1 | 1 | 1 | 15 |
| 3 | **Unit2.Innovation in Banking Tech.** | 8 | 1 | | | 10 |
| 4 | **Unit3.Organization of a Bank Branch** | 8 | | 1 | 1 | 15 |
| 5 | **Unit4.Basics of Business Math** | 4 | 1 | | 1 | 10 |
| | Total : | 1(30)=30 | 2(6)=12 | 3(2)=06 | 4(3)=12 | 60 |

## QUESTION PATTERN (ANNUAL)

| TYPE OF QUESTION (S) | MARKS(S) PE QUESTION | TOTAL NO. OF QUESTIONS | TOTAL MARKS |
|----------------------|----------------------|------------------------|-------------|
| VSA | 1 | 30 | 30 |
| SA-I | 2 | 6 | 12 |
| SA-II | 3 | 2 | 06 |
| LA-I | 4 | 3 | 12 |
| | TOTAL: | 41 | 60 |

**NB : PROJECT WORK TOPIC – – 40 Marks**

   **TOTAL- 100 Marks**

**N.B: Blue print of question paper for Pre-board/annual examination will be as per CBSE guidelines.**

# SPLIT UP OF SYLLABUS 21-22

## CLASS-XII SUB- MASS MEDIA STUDIES

**BOOK PRESCRIBED: Mass Media Studies [CBSE]**

| | MONTH | CHAPTERS/LESSONS TO BE TAUGHT | DISTRIBUTION OF MARKS FOR HALF YEARLY,PRE- BOARD AND BOARD XAMINATIONS |
|---|-------|-------------------------------|------------------------------------------------------------------------|
| | APRIL to JULY | **Part-A Skills**<br>Unit-1: Communication Skills<br>Unit-2:Self-management Skills<br>**Part-B Skills**<br>Unit-1: Selling/Marketing/<br>Exhibiting A Product through Advertising<br>Unit 2: Introduction to the Production Process | Theory 70 marks<br>Practical 30 marks<br>**Total Marks 100 marks**<br><br>**Part C Practical Work**<br>Practical Examination 15 marks<br>Viva Voce 05marks<br>**Total 20marks** |
| UT-I | AUG | **Part-A Skills**<br>Unit 3: Information and Communication Technology Skills | **Part D Project Work/Field Visit**<br>Practical File/Student Portfolio 10 marks<br>**Total 10 marks** |
| | SEPT. | **Part-A Skills**<br>Unit 4: Entrepreneurial Skills – IV<br>**Part-B Skills**<br>Unit 3: New Media<br>**Revision**<br>**Half Yearly Examination** | |
| | OCT. | **Part-A Skills**<br>Unit 5: Green Skills | |
| | NOV. | **Part-B Skills**<br>Unit 4: Creative Contributions of the Key People | |
| UT-II | DEC. | **Revision**<br>**Pre-Board-I** | |
| | JAN. | **Revision**<br>**Pre-Board-II** | |

