

# St Xavier's School, Doranda, Ranchi

## SYLLABUS FOR Class IX (2024-2025)

### ENGLISH

#### Grammar Topics (Both the terms)

1. Essay in 300 – 350 words (Descriptive, Narrative, Argumentative, Story Writing with theme/opening line/ closing line)
2. Informal/ Formal Letter writing
3. Notice and Email Writing
4. Unseen passage (Question & Answer/ Synonym/ Antonym/ Précis writing)
5. Grammar – Prepositions, Synthesis, Transformation of sentences, Correct form of word

#### **PROJECT (20 MARKS) –**

#### Literature topics

#### Month

- |  |       |
|--|-------|
| 1. A Work of Artifice (poem)             | April |
| 2. Oliver Asks for More (prose)          | April |
| 3. Act I Sc i (Julius Caesar)            | May   |
| 4. Skimbleshanks: The Railway Cat (poem) | June  |
| 5. Banku Babu's Friend (prose)           | June  |

#### **1<sup>st</sup> Unit Test – June (20 Marks) – Oliver Asks for More, Act I Sc i**

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|----------------------------------|-----------|
| 6. Act I Sc ii (Julius Caesar)   | July      |
| 7. I Remember, I Remember (poem) | July      |
| 8. The Model Millionaire (prose) | August    |
| 9. Act I Sc iii (Julius Caesar)  | August    |
| REVISION                         | September |

#### **First Terminal Examination September – All the chapters taught in the First Term**

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|-------------------------------------|----------|
| 10. Act II Sc i (Julius Caesar)     | October  |
| 11. Act II Sc ii (Julius Caesar)    | October  |
| 12. A Doctor's Journal Entry (poem) | November |
| 13. Act II Sc iii (Julius Caesar)   | November |
| 14. The Home-coming (prose)         | November |
| 15. The Night Mail (poem)           | December |

#### **2<sup>nd</sup> Unit Test – December (20 marks) - Act II Sc I, A Doctor's Journal Entry**

- |  |                    |
|--|--------------------|
| 16. Act II Sc iv (Julius Caesar)       | January            |
| 17. The Boy who Broke the Bank (prose) | January            |
| REVISION                               | January & February |

#### **Final Examinations – February – All the chapters taught in both the terms**

**PROJECT (20 MARKS)**

**English Literature** – With reference to the poem **A Work of Artifice**, *gender inequality* is discrimination on basis of gender, causing one to be routinely privileged or prioritized over the other. (To include History of Patriarchy, Types of social Inequality, Causes of gender Inequality and Ways to end discrimination)

**English Language** – Transformation of Sentences – Use of adverb ‘too’, as soon as, hardly/Barely/ Scarcely... when, No sooner... than, Change of degrees of Adjective, Same words in different part of speech, use of – Despite/ In spite of/ Though/ Although/ Unless/If/ But for.../ rather... than/ Prefer... to/ Provided/ Active – passive/ Direct – Indirect/

**\*Explanation of the rules with 3 examples each**

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# HINDI

## Mid Term

### Section A (40 Marks)

**भाषा** – व्याकरण पल्लव तथा व्यावहारिक व्याकरण की विस्तृत जानकारी हेतु व्याकरण की अन्य पुस्तकों से भी ज्ञान प्राप्त करना

1. प्रस्तावना
2. कहानी लेखन
3. चित्र लेखन
4. पत्र लेखन- क- औपचारिक , ख- अनौपचारिक
5. भाव ग्रहण (अपठित गद्यांश)
6. व्यावहारिक व्याकरण

### Section -B (40 Marks)

#### साहित्य – गद्य

1. बात अठनी की
2. काकी
3. महायज्ञ का पुरस्कार

#### पद्य –

1. साखी
2. गिरिधर की कुंडलियाँ
3. स्वर्ग बना सकते हैं

**UNIT TEST-** बात अठनी की , साखी  
व्यावहारिक व्याकरण

परियोजना कार्य –हिन्दी भाषा का उद्भव और विकास

### Final Term

#### Section-A (40 Marks)

1. प्रस्तावना
2. कहानी लेखन
3. चित्र लेखन
4. पत्र लेखन- क- औपचारिक , ख- अनौपचारिक
5. भाव ग्रहण (अपठित गद्यांश)
6. व्यावहारिक व्याकरण

