

# GURGAON WORLD SCHOOL, PAHARI, PATAUDI

## CLASS-XII BIOLOGY

### YEARLY PLANNER(2024-2025)

| S.NO | MONTH | NAME OF THE CHAPTER  | ACTIVITY  | SMART CLASS ACTIVITY  |
|------|-------|--|---|---|
| 1.   | APRIL | <b>Unit-I Reproduction</b><br>1. Sexual Reproduction in flowering plants.<br>2. Human Reproduction<br>3. Reproductive health             | 1. Prepare a temporary mount to observe pollen germination.<br>2. Flowers adapted to pollination by different agencies (wind, insects, birds).<br>3. Pollen germination on stigma through a permanent slide<br>4. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides<br>5. T.S. of blastula through permanent slides | 1. Process of pollination in plants.<br>2. Pollen-pistil interaction<br>3. Process of Cleavage towards Uterus.<br>4. showing various IUDs |
| 2.   | MAY   | <b>Unit-II Genetics &amp; Evolution</b><br>3. Principles of inheritance & variation<br>4. Molecular Basis of inheritance<br>5. Evolution | 6. Mendelian inheritance using seeds of different colour.<br>7. Isolate DNA from available plant material such as spinach, green peaseeds, papaya, etc<br>8. Flash cards showing analogous and homologous organs.   | 1. Process of Replication of DNA<br>2. Process of Transcription<br>3. Process of translation<br>4. Process of DNA Fingerprinting          |
| 3.   | JULY  | <b>Unit-III Biology and Human Welfare</b><br>1. Human Health and Disease<br>2. Microbes in Human Welfare                                 | 9. Common disease causing organisms like Ascaris, Entamoeba, Plasmodium through permanent slides. Comment on symptoms of disease that they cause.   | 1. Life cycle of Plasmodium<br>2. Process of Replication of Retrovirus<br>3. Biogas plant   |

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|     |           | <b>Unit-IV Biotechnology and its Applications</b> ✓<br><br>3.Biotechnology:Principles & Processes<br><br>4..Biotechnology & its applications |   |  |
| 4.  | AUGUST    | <b>Unit-V Ecology and Environment</b><br><br>1.Organism & Population ✓<br>2.Ecosystem ✓<br>3.Biodiversity & its conservation                 | 10.Study the plant population densityby quadrat method.<br><br>11.Study the plant populationfrequency by quadrat method | 1.Process of r-DNA technology<br><br>2.process of Gel electrophoresis<br><br>3.PCR TECHNIQUE |
| 5.  | SEPTEMBER | REVISION   | ASSIGNMENTS/CLASS TESTS   | ORAL TEST  |
| 6.  | OCTOBER   | REVISION   | ASSIGNMENTS/CLASS TESTS   | ORAL TEST  |
| 7.  | NOVEMBER  | REVISION   | ASSIGNMENTS/CLASS TESTS   | ORAL TEST  |
| 8.  | DECEMBER  | REVISION   | ASSIGNMENTS/CLASS TESTS   | ORAL TEST  |
| 9.  | JANUARY   | REVISION   | ASSIGNMENTS/CLASS TESTS   | ORAL TEST  |
| 10. | FEBRUARY  | REVISION   | ASSIGNMENTS/CLASS TESTS   | ORAL TEST  |
| 11. | MARCH     | Annual Exam  | ----  | --   |




**CLASS XII YEARLY PLANNER**  
**SUBJECT - CHEMISTRY (2024-2025)**

| MONTH | CHAPTER                       | LAB ACTIVITY   | SMART CLASS ACTIVITY                                     |
|-------|-------------------------------|--|--|
| APRIL | 1. Ch - 1 Solution            | 1.To find the molarity and strength of given solution of potassium permanganate by titrating it against M/20 solution of Mohr 's salt  | 1.To show the formation of different types of solution . |
|       | 2. Ch - 2 Electrochemistry    | 2. To find the molarity and strength and given solution of potassium permanganate by titrating it against M/20 solution of Oxalic acid | 2.To show the phenomenon of osmosis.                     |
|       | 3. Ch - 3 Chemical kinetics   | 3.To find the no. of water molecules in given solution Mohr 's salt by titrating it against potassium permanganate solution            |  |
| MAY   | Ch-5 . Coordination Compounds | 1.To prepare the pure crystal of blue vitriol  | 1. To show working of cells                              |
|       | Ch-4 d and f block elements   | 2.To prepare the pure crystal of potash alum.  | 2.To show the mechanism of rusting of iron               |
|       | Ch-10.Biomolecules            |  | 3. To show the process of galvanisation.                 |
|       |                               | 1.To detect the presence of functional groups  | 1. To show pseudo chemical process.                      |