# MASS MEDIA STUDIES (SUB.CODE-835)

**SESSION 2021-2022, BLUE PRINT**

**Total Marks: 100 (Theory-70 + Practical-30)**

## Part A

Employability Skills

Unit 1: Communication Skills

Unit 2: Self-Management Skills

Unit 3: ICT Skills

Unit 4: Entrepreneurial Skills

Unit 5: Green Skills

    **Total** :                             --- 10 Marks

## Part B

Subject Specific Skills

Unit 1: Selling / Marketing/ /Exhibiting A Product

through Advertising                   --- 20 Marks

Unit 2: Introduction to the Production Process    --- 20 Marks

Unit 3: New Media                           --- 10 Marks

Unit 4: Creative Contributions of the Key People  --- 10 Marks

## Part C

Practical Work

Practical Examination                     --- 15 Marks

Viva Voce                                --- 05 Marks

## Part D

Project Work/ Field Visit

Practical File/ Student Portfolio        --- 10 Marks

**GRAND TOTAL**                  **---**    **100 Marks**

**CLASS: XII:  SUB: HISTORY (027)**
**TEXTBOOK PRESCRIBED: TEXTBOOK FOR CLASS XII, HISTORY, NCERT**

| | MONTH | CHAPTERS/TOPIC TO BE TAUGHT | CHAPTER WISE WEIGHTAGE | |
| | | | HALF YEARLY | ANNUAL |
|---|---|---|---|---|
| UNIT TEST-I (JUNE) | APRIL TO JULY | Ch-1-Bricks, Beads, and Bones<br>Ch-2-Kings, Farmers and towns<br>Ch-3-Kinship, class and class<br>Ch-4-Thinkers, beliefs and buildings | 19 | 18 |
| | | Ch-6-Bhakti-sufi traditions<br>Ch-7-An imperial capital: Vijaynagar | 19 | 14 |
| UNIT TEST-II | AUGUST | Ch-9-Kings and Chronicles<br>Ch-10-Colonialism and the countryside: Exploring Official Archives<br>Ch-11-Rebels and the Raj | 19 | 17 |
| | SEPTEMBER | Ch-13-Mahatma Gandhi and the Nationalist movement<br>**Map Work**<br>**REVISION AND HALF-YEARLY EXAMINATION** | 18<br><br>05 | 14<br><br>05 |
| | OCTOBER | **Ch-15-Framing the constitution** | Total=80 | |
| | NOVEMBER | Ch-15-Framing the constitution (REVISION) | | 12 |
| | DECEMBER | **REVISION AND PRE-BOARD-I** | | |
| | JANUARY | **PRE-BOARD-II** | | |
| | | **TOTAL** | 80 | 80 |

| | | | |
|---|---|---|---|
| **QUESTION PATTERN FOR HYE & ANNUAL EXAM** | OTQ | 1x15 | 15 |
| | SB | 3x3 | 9 |
| | SA | 3X4 | 12 |
| | LA | 8X3 | 24 |

| | | |
|---|---|---|
| **EXTRACT** | 5X3 | 15 |
| **MAP** | 05 | 05 |
| **TOTAL** | | 80 |

# PROJECT WORK

| | | | |
|---|---|---|---|
| 1 | Project Synopsis | | 2 Marks |
| 2 | Data/Statistical analysis/Map work | | 3 Marks |
| 3 | Visual/overall presentation | | 5 Marks |
| 4 | Analysis/explanation and interpretation | | 5 Marks |
| 5 | Bibliography | | 1 Marks |
| 6 | Viva | | 4 Marks |
| | | TOTAL | 20 Marks |

## FEW SUGGESTIVE TOPICS FOR PROJECTS

1. The mysteries behind the mound of dead –Mohenjo-Daro

2. An In-depth study to understand Spiritual Archaeology in the Sub-Continent

3. Buddha's Path to Enlightenment

4. Insight and Reflection of Bernier's notions of The Mughal Empire

5. An exploratory study to know the women who created history

6. "Mahatma Gandhi" – A legendary soul

7. To reconstruct the History of Vijayanagar through the Archaeology of Hampi

8. The emerald city of Colonial Era –BOMBAY

9. Vision of unity behind the first war of Independence

10. Divine Apostle of Guru Nanak Dev

11. Help, Humanity and Sacrifices during Partition

12. Glimpses inside Mughals Imperials Household

13. The process behind the framing of the Indian Constitution

14. The 'Brahm Nirupam' of Kabir – A journey to Ultimate Reality

## LEARNING OUTCOMES
## SUBJECT-HISTORY (027)

| SL.NO | CLASS | NAME OF THE TEXT BOOK | CHAPTER | LEARNING OUTCOMES |
|---|---|---|---|---|
| 1 | XII | NCERT | Bricks, beads and bones | 1. Familiarize the learner with early urban centres as economic and social institutions.2.Illustrate how archaeological reports. |
| 2 | | | Kings, Farmers and towns | 1.Introduce inscriptional analysis.2.Understanding of political and economic processes.3.Major trends in the political and economic history of subcontinent. |