#### Section -B (40 Marks)

#### साहित्य- गद्य

1. नेता जी का चश्मा
2. अपना-अपना भाग्य
3. बड़े घर की बेटी

#### पद्य-

1. वह जन्मभूमि मेरी
2. मेघ आए
3. सूर के पद

**NOTE-** प्रथम सत्र के गद्य और पद्य के शेष पाठ भी संलग्न ।

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**HISTORY AND CIVICS (H.C.G-PAPER -1)**  
**SECTION A: CIVICS**

**1. The Union Legislature [April ]**

*Meaning of the federal setup in India.*

*(i) Lok Sabha - term, composition, qualifications for membership. Parliamentary procedures: a brief idea of sessions, quorum, question hour, adjournment and no-confidence motion. Speaker – election and functions.*

*(ii) Rajya Sabha – composition, qualifications for membership, election, term, Presiding Officer.*

*Powers and functions of Union Parliament -(legislative, financial, judicial, electoral, amendment of the Constitution, control over executive). Exclusive powers of the two Houses.*

**2. The Union Executive**

(a) The President: [**September/October**]

*Qualifications for election, composition of Electoral College, reason for indirect election, term of office, procedure for impeachment.*

*Powers (executive, legislative, financial, judicial, discretionary and emergency)*

(b) The Vice-President: *Qualifications for election, term of office and powers.*

**SECTION B: HISTORY**

**1. The Indian National Movement (1857 - 1917)**

(a) The First War of Independence, 1857 [**May**]

*Only the causes (political, socio-religious, economic and military) and consequences will be tested. [The events, however, need to be mentioned in order to maintain continuity and for a more comprehensive understanding.]*

(b) Factors leading to the growth of Nationalism [**July**]

*– economic exploitation, repressive colonial policies, socio-religious reform movements (brief mention of contribution of Raja Rammohan Roy and Jyotiba Phule) and role of the Press.*

*Foundation of the Indian National Congress - the Indian National Association (Surendranath Banerjee) and the East India Association (Dadabhai Naoroji) as precursors. Immediate objectives of the Indian National Congress - the first two sessions and their Presidents should be mentioned.*

**The Contemporary World**

(a) The First World War [**May**]

*Causes (Nationalism and Imperialism, Armament Race, division of Europe and Sarajevo crisis) and Results (Treaty of Versailles, territorial rearrangements, formation of League of Nations).*

(b) Rise of Dictatorships [**July**]

*Causes for the rise of Fascism in Italy and the rise of Nazism in Germany. A comparative study of Mussolini’s Fascist and Hitler’s Nazi ideologies.*

(c) The Second World War [**August**]

*Causes (Dissatisfaction with the Treaty of Versailles, Rise of Fascism and Nazism, Policy of Appeasement, Japanese invasion of China, Failure of League of Nations and Hitler’s invasion of Poland). Brief mention of the attack on Pearl Harbour and bombing of Hiroshima and Nagasaki. Consequences (Defeat of Axis Powers, Formation of the United Nations and Cold War).*

(d) United Nations[**November**]

(i) The objectives of the U.N.

*The composition and functions of the General Assembly, the Security Council, and the International Court of Justice.*

(ii) Major agencies of the United Nations [**November**]

*UNICEF, WHO and UNESCO - functions only.*

(e) Non-Aligned Movement [**December**]

*Brief meaning; objectives; Panchsheel; role of Jawaharlal Nehru; Names of the architects of NAM.*

**INTERNAL ASSESSMENT**

UNIT TEST: UNION LEGISLATURE

FIRST TRRM: All chapters taught in the first term.

SECOND TERM: All Chapters taught in the first term and the second term.

PROJECT TOPIC: Presentation on Presidential v/s Parliamentary government in class.

( group-wise ).

Date of Submission:

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# GEOGRAPHY

## **MID TERM (April to September)**

### **April and May**

#### **Ch.2: Geographic Grid - Latitude and Longitudes.**

Concept of latitudes: Main latitudes, their location with degrees, parallels of latitude and their uses, Concept of longitude - Prime meridian, time( local standard and time zones), Greenwich Mean Time and International Date Line. Eastern and Western hemisphere. Great and small circle.