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|           |   | 2. Detection of unsaturation in the given compounds<br><br>3. Detection of alcohol and phenol detection of aldehydes, ketones and carboxylic acid. | 2. To show collision theory<br><br>3. To show effect of catalyst on rate of reactions   |
| JULY      | Ch-6 Haloalkanes and Haloarenes ✓<br><br>Ch-7. Alcohol, Phenol and Ethers ✓ | 1. To detect basic and acidic radicals   | 1. To show the phenomenon of isomerism.<br><br>2. To show working of valence bond theory.<br><br>3. To show working of crystal field theory                             |
| AUGUST    | Ch-8 Aldehydes, Ketones and Carboxylic acid<br>→ <i>gaining</i>             | 1. To find group 1 to 6 basic radical  | 1. To show the formation of primary, secondary and tertiary structure of protein<br><br>2. Structure of DNA<br><br>3. To show how the structure of glucose synthesized. |
| SEPTEMBER | Ch-9. Amines  | 1. To find acidic radicals   | 1. To show PPT on functional groups<br><br>2. To show PPT on lanthanoid contraction   |
| OCTOBER   | Revision  | Assignments<br>Class test  | Assignments<br>Class test   |
| NOVEMBER  | Revision  | Assignments<br>Class test  | Assignments<br>Class test   |
| DECEMBER  | Revision  | Assignments<br>Class test  | Assignments<br>Class test   |
| JANUARY   | Revision  | Assignments<br>Class test  | Assignments<br>Class test   |
| FEBRUARY  | Revision  | Assignment<br>Class test   | Assignment<br>Class test  |



**CLASS XII**  
**PHYSICS YEARLY PLANNER**  
**2024-2025**

| MONTH | CHAPTER  | LAB ACTIVITY  | SMART CLASS ACTIVITY   |
|-------|--|---|--|
| APRIL | 1. Electric Charges and Fields<br>2. Electrostatic Potential and Capacitance<br>3. Current Electricity               | 1. To determine resistivity of two / three wires by plotting a graph for potential difference versus current.<br>2. To find resistance of a given wire / standard resistor using metre bridge.<br>3. To measure resistance, voltage (AC/DC), current (AC) and check continuity of a given circuit using multimeter. | 1. To show formation of current due to charge carrier<br>2. To show combination of cell              |
| MAY   | 1. Moving Charges and Magnetism<br>2. Magnetism and Matter<br>3. Electromagnetic Induction<br>4. Alternating Current | 1. To verify the laws of combination (series) of resistances using a metre bridge.<br>2. To determine resistance of a galvanometer by half-deflection method and to find its figure of merit.<br>3. To assemble a household circuit comprising three bulbs, three (on/off) switches, a fuse and a power source.     | 1. To show motion of charges in magnetic field<br>2. Differentiate dia, para, ferromagnetic material |
| JULY  | 1. Electromagnetic Waves<br>      | 1. To find the focal length of a convex lens by plotting graphs between $u$ and $v$   | 1. To show spectrum of electromagnetic wave  |