| 3 | | | Kinship, caste and class | 1.Learners familiarise the social history.2.Introduce strategies of textual analysis. 3.To know about the reconstructing of social strategies. |
|---|---|---|---|---|
| 4 | | | Thinkers, beliefs and buildings | 1.Learners will know about the religious developments in the early india.2.Introduce strategies of visual analysis.3.Use of reconstructing histories of religion. |
| 5 | | | Bhakti- Sufi traditions | 1.Familiarize the learner with religious development.2.Analyse devotional literature.3.To know about 2 important religion |
| 6 | | | An imperial capital: Vijayanagar | 1.Learners will know about the new buildings.2. Relationship between architecture and political system.3. Analyse the important structures of temple |
| 7 | | | Kings and chronicles | 1.Students will know about the Mughal dynasty.2. Familiarise about the different art and architecture of 16th century. |
| 8 | | | Colonialism and countryside: Exploring Official Archives | 1.To know about how colonialism affected Zamindars, Peasants and artisans.2. Familiarise about the lives of people.3. To know about how the events of 1857 are being reinterpreted. |
| 9 | | | Rebels and Raj | 1.Familiarize the learner with the history of modern urban centres.2. |
| 10 | | | Mahatma Gandhi and nationalist movement | 1.Familiarise the learner with significant elements and the nature of Gandhian leadership. |
| 11 | | | Framing the constitution | 1.Understand how much debates and discussions can be read by historians. |

## CLASS: XII: SUB: GEOGRAPHY (029)
### Text Book Prescribed:  Book-I Fundamentals of Human Geography (NCERT)
### Book-II India People and Economy (NCERT)
### Book-III Practical Work in Geography Part-II (NCERT)

| | MONTHS | CHAPTERS/TOPIC TO BE TAUGHT | CHAPTER WISE WEIGHTAGE | |
|---|---|---|---|---|
| | | | HALF-YEARLY | PRE-BOARD |
| | APRIL TO JULY | BOOK-I( FUNDAMENTALS OF HUMAN GEOGRAPHY ) CH-1-Human Geog-Nature & Scope CH-2-World Population-Distribution, Density &Growth CH-3-Poplation Composition CH-4-Hman Development | 20 | 30 |

| UNIT TEST-I | | CH:5-Primary Activities<br>CH-6-Secondary Activities*<br>CH-7-Tertiary & Quaternary Activities<br>CH-8.Transport and Communication*<br>CH-9.International Trade*<br>CH-10-Human Settlements | 20 | |
|---|---|---|---|---|
| | | *World Map Activities[Identification] | 5 | 5 |
| UNIT TEST-II | AUGUST | **BOOK-II (INDIA PEOPLE & ECONOMY)**<br>CH-1-India Population-Distribution, Density, Growth& Composition.<br>CH-2-Migration<br>CH-3-Human Development | 25 | |
| | SEPTEMBER | CH-4-Human Settlements<br>CH-5Land Resources and Agriculture*<br>CH-6-Water Resources<br>CH-7-Mineral & Energy Resources | | 30 |
| | SEPTEMBER - OCTOBER | **REVISION<br>HALF-YEARLY EXAMINATION** | | |
| | NOVEMBER | CH-8.Manufacturing Industries*<br>CH-9-Planning & Sustainable Development in Indian Context<br>CH-10Transport and Communication*<br>CH-11.International Trade*<br>CH-12-Geographical Perspective on selected Issues & Problems | | |
| | | -**India Map Activities | | 5 |
| | DECEMBER | **REVISION  & PRE-BOARD-I** | | |
| | JANUARY | **PRE-BOARD-II** | **Total=70** | **Total=70** |

## Learning Outcome
### CLASS: XII: SUB: GEOGRAPHY

| 1 | XII | NCERT-FUNDAMENTALS OF HUMAN GEOGRAPHY | Ch 1.Human Geography Nature and Scope | **The learner will be able to know :** |
|---|---|---|---|---|
| | | | | The students will Familiarise with the term, key word, concept, and basic principles of geography. |
| | | | | Explain  nature of human geography and it's relationship with other disciplines. |
| | | | | Understand and Analyze the interrelationship between physical and human environment and their impact . |
| 2 | XII | | Ch. 2 and Ch 3.The World Population, Distribution, Density and growth and composition | **The learner will be able to know :** |
| | | | | Students will understand population growth, distribution in India and world. |
| | | | | Understand about factors affecting growth of pop., causes and migration and composition. |
| | | | | Identification the factors for uneven distribution of pop. India and world. |
| | | | | Explain trends of pop growth since 1951. |