#### **Ch.3: Rotation and Revolution**

Rotation - direction, speed and its effects (occurrence of day and night, the sun rising in the east and setting in the west, Coriolis effect)

Revolution of the Earth and its inclined axis- effects: the variation in the length of day and night and seasonal changes with equinoxes and solstices.

### **UNIT TEST - Ch.2: Geographic Grid - Latitude and Longitudes and Ch.3: Rotation and Revolution**

### **June**

#### **Ch.4: Earth's structure**

Core, mantle, crust- meaning, extent and their composition.

### **July**

#### **Ch.6: Rocks**

Difference between rocks and minerals, types of rocks: igneous, sedimentary, metamorphic - their characteristics and formation; rock cycle.

#### **Ch.7: Volcanoes**

Meaning, types – active, dormant, extinct. Effects - Constructive and destructive.

Important volcanic zones of the world.

### **August + September**

#### **Ch.8 : Earthquakes**

Meaning, causes and measurement.

Effects: Destructive and constructive.

Earthquake zones of the world.

#### **Ch 9: Weathering and Denudation**

Meaning, types and effects of weathering.

Types: Physical weathering: block and granular disintegration, exfoliation;

Chemical weathering: oxidation, carbonation, hydration and solution;

Biological weathering: caused by humans, plants and animals.

#### **Map work for Mid term:**

The oceans, Seas, Gulfs and Straits

Rivers – Mississippi, Colorado, Amazon, Paraguay, Nile, Zaire, Niger, Zambezi, Orange, Rhine, Volga, Danube, Murray, Darling, Hwang Ho, Yangtse Kiang, Ob, Indus, Ganga, Mekong, Irrawady, Tigris, Euphrates

## **FINAL TERM (October to February)**

### **October**

#### **Ch.10: Hydrosphere**

Meaning of hydrosphere.

Waves

Tides – formation and pattern.

Ocean currents- their circulation pattern and effects. (specifically of Gulf Stream, North Atlantic Drift, Labrador Current, Kuro Shio and Oya Shio.)

### **November + December**

#### **Ch. 12: Insolation**

Meaning of insolation and terrestrial radiation

Factors affecting temperature: latitude, altitude, distance from sea, slope of land, winds and ocean currents.

#### **Ch. 13: Atmospheric Pressure and Winds**

Meaning and factors that affect atmospheric pressure.

Major pressure belts of the world.

Factors affecting direction and velocity of wind - pressure gradient, Coriolis Effect.

Permanent winds - Trades, Westerlies and Polar Easterlies.

Periodic winds – Land and sea breezes, monsoons

Local winds – Loo, Chinook, Foehn and Mistral

Variable winds – Cyclones and anticyclones

#### **Ch. 14: Humidity and Precipitation**

Precipitation – forms: rain, snow and hail

Types of rainfall - relief/orographic, convectional, cyclonic/frontal with examples from different parts of the world.

## **UNIT TEST - Ch.10: Hydrosphere and Ch. 12: Insolation**

### **January**

#### **Ch. 16: Natural Regions of the world**

Location, area, climate, natural vegetation and human adaptation.

Equatorial region, Tropical grassland, Tropical Deserts, Tropical Monsoon, Mediterranean, Temperate grasslands, Tundra and Taiga .

#### **Map work for Final term:**

Major Natural Regions of the world.

Including the maps from the Mid term

## **PROJECT TOPIC: WATER SCARCITY**

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# MATHEMATICS

## **1st Unit test portion**

1. Indices
2. Logarithms
3. Expansion

## **First Term Portion :**

1. Indices
2. Logarithms
3. Expansion
4. Factorisation
5. Simultaneous Equations
6. Co ordinate Geometry
7. Graphical Solutions
8. Rational Number
9. Compound Interest without formula
10. Compound Interest with formula
11. Congruency of triangle
12. Isosceles triangle
13. Pythagoras theorem

## **2nd Unit test portion**

1. Midpoint theorem and it's Converse
2. Trigonometrical Ratios
3. Trigonometrical relations of standard angles
4. Solution of Right Angles
5. Complementary Angles

## **Second Term Portion**

1. Trigonometrical Ratios
2. Trigonometrical relations of standard angles
3. Solution of Right Angles
4. Complementary Angles
5. Midpoint theorem and it's Converse
6. Rectilinear figures
7. Construction of polygons
8. Area theorem
9. Circle
10. Statistics
11. Mean , median , mode
12. Area and perimeter of plane figures
13. Solids
14. Distance Formula