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|                  | 2. Ray Optics and Optical Instruments<br><i>gaf</i><br>3. Wave Optics<br><i>LHP</i> | or between $1/u$ and $1/v$ .<br>2. To assemble the components of a given electrical circuit.<br>3. To study the nature and size of the image formed by a (i) convex lens, or (ii) concave mirror, on a screen by using a candle and a screen (for different distances of the candle from the lens/mirror).  | 2.study about optical instrument<br><br>3. diffraction of light through single slit     |
| <b>AUGUST</b>    | 1.Wave Optics<br>2. Dual Nature of Radiation and Matter<br>3.Atoms                  | 1.To find the focal length of a concave lens, using a convex lens.<br>2. To observe refraction and lateral deviation of a beam of light incident obliquely on a glass slab.   | 1. Rutherford alpha scattering experiment<br><br>2. To study about photoelectric effect |
| <b>SEPTEMBER</b> | 1.Nuclei<br>2.Semiconductor Electronics: Materials, Devices and Simple Circuits     | 1. To determine angle of minimum deviation for a given prism by plotting a graph between angle of incidence and angle of deviation.<br>2. To draw the I-V characteristic curve for a p-n junction diode in forward and reverse bias.<br>3. To obtain a lens combination with the specified focal length by using two lenses from the given set of lenses. | 1. study about electronic devices<br><br>2. explain about bohr model of atom            |
| <b>OCTOBER</b>   | <b>REVISION</b>   | <b>Assignments</b>  | <b>Assignments</b>  |
|                  |   |   |   |

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|-----------------|-------------|-------------------------|-----------|
| <b>NOVEMBER</b> | REVISION    | ASSIGNMENTS/CLASS TESTS | ORAL TEST |
| <b>DECEMBER</b> | REVISION    | ASSIGNMENTS/CLASS TESTS | ORAL TEST |
| <b>JANUARY</b>  | REVISION    | ASSIGNMENTS/CLASS TESTS | ORAL TEST |
| <b>FEBRUARY</b> | REVISION    | ASSIGNMENTS/CLASS TESTS | ORAL TEST |
| <b>MARCH</b>    | Annual Exam | ----                    | --        |



**Class:12<sup>th</sup>**  
**Subject:Physical Education**  
**Syllabus**

**2024-25**

| Month     | Name of Books | Content  | Subject Activity  | Smart Activity  |
|-----------|---------------|--|---|---|
| April     |               | 1. Management Of Sporting Events<br><br>2. Children And Women In Sports  | Draw a fixture related to tournament<br><br>Different types of deformity  | Fixture of Tournaments  |
| May       |               | 3. Yoga As Preventive Measure For Lifestyle<br><br>4. Physical Education And Sports For CWSN                   | Yogasana<br><br>Draw a list sportsperson with their medals                | Asanas<br>Surya Namaskar  |
| July      |               | 5. Sports And Nutrition ✓<br><br>6. Test And Measurement In Sports<br><br>7. Physiology And Injuries In Sports | Balance diet pre - post tournament<br><br>Physical fitness test           | Different types of Fracture   |
| August    |               | 8. Biomechanics And Sports<br><br>9. Psychology And Sports<br><br>10. Training In Sports                       | Newton's laws in sports<br><br>Aggression in sports<br>Talent Development | Projectile in sports<br><br>Friction in sports<br><br>Warming up , Cooling down , arobic and anaerobic exercise |
| September |               | Practical work   | Written , practical and oral practice                                     |   |



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|----------|--|-------------|---|--|
| October  |  | Revision    | Written ,<br>practical and<br>oral practice |  |
| November |  | Revision    | Written ,<br>practical and<br>oral practice |  |
| December |  | Revision    | Written<br>practical and<br>oral practice   |  |
| January  |  | Revision    | Written ,<br>practical and<br>oral practice |  |
| February |  | Revision    |   |  |
| March    |  | Examination |   |  |