| | | | | Describe Rural, Urban pop. composition and analyses map showing density and distribution of pop and choropleth map. |
|---|---|---|---|---|---|
| | | | | students will understand sex composition and structure age sex pyramid rural-urban composition literacy rate and occupational structure |
| 3 | XII | | Ch 4 .Human Development | The learner will be able to : |
| | | | | Student will know the concept selected indicator International comparison of Human Development. |
| | | | | Student will differentiate between growth and development. |
| | | | | Student will know key areas of Human Development and importance of economic growth. |
| | | | | they will understand the factors prevent people to lead a long and healthy life |
| 4 | XII | | ch. 5,6,7. Primary, Secondary, Tertiary and Quaternary Activities. | The learner will be able to : |
| | | | | student will understand the changing Trends of gathering to modern agricultural activities in the world and India |
| | | | | student will understand the importance concept of manufacturing industry their types and people engage in different activities |
| | | | | they will know about the concept of trade transport tourism and Communication And Services with selected examples |
| | | | | student will know the concept of knowledge based industries and case study from selected countries. |
| 5 | XII | | Ch. 8.Transport and communication ( World and India) | The learner will be able to : |
| | | | | Compare different modes of transport and communication in world and India. |
| | | | | develops sensitivity towards the role of transport and communication integrating National global economy. |
| | | | | relate transparent communication and their role in enhancing trade and Commerce and also Tourism Development |
| | | | | students will understand the difference between Traditional and modern means of transport and communication and help their lives. |
| 6 | XII | | Ch. 9  International Trade | The learner will be able to : |
| | | | | understand the ancient methods of exchange of goods and services .(Barter system) |
| | | | | Apprehend history of international trade ,slave trade. |
| | | | | Know about reason for existence of International Trade and basis of international trade |
| | | | | understand the changing pattern of India's foreign trade. Sea port and Hinterland. |
| 7 | XII | | Ch. 10 . Human settlement (World and India) | The learner will be able to : |
| | | | | explain about settlement types and morphology, |

| | | | | Function. |
|---|---|---|---|---|
| | | | | know about classification of rural and urban settlement in the world and India. |
| | | | | perceive about the problems faced by rural and urban settlement in developing countries of the world |
| 7 | XII | NCERT - INDIA PEOPLE AND ECONOMY | ch-1. Population: Distribution, Density, growth and composition | **The learner will be able to :** |
| | | | | Understand distribution of population density and e growth in India. |
| | | | | what are the factors for uneven distribution of population in India |
| | | | | explanation of trend of population growth after independence till 21st century. |
| | | | | describes rural Urban population composition and analyse map showing density and distribution of population in choropleth map |
| 8 | XII | | **Ch. 2 Migration Types , Causes, and Consequences** | students will be able to know migration and distinguish between immigration and emigration. |
| | | | | classification of streams of migration causes of Migration on and consequence of migration |
| 9 | XII | | **Ch. 3. Human Development.** | students will be know the concept of selected indicators International comparison of Human Development |
| | | | | difference in growth and development |
| | | | | key areas of Human Development, Importance of economic growth. |
| | | | | factors prevents people to lead a long healthy life. |
| 10 | XII | | **Ch. 4. Human settlements.** | The students will be able to explain about supplement types and morphology |
| | | | | problems of rural and urban settlement in developing countries |
| | | | | function of rural and urban settlement in India |
| 11 | XII | | **Ch. 5.Land Resources and Agriculture** | **The learner will be able to :** |
| | | | | Understand the land use pattern and Agriculture land use Geography cal condition and distribution of major crops in India. |
| | | | | agricultural development in India problems and solution in India |
| | | | | cultivation method of different crops and their production and geography kal condition and distribution in India |
| 12 | XII | | **Ch 6. Water Resources.** | **The learner will be able to :** |
| | | | | Water Resources in India. Emerging problems. in India. |
| | | | | Availability and utilisation of irrigation in domestic and other uses |
| | | | | Causes of scarcity of water and their solution |
| | | | | Methods of rainwater harvesting and watershed Management in India |
| 13 | XII | | **Ch 7 Minerals and Energy Resources** | **The learner will be able to :** |
| | | | | know the different minerals and their importance distribution and occurrence. |