## **Final Term Portion**

All the chapters taught in first term and second term



## Monthly Break-up

Month	Topics to be covered
April	<ol style="list-style-type: none"><li>1. Indices</li><li>2. Logarithms</li><li>3. Expansions</li><li>4. Factorisation</li></ol>
May	<ol style="list-style-type: none"><li>1. Continuation of factorisation</li><li>2. Simultaneous Equations</li></ol>
June	<ol style="list-style-type: none"><li>1. Co ordinate Geometry</li><li>2. Graphical Solutions</li><li>3. Rational Number</li></ol>
July	<ol style="list-style-type: none"><li>1. Compound interest without formula</li><li>2. Compound interest with formula</li><li>3. Congruency of triangle</li></ol>
August	<ol style="list-style-type: none"><li>1. Isosceles triangle</li><li>2. Pythagoras theorem</li><li>3. Revision</li></ol>
September	<ol style="list-style-type: none"><li>1. Revision for Mid term exam</li><li>2. Trigonometrical Ratios</li><li>3. Trigonometrical relations of standard angles</li></ol>
October	<ol style="list-style-type: none"><li>1. Solution of Right Angles</li><li>2. Complementary Angles</li><li>3. Midpoint theorem and it's Converse</li></ol>
November	<ol style="list-style-type: none"><li>1. Rectilinear figures</li><li>2. Construction of polygons</li><li>3. Area theorem</li></ol>
December	<ol style="list-style-type: none"><li>1. Circle</li><li>2. Statistics</li><li>3. Mean , median , mode</li><li>4. Area and perimeter of plane figures</li></ol>
January	<ol style="list-style-type: none"><li>1. Solids</li><li>2. Distance Formula</li></ol>

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# CHEMISTRY

## **Mid Term Syllabus:**

1. Language of Chemistry
2. Chemical Changes and Reactions
3. Water
4. Gas Laws
5. Pollution

**Unit Test:** Language of Chemistry and Chemical Changes and Reactions

## **Final Term Syllabus:**

1. Atomic Structure and Chemical Bonding
2. Periodic Table
3. Hydrogen

## **Unit Test:**

Atomic Structure and Chemical Bonding, The Periodic Table

**Final Term Examination: All chapters of class 9**

## **MONTHLY BREAKUP OF SYLLABUS:**

April: Language of Chemistry, Chemical Changes and Reactions

May: Chemical Changes and Reactions continued

June: Water

July: Gas Laws

August: Pollution and Revision .

October: Periodic Table

November: Hydrogen

December: Introduction to Class 10 Organic Chemistry

January: Revision

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# PHYSICS

## First unit test

Ch-1 measurement and experimentation

## Second unit test

Ch-4 pressure in fluids and atmospheric pressure

Ch-5 upthrust in fluids, Archimedes' principle and flotation

## First term syllabus

Ch-1 measurement and experimentation

Ch-2 motion in one dimension

Ch-3 laws of motion

Ch-6 heat and energy

Ch-7 reflection of light

## Final term syllabus

Ch-1 measurement and experimentation

Ch-2 motion in one dimension

Ch-3 laws of motion

Ch-4 pressure in fluids and atmospheric pressure

Ch-5 upthrust in fluids, Archimedes' principle and flotation

Ch-7 reflection of light

Ch-8 propagation of sound waves

Ch-9 current electricity

Ch-10 magnetism

## Physics practical

1. To determine the least count of the vernier callipers and measure the length and diameter of a small cylinder.
2. To determine the pitch and least count of the given screw gauge and measure the mean radius of the given wire.
3. To measure the volume of a given metal bob by measuring its radius using vernier callipers and to verify the volume measured by the measuring jar.

4. To determine the time period of a simple pendulum for different lengths and to plot a graph between  $l$  and  $T^2$ . To calculate the slope of this graph and to use it to find the value of 'g' in the laboratory by the method  $g=4\pi^2$  slope
5. To verify the laws of reflection of light by using a plane mirror.
6. To prove that the image formed in a plane mirror is as far behind the mirror as the object is in front of it.
7. To determine the focal length of a concave mirror by obtaining an image of a distant object.