**Class:12<sup>th</sup>**  
**Subject:English (Core)**  
**Syllabus**

**2024-25**

| Month | Name of Books | Content  | Subject Activity   | Mike Activity  |
|-------|---------------|--|--|--|
| April | Flamingo      | Prose- *The Last Lesson<br>*Lost Spring<br>*Deep Water<br>*The Rattrap<br><br>Poetry-<br>*My Mother at Sixty Six<br>*Keeping Quiet<br>*A thing of Beauty<br><br>Writing Skill- Notice<br><br>*The Third Level<br>*The Tiger King<br>*Journey to the End of the Earth<br>*The Enemy | Movie on Last Lesson<br><br>Documentary on Bangle making Industry and seemapuri slum | -Importance of Mother in life.<br><br>- Child labour.<br><br>-Glass Bangle industry<br><br>-Old Age people and their problems<br>-Women Empowerment<br><br>-Philately helps to keep past Alive |
| May   | Flamingo      | Prose-<br>*Indigo<br>*Poets and Pancakes<br><br>Poetry- A Roadside Stand<br><br>Writing skill- Invitation and reply<br><br>*On the Face of it  | Documentary on indigo Event<br><br>Plight of differently abled child                 | Bollywood of 19 <sup>th</sup> century vs 21 <sup>st</sup> century<br><br>Drafting invitation card  |
|       | Vistas        |  |  |  |
|       | Vistas        |  |  |  |



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|-----------|----------|---|--|---|
| July      | Flamingo | Prose-<br>*The Interview<br>*Going Places   | Conduct<br>interviews of<br>any 5 people<br>around you | *Teen age and<br>Heroism<br><br>*Women<br>Empowerment |
|           | Vistas   | Poetry-<br>*Aunt Jennifer's Tiger<br><br>Writingskill-<br>Job Application/ Letter to<br>Editor<br><br>Memories of Childhood |  |   |
| August    | Flamingo | Unseen passage<br><br>Report Writing<br><br>Article Writing<br><br>Revision   | Written and<br>oral practice                           |   |
| September | Vistas   | Revision  | Written and<br>oral practice                           |   |

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|----------|------------------------------|----------|------------------------------|--|
| October  | Flamingo                     | Revision |                              |  |
|          | Vistas(Sup<br>pl.<br>Reader) |          | Written and<br>oral practice |  |
| November | Flamingo                     | Revision |                              |  |
|          | Vistas(Sup<br>pl.<br>Reader) |          | Written and<br>oral practice |  |
| December | Flamingo                     | Revision |                              |  |
|          |                              |          | Written and<br>oral practice |  |

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|----------|------------------------------|-------------|------------------------------|--|
|          | Vistas(Sup<br>pl.<br>Reader) |             |                              |  |
| January  |                              | Revision    | Written and<br>oral practice |  |
| February |                              | Revision    |                              |  |
| March    |                              | Examination |                              |  |



**GURGAON WORLD SCHOOL PAHARI (PATAUDI)**  
**CLASS XII (MATHEMATICS)**  
**YEARLY PLANNER (2024-25)**

| Sr. No | Month  | Name of the Chapter  | Activity  | SMART CLASS ACTIVITY   |
|--------|--------|--|---|--|
| 01     | April  | 1. Matrices<br>2. Determinants<br>3. Relations and Functions                             | 1. Solve practical problems by using matrix method.<br>2. Practically finding the area of a triangle by the help of determinants.   | -----  |
| 02     | May    | 1. Inverse Trigonometric Functions<br>2. Continuity<br>3. Differentiability              | 1. To verify that the relation $R$ in the set $L$ of all lines in a plane, defined by $R = \{(l, m) : l \parallel m\}$ is an equivalence relation<br>2. To demonstrate a function which is one-one but not onto.  | To show the graphs of all functions and study their domain and range       |
| 03     | July   | 1. Application of derivative<br>2. Indefinite Integrals<br>3. Application of Integration | 1. To find analytically the limit of a function $f(x)$ at $x = c$ and also to check the continuity of the function at that point<br>2. To understand the concepts of decreasing and increasing functions.<br>3. To verify that amongst all the rectangles of the same perimeter, the square has the maximum area.   | To show the rate of change of one object with respect to the other object. |
| 04     | August | 1. Differential Equations<br>2. Probability<br>3. Vector and 3 D Geometry                | 1. To understand the concepts of local maxima, local minima and point of inflection.<br>2. To evaluate the definite integral $\int_a^b (ax^2 + bx + c) dx$ as the limit of a sum and verify it by actual integration.<br>3. To find the time when the area of a rectangle of given dimensions become maximum, if the length is decreasing and the breadth is increasing at given rates. | To study the three dimensional geometry with xyz plane.                    |