| | | | | Difference between conventional and nonconventional Minerals sources of energy and conservation of mineral and energy resources |
|---|---|---|---|---|
| | | | | They will understand the importance of mineral in their day-to-day life and their use |
| 14 | XII | | **Ch 8 . Manufacturing Industries** | **The learner will be able to :** |
| | | | | Access the importance of industries in national economy |
| | | | | Different factors affecting location of industries |
| | | | | Types of Industries, Distribution, Major Industries in India |
| | | | | Industrial policy, Changing pattern of industrial of selected industries. |
| | | | | impact of liberalisation ,privatisation and globalisation of industrial location. Major and Minor industrial region. |
| 15 | XII | | **Ch 9. Planning and sustainable development in Indian context** | students will be able to know the planning in India macro and micro level. |
| | | | | they will understand development and sustainable development |
| | | | | importance of Indira Gandhi Canal in Rajasthan and stages of command area development and their use |
| | | | | positive effects of Indira Gandhi Canal project and stages to promote sustainable development |
| 16 | XII | | **Ch. 10 Transport and communication** | **The learner will be able to :** |
| | | | | compare different modes of transport and communication in India |
| | | | | develop sensitivity towards the role of transport and communication indicating National global economy |
| | | | | relate the role in enhancing trade and Commerce and also tourism in India |
| | | | | importance of modern means of communication and use of Technology like satellite communication. |
| | | | | students will be able to  understand the ancient methods of exchange of goods and services .(Barter system) |
| | | | | History of international trade ,slave trade. |
| | | | | Reason for existence of International Trade and basis of international trade |
| | | | | changing pattern of India's foreign trade. Sea port and Hinterland. |
| 18 | XII | | **Ch 12 Geographical prospective on selected issues and problems in India** | **The learner will be able to :** |
| | | | | Understand environmental pollution urban waste disposal in India |
| | | | | main source of water air land and noise pollution India and causes UP Pollution |
| | | | | step to Tekken check pollution and land degradation in India |
| | | | | what is Slum?their problems and case study of (Dharavi in Mumbai) and their solution. |

# कक्षा - बारहवीं (XII)

## विषय - हिंदी (आधार /केन्द्रिक) ,कोड - (302 )

**अधिकृत पुस्तकें -**     (1) आरोह  भाग-२ :          (2) वितान  भाग -२

### (3) अभिव्यक्ति और संचार -माध्यम (कामकाजी हिंदी और रचनात्मक -लेखन )

| | Month | Chapters / Topics to be taught |
|---|---|---|
| **Unit Test - I** | अप्रैल | पद्य -आत्म -परिचय ,दिन जल्दी -जल्दी  ढलता है <br><br> गद्य -भक्तिन <br><br> पद्य -कविता के बहाने .पतंग <br><br> गद्य - बाजार -दर्शन , काले मेघा पानी दे | |
| | जून | पुनरावलोकन |
| **Unit Test- II** | जुलाई | पद्य -कैमरे में बंद अपाहिज ,सहर्ष स्वीकारा है , बात सीधी थी पर <br><br> गद्य - पहलवान  की ढोलक <br><br> वितान -सिल्वर -वेडिंग <br><br> अभिव्यक्ति और संचार माध्यम -अध्याय -३ |
| | अगस्त | पद्य - कवितावली ,ऊषा , बादल-राग (केबल पढ़ने के लिए ) <br><br> गद्य -चार्ली -चैप्लिन ,नमक <br><br> वितान—जूझ <br><br> संचार -माध्यम -अध्याय -४ |
| **Half Yearly Exam** | सितम्बर | वितान—अतीत में दबे पाँव |
| | | ### अर्द्ध-वार्षिक -परीक्षा -पुनरभ्यास -कार्य |
| | अक्टूबर | पद्य-लक्ष्मण -मूर्छा एवं राम का विलाप ,रुबाइयां ,गजल <br><br> गद्य -शिरीष के फूल <br><br> वितान -२ ,संचार-माध्यम -अध्याय -५ |
| | नवम्बर | पद्य -छोटा मेरा खेत चौकोना , बगुलों के पंख <br><br> गद्य - श्रम -विभाजन <br><br> वितान -डायरी के पन्ने |
| | दिसंबर 2021 | **प्री-बोर्ड -१** |
| | जनवरी 2022 | **प्री-बोर्ड -२** |