### Month wise syllabus

<b>April</b>	<b>Ch-1</b> measurement and experimentation
<b>May/June</b>	<b>Ch-2</b> motion in one dimension
<b>July</b>	<b>Ch-3</b> laws of motion
<b>August</b>	<b>Ch-6</b> heat and energy
<b>August /September</b>	<b>Ch-7</b> reflection of light
	<b>Revision</b>
<b>October</b>	<b>Ch-4</b> pressure in fluids and atmospheric pressure
<b>November</b>	<b>Ch-5</b> upthrust in fluids, Archimedes' principle and flotation
<b>December</b>	<b>Ch-8</b> propagation of sound waves
<b>January</b>	<b>Ch-9</b> current electricity
	<b>Ch-10</b> magnetism
<b>February</b>	<b>Revision</b>

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## BIOLOGY

<u>MID TERM PORTION</u>	<u>FINAL TERM PORTION</u>
<ul style="list-style-type: none"><li>• CELL: THE UNIT OF LIFE</li><li>• TISSUES: PLANT AND ANIMAL TISSUES</li><li>• ECONOMIC IMPORTANCE OF BACTERIA AND FUNGI</li><li>• AIDS TO HEALTH</li><li>• HEALTH ORGANISATIONS DISEASES: CAUSE AND CONTROL</li><li>• HYGIENE</li><li>• THE FLOWER</li><li>• POLLINATION AND FERTILIZATION</li><li>• SEEDS- STRUCTURE AND GERMINATION</li><li>• RESPIRATION IN PLANTS</li><li>• FIVE KINGDOM CLASSIFICATION</li></ul>	<ul style="list-style-type: none"><li>• NUTRITION</li><li>• DIGESTIVE SYSTEM</li><li>• SKELETON- MOVEMENT AND LOCOMOTION</li><li>• SKIN-“THE JACK OF ALL TRADES”</li><li>• THE RESPIRATORY SYSTEM</li><li>• WASTE GENERATION AND MANAGEMENT.</li></ul>

### MID TERM (APRIL – SEPTEMBER 2024)

#### April-May 2024

##### ❖ Cell- The Unit of Life

- Basic Understanding of the cell theory.
- Structure of the plant and the animal cells with basic with the functions of various cell organelles.
- Major differences between a prokaryotic and eukaryotic cell.
- Differences between a plant cell and an animal cell with respect to cell wall, centrosomes, vacuoles and plastids.

##### ❖ Tissues- Plant and Animal Tissues

- Introduction to Tissues
- Plant Tissues - Meristematic Tissue and Permanent Tissue
- Meristematic tissue – Apical, Intercalary, Lateral Meristem
- Permanent tissues
  - Protective tissues
  - Supportive Tissues - Parenchyma, Collenchyma and Sclerenchyma
  - Conducting tissues - Xylem and Phloem
- Animal tissues
- Epithelial tissues – Squamous, Cuboidal, Columnar, Ciliated, Glandular, Stratified
- Connective Tissue
  - Connective tissue proper- Areolar, Adipose and Fibrous
  - Supportive Connective Tissue- Cartilage and Bone
  - Fluid Connective Tissue- Blood and lymph
- Muscle Tissue - Striated Muscles, Unstriated Muscles, Cardiac Muscles
- Nervous tissue

## June 2024

### ❖ Economic Importance of Bacteria and Fungi

- Useful role of Bacteria- Medicine: Antibiotics, serums and vaccines.
- Nitrogen Cycle
- Industry- Curing of tea, Tanning of leather.
- Harmful role of bacteria -Spoilage of food, diseases in plants and animals, bioweapons.
- Economic importance of Fungi- A brief idea of the useful role in fungi in breweries, bakeries, cheese processing, mushroom cultivation.

### ❖ Aids to Health

- Active and Passive immunity
- An understanding of the use and action of the following-
  - Vaccination
  - Immunisation
  - Antitoxin
  - Serum
  - Antiseptics
  - Disinfectants
  - Antibiotics.
- An idea of local defence system and its merits.
- Difference between antiseptics and disinfectants.

### ❖ Health organisations

- Health organisations- Red cross and WHO
- Main activities of Red Cross and WHO

## July 2024

### ❖ Diseases: Cause and Control

- A brief introduction to communicable, non-communicable, endemic, pandemic and sporadic diseases. Modes of transmission
- Bacterial diseases- Cholera, typhoid, tuberculosis.
- Viral Diseases- AIDS, Chicken pox, Hepatitis
- Protozoan diseases- Malaria, Amoebic Dysentery, Sleeping Sickness.
- Helminthic Diseases-Ascariasis, Taeniasis, Filariasis.

