

St Xavier's School, Doranda, Ranchi
Session 2023-24

Class - X

ENGLISH LANGUAGE

1. Essay in 300 to 350 words - Descriptive, Argumentative, Narrative, Stories with opening, concluding lines, themes, few characters, morals
 2. Letter - Formal and Informal
 3. Notice and E mail
 4. Unseen passage with word meanings, questions, and précis
 5. Grammar- Preposition, Synthesis, Transformation and correct form of verbs
 - **Project (20 marks)**
 - 5 Essays – Argumentative, Narrative, Descriptive, Story, Picture based (1 each)
-

ENGLISH LITERATURE

TOPICS (FIRST TERM)

MONTH

- 1 Daffodils (poem)
- 2 Act 3 scene I (MOV)
- 3 An Angel in Disguise (prose)
- 4 I Know Why the Caged Bird sings (poem)
- 5 The Little Match Girl (prose)
- 6 Act 3 scene ii
- 7 My Greatest Olympic Prize (prose)
- 8 Act 3 scene iii, iv, v

March
April
April
April
May
May
June
June

➤ **FIRST SELECTION TEST**

JULY

TOPICS (FINAL TERM)

MONTH

1. The Blue Bead (prose)
2. The Patriot (poem)
3. Act 4 scene i
4. Abou Ben Adhem (poem)
5. Act 4 scene ii
6. All summer in a day (prose)
7. Act 5 Sc i
8. Nine God Medals (poem)

July
August
August
August
October
October
November
November

➤ **SECOND SELECTION TEST**

DECEMBER

- **PROJECT:** **Review of Act 3 Scene 2**
 1. Text with paraphrase
 2. Summary/ Plot Development
 3. Characterization of Portia & Bassanio
 4. Bassanio's logic behind choosing the Lead Casket


MATHEMATICS

First Term Examination

- | | |
|-----------------|---|
| March and April | • Banking (Recurring Deposit Accounts) |
| | • Linear Inequations(In one variable) |
| | • Remainder and Factor Theorems |
| | • Quadratic Equations |
| May | • Solving (Simple) problems: Based on Quadratic Equations |
| June | • Shares and Dividends |
| | • Goods and Services Tax |
| | • Matrices |
| | • Arithmetic Progression |

Second Term Examination

- | | |
|---------------|--|
| July | • Ratio and Proportions (Including properties and uses) |
| | • Geometric Progression |
| August | • Reflection |
| | • Section and Mid – Point Formula |
| | • Equation of a line |
| | • Similarity (With Application to maps and models) |
| | • Loci (Locus and its constructions) |
| September | • Circles |
| | • Tangents and Intersecting chords |
| | • Constructions (Circles) |
| | • Cylinder, Cone and Sphere (Surface area and volume) |
| October | • Trigonometrical Identities (Including T – ratios of complementary angles and Use of four figures T – tables) |
| | • Heights and Distances |
| November | • Graphical Representation (Histograms and Ogives) |
| | • Measure of Central Tendency (Mean, median, quartiles and mode) |
| | • Probability |
| December | Revision : First term Examination Chapters |
| Project Topic | : Revision : First term Examination Chapters
Shares and Dividend |


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SUBJECT: HINDI

First Term

SECTION A (40 Marks)

भाषा – सरस हिंदी व्याकरण तथा व्यावहारिक व्याकरण की विस्तृत जानकारी हेतु व्याकरण की अन्य पुस्तकों से ज्ञान प्राप्त करना

1. प्रस्तावना
2. चित्र लेखन
3. पत्र लेखन – क) औपचारिक ख) अनौपचारिक
4. भाव ग्रहण
5. कहानी लेखन
6. व्यावहारिक व्याकरण

SECTION B (40 MARKS)

साहित्य

गद्य

1. बात अठन्नी की
2. काकी
3. महायज्ञ का पुरस्कार
- 4 अपना-अपना भाग्य
5. बड़े घर की बेटी
6. भीड़ में खोया आदमी

पद्य

1. साखी
2. गिरिधर की कुंडलियाँ
3. स्वर्ग बना सकते हैं
4. मेघ आए
5. विनय के पद
6. मातृ मंदिर की ओर