# अंक –विभाजन एवं प्रश्न – पत्र का प्रारूप

## कक्षा –बारहवीं (XII)

| | प्रश्न – संख्या | अर्द्ध –वार्षिक परीक्षा एवं वार्षिक –परीक्षा के लिए प्रश्न –पत्र का प्रारूप एवं अंक – विभाजन | अंक |
|---|---|---|---|
| **खंड क** | 1 | अपठित गद्यांश बोध पर पांच लघूत्तरात्मक प्रश्न | 5 x 2 = 10 Marks |
| | 2 | काव्यांश बोध पर आधारित एवं शीर्षक आधारित लघु प्रश्न | 5 |
| **खंड ख** | 3 | निबंध –लेखन किसी एक विषय पर विकल्प पर | 5 x 1 = 5 |
| | 4 | कार्यालयी –पत्र (विकल्प सहित ) | 5 x 1 = 5 |
| | 5 | प्रिंट –माध्यम , सम्पादकीय ,रिपोर्ट आदि पर आधारित पांच लघूत्तरात्मक प्रश्न | 5 |
| | 6 | आलेख किसी एक विषय पर विकल्प सहित | 10 |
| | 7 | फीचर –लेखन (जीवन सन्दर्भों से जुड़ी घटनाओं और परिस्थिति यों पर | 5 |
| **खंड ग** | 8 | दो काव्यांशों में से किसी एक पर अर्थ से संबधित तीन प्रश्न | 5 |
| | 9 | काव्यांशों पर आधारित सौंदर्य बोध पर विकल्प सहित किसी एक काव्यांश पर दो प्रश्न | 5 |
| | 10 | कविताओं की विषयवस्तु से सम्बंधित चार प्रश्नों में से दो लघूत्तरात्मक प्रश्न | 5 |
| | 11 | दो में से किसी एक गद्यांश पर अर्थग्रहण संबंधी तीन प्रश्न | 6 |
| | 12 | पाठों की विषयवस्तु पर आधारित चार बोधात्मक प्रश्न | 4 |
| | 13 | पूरक पुस्तक वितान से -पाठों की विषय वस्तु पर दो में से एक प्रश्न विकल्प सहित | 6 |
| | 14 | विषय वस्तु पर आधारित तीन में से दो प्रश्न | 4 |
| **खंड घ** | | श्रवण तथा वचन कौशल <br> परियोजना -कार्य | 10 <br> 10 |
| TOTAL | | | 100 |

## LEARNING OUT-COME CLASS – XII      SUBJECT – HINDI  आरोह भाग 2

| SL.NO | TOPIC/CHAPTERS | CATEGORY | LEARNING OUT COME |
|---|---|---|---|
| 1 | आत्मपरिचय | (कविता) | व्यक्ति दूसरों को जानने के अपेक्षा स्वयं को जानना जरूरी |
| | | | मनुष्य को सामाजिकता का निर्वाह करते हुए व्यावहारिक बनाना |
| 2 | पतंग | (कविता) | बच्चों को सपना देखने के लिए प्रेरित करना |
| | | | आसमान की ऊँचाइयों और उसके पार जाने का लक्ष रखना , |
| )3क( | कविता के बहाने | (कविता) | कविता की व्यापकता का प्रदर्शन करना |
| | | | कविता एक यात्रा है जो कण कण से लेकर जीव मात्र तक व्याप्त - है :- इसकी जानकारी देना |
| )3ख( | बात सीधी थी पर | (कविता) | सीधी सादी बातों द्वारा प्रभाव उत्पन्न करना- |
| | | | घुमाफिराकर बातें करने की शैली में उलझने के बजाय सपाट शब्दों- का प्रयोग करना सीखना |
| 4 | कैमरे में बंद अपाहिज | (कविता) | समाज व मीडिया की संवेदनहीनता से बच्चों को परिचित करवाना |
| | | | भावनात्मक शोषण कर रहे मीडिया और समाज का सामना करना |