### ❖ Hygiene

- A brief introduction to maintaining good health
- General idea of personal hygiene, public hygiene and sanitation.

- Modes of transmission of diseases: air borne, water borne, vectors (housefly, mosquito, cockroach).

❖ **The Flower**

- Structure of the bisexual flower and the functions of its various parts,
- A brief introduction to complete and incomplete flowers.
- Essential and non-essential whorls of a bisexual flower, their various parts and functions.
- Inflorescence and Placentation (meaning only)

❖ **Pollination and Fertilization**

- Explanation, advantages and disadvantages of self and cross pollination.
- Agents of pollination and the characteristic features of the flowers pollinated by various agents such as insects, wind and water.
- Contrivances to prevent Self-pollination.
- Events taking place between pollination and fertilization leading to the formation of the zygote in the embryo sac.
- A brief explanation of the term double fertilization and triple fusion.

❖ **Portion for the First Unit Test (20 marks)**

- **Cell- The Unit of Life**
- **Tissues-Plant and Animal Tissues**

**August 2024**

❖ **Seed- Structure and Germination**

- Fruit and Seed (definition and Significance)
- Structure of dicot and monocot seed.
- Germination of seeds, types and conditions for seed germination.
- Structure and germination of Bean seed and maize grain.
- Differences between monocot and dicot seeds.
- Differences between hypogeal and epigeal germination.
- Conditions for seed germination to explained and supported by experiments.

❖ **Respiration in Plants**

- Outline of the Process, gaseous exchange.
- Explanation of the terms Glycolysis and Krebs Cycle and their significance.
- Reference to Aerobic and Anaerobic respiration with balanced chemical equations in each case.
- Experiments on Gaseous exchange and on Heat production during respiration.

❖ **Five Kingdom Classification**

- Main Characteristics of each kingdom with suitable examples of Monera, Protista, Fungi, Plantae (Thallophyta, Bryophyta, Pteridophyta and Spermatophyta)
- Animalia (Porifera to Echinodermata and chordates -all five classes).

## September 2024

Revision

### **Portion for the Mid-term Exam (80 marks)**

- ❖ Cell- the unit of life
- ❖ Tissues: Plant and Animal Tissues
- ❖ Economic Importance of Bacteria and Fungi
- ❖ Aids to health
- ❖ Health Organisations
- ❖ Diseases: Cause and Control
- ❖ Hygiene
- ❖ The flower
- ❖ Pollination and fertilization
- ❖ Seeds- Structure and Germination
- ❖ Respiration in Plants
- ❖ Five Kingdom Classification

## **FINAL TERM**

### **October- 2024**

#### ❖ **Nutrition**

- Definition
- Need of Nutrition
- Classes of Nutrients
- Balanced diet

#### ❖ **Digestive System**

- Need for Digestive System
- Parts of the Digestive System
- Structure and Types of teeth with Dental formula
- Peristalsis
- Physiology of digestion and absorption
- Assimilation of food
- Liver

### **November 2024**

#### ❖ **Skeleton-Movement and Locomotion**

- Functions of Human skeleton
- Constituents of Skeleton
- Structure of a long bone
- The Human Skeleton
- Axial Skeleton
- Appendicular Skeleton



- Joints and its types
- Muscles and its types

## December 2024

### ❖ Skin - The Jack of All Trades

- Functions of the skin
- Structure of the skin- Epidermis and Dermis
- Derivatives of the skin
- Skin and Regulation of heat of body.