1st Unit Test

1. साखी
2. महायज्ञ का पुरस्कार

परियोजना कार्य – समाचार पत्र का इतिहास एवं उपयोगिता(submission date:15 /7/2023)

2nd Selection Test

Section A (40 Marks)

भाषा – सरस हिंदी व्याकरण तथा व्यावहारिक व्याकरण की विस्तृत जानकारी
साहित्य

गद्य

1. दो कलाकार
2. भिक्षुक
3. भीड़ में खोया आदमी

पद्य

1. चलना हमारा काम
2. मातृ मंदिर की ओर
3. मेघ आए

(गद्य एवं पद्य का सम्पूर्ण पाठ परीक्षा हेतु)

2nd Unit Test

1. बड़े घर की बेटी
2. विनय के पद
3. व्यावहारिक व्याकरण

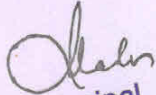
PHYSICS

First Selection

1. Force
2. Work, Power and energy
3. Machine
4. Refraction of light at Plane Surfaces
5. Refraction through a lens

Second Selection

6. Spectrum
7. Calorimetry


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8. Sound
9. Current Electricity
10. Household Circuit
11. Electro-magnetism
12. Radioactivity

Month-wise breakup

- March:- Force
- April: - Work, Power and energy, Machine
- May:- Refraction of light at Plane Surfaces
- June:- Refraction through a lens
- July:- Spectrum
- August:- Calorimetry
- September:- Sound, Current Electricity
- October: - Current Electricity
Household Circuit
- November: - Electro-magnetism, Radioactivity

BIOLOGY

1ST SELECTION	2ND SELECTION
1. CELL-THE STRUCTURAL AND FUNCTIONAL UNIT OF LIFE 2. STRUCTURE OF CHROMOSOMES, CELL CYCLE AND CELL DIVISION 3. GENETICS – SOME BASIC FUNDAMENTALS 4. ABSORPTION BY ROOTS 5. TRANSPIRATION	1. CELL 2. STRUCTURE OF CHROMOSOME, CELL CYCLE AND CELL DIVISION 3. GENETICS 4. ABSORPTION BY PLANTS 5. TRANSPIRATION 6. PHOTOSYNTHESIS 7. CHEMICAL COORDINATION BY PLANTS 8. THE CIRCULATORY SYSTEM 9. THE EXCRETORY SYSTEM 10. NERVOUS SYSTEM 11. SENSE ORGANS 12. THE ENDOCRINE SYSTEM 13. THE REPRODUCTIVE SYSTEM 14. POPULATION- THE INCREASING NUMBERS AND RISING PROBLEMS 15. HUMAN EVOLUTION 16. POLLUTION

1ST SELECTION TEST PORTION (3rd July)

MARCH 2023

1. CELL-THE STRUCTURAL AND FUNCTIONAL UNIT OF LIFE (Revision)
2. STRUCTURE OF CHROMOSOMES, CELL CYCLE AND CELL DIVISION

- What are Chromosomes
- Molecular Structure of DNA
- Structure of Chromosomes
- What are Genes
- Need for New Cells
- Cell Cycle
- Cell Division
- Mitosis (Karyokinesis and Cytokinesis)
- Differences in Mitosis in Plant and Animal Cells
- Significance of Mitosis
- Meiosis
- Significance of Meiosis

APRIL - MAY 2023

3. GENETICS – SOME BASIC FUNDAMENTALS

- Heredity and Variations
- Chromosomes- The Carriers of Heredity
- The two Main Categories of Chromosomes- Autosomes and Sex Chromosomes
- Sex Determination- Son or Daughter
- Chromosomes- Carriers of Genes
- Genes and their Alleles - Dominant and Recessive Alleles
- Genotype and Phenotype
- Sex Linked Inheritance- X linked Inheritance
- Mendel's Experiments on Inheritance
- Mendel's Laws of Inheritance
- Law of Dominance
- Law of Segregation
- Law of Independent Assortment
- Mutation

4 . ABSORPTION BY ROOTS

- Absorption by the Roots
- Need of water and Minerals for Plants
- Characteristics of Roots for Absorbing Water
- Absorption and conduction of Water and Minerals
- Imbibition, Diffusion, Osmosis and Osmotic Pressure
- Active Transport
- Turgidity and Flaccidity
- Uses of Turgidity to Plants
- Root Pressure