| 5 | सहर्ष स्वीकार है | (कविता) | मानव मात्र में परमात्मा की उपस्थिति को स्वीकारना |
|---|---|---|---|
| | | | ईश्वरीय नियमों से बाहर निकलने को अहंकार से मुक्त होने की सलाह |
| 6 | उषा | (कविता) | प्रकृति से तादात्म्य का भाव उत्पन्न करना |
| | | | ग्राम्य परिवेश के प्रति विद्यार्थियों को आकृष्ट करना |
| 8 | कवितावली | (कविता) | प्रभु श्रीराम के प्रति प्रेम भाव जगाना |
| | | | लोकमंगल की साधना को समझना |
| 9 | रुबाइयाँ गजल, | (कविता) | प्रकृति का मानवीकरण कर आनंद प्राप्त करने में सक्षम होना |
| | | | लोकभाषा लोकपर्व मनाकर वात्सल्य भाव उत्पन्न करना सिखाना , |
| 10 | छोटा मेरा खेत | (कविता) | कविता और कृषि में समानता को समझाना |
| | | | किसान पेट की भूख को मिटाती है और कविता आत्मा की भूख को मिटाती है इस तत्व को समझना | |
| 11 | भक्तिन | गद्य | सेविका के संघर्षपूर्ण जीवन की मार्मिकता का परिप्रकाश करना |
| | | | स्त्री अस्मिता के संघर्षपूर्ण जीवन शैली से परिचित होना- |
| 12 | बाज़ार दर्शन | गद्य | बाज़ार के चकाचौंध से बचने की सलाह देना |
| | | | आवश्यकतानुसार खरीददारी करने की कला सिखाना |
| 13 | काले मेघा पानी दे | गद्य | विज्ञान और विश्वास के द्वंद्व से बचने की कला सिखाना |
| | | | विज्ञान और विश्वास से ही प्रकृति तथा मानव जाति के कल्याण होने की बात से परिचित कराना |
| 14 | पहलवान की ढोलक | गद्य | समाज में लोक कलाओं के अप्रासंगिक प्रक्रिया से छात्रों को यथार्थ का बोध कराना | |
| | | | पुरानी व्यवस्था में परिवर्तन भुखमरी की स्थिति का कारण बन जाने की बात का वर्णन | |
| 15 | चार्ली चैप्लिन यानी हम सब | गद्य | बड़े कलाकार चार्ली चैप्लिन के भीतर छिपे साधारण इंसान से रूबरू कराते हुए उनके व्यक्तित्व में करूणा एवं हास्य के सामंजस्य का बोध कराना |
| | | | व्यक्ति के वाह्य एवं आतंरिक दोनों पहलू से बच्चों को परिचित करना |
| 16 | नमक | गद्य | भारत - पाक विभाजन के समय की मार्मिकता का बोध कराना |
| | | | अपने परदेश की प्रचलित धारणाओं से छात्रों को-देश , पराये - अवगत कराना |
| 17 | शिरीष के फूल | गद्य | व्यक्ति को शिरीष के फूल के भांति स्थिर धैर्यवान और , | कर्तव्यशील बने जहने के लिए प्रेरित कराना |
| | | | साहित्य समाज व राजनीति में पुरानी व नई पीढ़ी के अंतरों की , और संकेत कराना |
| 18 | श्रम विभाजन और जाति - प्रथा | गद्य | डॉ भीमराव आम्वेदकर सदैव जातिगत भेदभाव का विरोध एवं उसे . जद से मिटनेकी इच्छा को प्रकट कराना | |
| | | | समानता स्वतंत्रता एवं बंधुता जैसे तीन तत्वों का वर्णन कराना , |
| | | वितान भाग 2 - | |
| 1 | सिल्वर वैडिंग | कहानी | प्राचीन रूढ़िवादी चिंतन एवं आधुनिकता की ओर बढ़ते समाज का अंतर्द्वंद्व को प्रमाणित करना |
| | | | सामाजिक विधि नियम तथा हृदय की संवेदनशीलता के बिच समन्वय स्थापित करना सिखाना |

| 2 | जूझ | कहानी | पारिवारिक बाधाओं के बीच  भी प्रगति संभव है  इस बात का - ज्ञान कराना |
| | | | एक गरीब किशोरी के जीवन का मार्मिक परिवेश में ,संवेदनशील , मध्यवर्गीय परिवारके जीवनशैली को अपनाने की कला - भी निम्न  सिखाना |
| 3 | अतीत में दबे पावँ | यात्रा वृतांत | ऐतिहासिक सिंधु घाटी की सभ्यता से परिचित कराना |
| | | | यात्रा वृतांत तथा रिपोर्ट लेखन शैली से बच्चों को परिचित कराना |
| 4 | डायरी के पन्ने | संस्मरण | आतंकवाद के दर्दनाक अध्याय का ज्ञान करा कर उससे बचने की सलाह देना |
| | | | द्वितीय विश्व युद्ध की भयावहता को स्पष्ट करना |