<h3><u>Portion for the Second Unit test (20 marks)</u></h3> <ul style="list-style-type: none"> <li>• Nutrition</li> <li>• Digestive System</li> </ul>
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## January 2025

### ❖ The Respiratory System

- Need for Respiration
- Glucose as Respiratory Substrate
- Two kinds of Respiration
- Parts of Respiration
- Respiratory Organs (Breathing)
- Blood supply to lungs
- Respiratory cycle
- Control of Breathing movements
- Lung Capacities
- Effects of Altitude on Breathing
- Hypoxia and Asphyxiation
- Some Experiments on Breathing and Respiration

### ❖ Waste Generation and Management

- What is Waste?
- Categories of Waste
  - Domestic, Industrial, Agricultural, Municipal, E-waste, laboratories waste.
- Methods of Safe Disposal of Waste
  - Segregation
  - Dumping
  - Composting

- Drainage
- Treatment of effluents before discharge
- Incineration
- Scrubbers
- Electrostatic Precipitators

**February 2025**

❖ Revision

Portion for Final Term Examinations (80 marks)

- Cell-The Unit of life
- Tissues- Plant and Animal Tissues
- The Flower
- Pollination and Fertilization
- Seeds-Structure and Germination
- Respiration in Plants
- Five Kingdom Classification
- Economic Importance of Bacteria and Fungi
- Nutrition
- Digestive System
- Skeleton-Movement and Locomotion
- Skin-“The Jack of all trades”
- The Respiratory System
- Hygiene
- Diseases: Cause and Control
- Aids to health
- Health Organisations
- Waste Generation and Management.

❖ **PROJECT WORK-(20 MARKS)**

**Chart preparation on different topics as allotted to each student.**

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## ECONOMIC APPLICATIONS

### Monthly Break up

<u>Month</u>	<u>Topics to be covered</u>
<b>April</b>	Ch1. Meaning and Definition of Economics Ch2. Basic Economic Entities in an Economy
<b>May</b>	Ch3 Basic Problems of an Economy
<b>June</b>	<b>Revision for Unit Test</b> Ch4 Types of Economies
<b>July</b>	Ch5 Characteristics of Indian Economy Ch6 Main sectors of Indian Economy: <u>Agriculture</u>
<b>August</b>	Ch7 Main Sectors of Indian Economy: <u>Industry</u> Ch8 Main Sectors of Indian Economy: <u>Services</u>
<b>September</b>	<b>Revision for Mid Term</b>
<b>October</b>	Ch9 Other Sectors of Indian Economy Ch10 Economic Infrastructure
<b>November</b>	Ch11 Social Infrastructure Ch12 Consumer Awareness
<b>December</b>	<b>Revision for Unit Test</b> Ch 13 Globalization
<b>January</b>	<b>Revision for Final Term</b>
<b>February</b>	<b>Revision for Final Term</b>

### Unit Test Portion

Ch1 Meaning and Definition of Economics  
Ch2 Basic Economic Entities in an Economy  
Ch3 Basic Problems of an Economy

### Mid Term Portion

Ch1 Meaning and Definition of Economics  
Ch2 Basic Economic Entities in an Economy  
Ch3 Basic Problems of an Economy  
Ch4 Types of Economies  
Ch5 Characteristics of Indian Economy  
Ch6 Main Sectors of Indian Economy: Agriculture  
Ch7 Main Sectors of Indian Economy: Industry

### Unit Test Portion

Ch8 Main Sectors of Indian Economy: Services  
Ch9 Other Sectors of Indian Economy  
Ch10 Economic Infrastructure  
Ch11 Social Infrastructure

### Final Term Portion

Whole Syllabus (Ch1 - Ch13)

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# MORAL SCIENCE

## **First Term (April, May, June, July, August & September)**

### **April**

Chapter1: - Ambition.

Chapter2: - You And Your Appearance.

ActivityBased on Conventional Morality)

### **May**

Chapter3: - Women Empowerment.

Activity – Group Discussion (Gender Equality)

### **June**

Chapter4: - Politeness Counts.

Chapter5: - Stress Management.

Activity (Problem based approach – Students to come up with solutions)

### **July**

Chapter6: - Dignity Of Labour.

Activity (Role Play)

### **August**

Chapter7: - Nurture Nature For Future.

Activity (Based on Importance of Nature)

### **September**

Chapter8: - Youth And Social Media.

Activity (Challenges faced by adolescent and its affects by social media)

## **Final Term (October, November, December, January & February)**

### **October**

Chapter9: -Corruption.

Chapter10: - Respect The Other.

Activity (Team Building Games)

### **November**

Chapter11: - Conviction Versus Convenience.

Activity (Difference Conviction & Convenience-Role Play)

### **December**

Chapter12: - Be Your Own Hero.

Activity (SWOT Analysis)

### **January**

Chapter13: - Mobile Mania.

Activity (Side Effects of mobile phone & Tips to Control its Use)

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