# CLASS – XII
## SUB : PAINTING (Code – 049)
### Book Prescribed : HISTORY OF INDIAN ART ( Full Marks Publication)

| TEST/ EXAM | MONTH | CHAPTER / TOPIC TOBE TAUGHT | MARK DIST-FOR HALF YEARLY EXAMINATION | MARK DIST-FOR PRE BOARD/ANNUAL EXAMINATION |
|---|---|---|---|---|
| UNIT TEST-I | APRIL | *Rajastani school of miniature Painting | 07 | 15 |
| | JUNE | *Pahari school of miniature Painting | 07 | |
| UNIT TE ST-II | JULY | *Mughal school of miniature Painting | 06 | |
| | | *Deccan school of miniature Painting | 03 | 10 |
| | AUGUST | *Introduction to Bengal School of Painting *Study of the Paintings of the Bengal School *Contribution of Indian Artists in the Struggle for National Freedom Movement  *Evolution of the National Flag | 07 | |
| HALF – YEARLY EXAM | SEPTEMBER | REVISION FOR HALF YEARLY EXAM | Total - 30 | |
| | OCTOBER | *The Modern Trends in Indian Art | | 05 |
| | NOVEMBER | * Painting, Graphic Prints and  Sculptures of the Contemporary (Modern) Indian Artists | | |
| P.B.-I | DECEMBER | REVISION AND PRE-BOARD- I EXAM | | |
| P.B.-II | JANUARY | PRE-BOARD- II EXAMINATION | | |
| | FEBRUARY | REVISION FOR BOARD EXAMINATION | | |
| | | | | Total - 30 |

## MARKING SCHEME FOR THEORY

|       | Mark(s) | No. of Questions | Total Marks | Type of Questions |
|-------|---------|------------------|-------------|-------------------|
| (i)   | 1       | 6                | **6**       | (Objective type)  |
| (ii)  | 2       | 3                | **6**       | (Ans about 30 words) |
| (iii) | 3       | 2                | **6**       | (Ans about 100 words) |
| (iv)  | 6       | 1                | **6**       | (Ans about 200 words) |
| (v)   | 6       | 1                | **6**       | (Ans about 200 words) |

## PAINTING (PRACTICAL)

**Max. Marks :70**                                    **Time : 6 hrs ( 3+3)**

| UNIT |                           | MARKS |
|------|---------------------------|-------|
| 1    | **Nature and Object Study** | 25    |
| 2    | **Painting Composition**  | 25    |
| 3    | **Portfolio Assessment**  | 20    |
|      |                           | 70    |

## Marking Scheme:

### Unit I – Nature and Object study                                    25 marks
Studies on the basis of exercises done in class XI with two or three objects and two draperies (in different colors) for background and foreground. Exercises in pencil with light and shade and in full colour from a fixed point of view.

### Unit II – Painting Composition                                      25 marks
Imaginative painting based on subjects from Life and Nature in water and poster colours With colour values.

### Unit III -  Portfolio Assessment                                    20 marks
(i)      Record of the entire year's performance from sketch to finished product      **(10)**
(ii)     Five selected nature and object study exercises in any media done    during this session
                                                                              **(05)**
(iii)    Three selected works of paintings composition done during this year        **(03)**
 iv)    Two selected works based on any Indian Folk Art (Painting)               **(02)**

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# 10 Principles of ARYA SAMAJ
## With Eternal Truths

1. God is the primary source of all true knowledge and of all that can be known through it.

2. God is Existent, Intelligent and Blissful. He is Formless, Almighty, Just Merciful, Unborn, Infinite, Unchangeable, Beginningless, Incomparable, Immortal, Fearless, Eternal, Holy and the Maker of the Universe. To Him alone worship is due.

3. The Vedas are the scriptures of true knowledge. It is the duty of all Aryas to read them, hear them being read and recite them to others.

4. We should always be ready to accept truth and give up untruth.

5. All actions should be performed in conformity with Dharma, that is, after due consideration of right and wrong.

6. The primary aim of the Arya Samaj is to do good for all, that is, promote their physical, spiritual and social well being.

7. We should treat all people with love, fairness and due regards for their merit.

8. We should aim at dispelling ignorance and promoting knowledge.

9. One should not only be content with one's own welfare, but should look for it in the welfare of others also.

10. One should regard oneself under restrictions to follow altruistic rulings of the society, while all should be free in following the rules of individual welfare.