- Importance of Root Hair and the Upward Movement of Absorbed Water and Minerals
- Some Experiments on Absorption and Conduction of Water in Plants
- Forces Contributing to Ascent of Sap

5. Transpiration

- Transpiration
- Demonstration of Transpiration
- Measurement of Transpiration
- Kinds of Transpiration Stomatal, Cuticular, Lenticular Transpiration
- Mechanism of Stomatal Transpiration
- • Factors that Affect Transpiration- External and Internal Factors
- Adaptations in Plants to Reduce Excessive Transpiration
- Significance of Transpiration
- Guttation and Bleeding

1ST SELECTION TEST (3rd JULY 2023)

1. CELL-STRUCTURE AND FUNCTIONAL UNIT OF LIFE
2. STRUCTURE OF CHROMOSOMES, CELL CYCLE AND CELL DIVISION
3. GENETICS – SOME BASIC FUNDAMENTALS
4. ABSORPTION BY ROOTS
5. TRANSPIRATION

2ND SELECTION TEST PORTION

JUNE 2023

6. Photosynthesis

- What is Photosynthesis?
- Chlorophyll- The Vital Plant Pigment
- Regulation of Stomatal Opening for Letting in Carbon Dioxide
- Opening and Closing of Stomata
- Potassium ion Concentration Theory
- Sugar Concentration Theory
- Process of Photosynthesis
- Two Main Phases of Photosynthesis - Light Dependent Phase and Light Independent Phase
- Adaptations in Leaf To Perform Photosynthesis
- End Result of the Products of Photosynthesis
- Factors Affecting Photosynthesis- External and Internal Factors
- Experiments on Photosynthesis
- Carbon Cycle

7. Chemical Coordination in Plants

- What are Plant Hormones?
- Auxins, Gibberellins, Cytokinins, Ethylene and Absciscic Acid

- Tropic Movements in Plants
- Phototropism, Geotropism, Hydrotropism, Thigmotropism, Chemotropism

JULY 2023

8. The Circulatory System

- Need for transport inside the body
- Fluids in our body
- Properties and Composition of Blood
- Blood transfusions and Blood groups (ABO and Rh systems)
- Structure of the Heart – Chambers, Blood vessels entering and leaving the heart, Valves
- Circulation of blood in the heart
- Heart beat and Heart sounds
- Pacemaker
- The Blood Vessels- Arteries, Veins and Capillaries (structure and function)
- Hepatic Portal System
- The Pulse
- Blood Pressure
- Lymph and Lymphatic System
- The Spleen- Functions of the Spleen

AUGUST - SEPTEMBER 2023

9. The Excretory System

- Substances to be eliminated
- The Excretory Organs
- Internal structure of the kidney
- Structure of a kidney tubule
- Blood supply to the kidney tubules
- Urine formation – Ultra-filtration, Selective Re-absorption, Tubular Secretion
- Properties of urine
- Regulation of Urine output
- Osmo-regulation
- Artificial Kidney

10. Nervous System

- Need of nervous system
- Structure of neuron
- Transmission of nerve impulse
- Synapse
- Types of neurons
- Nerves
- Two major divisions of nervous system

- The brain
- The spinal cord
- Peripheral nervous system
- Reflexes
- Types of reflexes
- Reflex arc

11. Sense Organs

➤ The Eyes

- Structure of the Eyeball
- Image formation, Accommodation, light and dark adaptation
- Common defects of the eye
- Myopia, Hyperopia, Astigmatism, Presbyopia, Cataract, Night Blindness, Colour Blindness, Corneal opacities
- Stereoscopic Vision and after images

➤ The Ear

- Structure of the ear
- Functions of the Ear – Hearing and Balancing

OCTOBER - NOVEMBER 2023

12. The Endocrine System

- Need for The Regulation of Body Activities
- General Properties of Hormones
- Endocrine Glands
- Adrenal Glands (Conditions due to Hyposecretion and Hypersecretion of the hormones from Adrenal Cortex and Adrenal Medulla)
- Pancreas (Conditions due to Hyposecretion and Hypersecretion of Insulin)
- Thyroid (Conditions due to Hyposecretion and Hypersecretion of the Thyroxin)
- Pituitary Gland (Conditions due to Hyposecretion and Hypersecretion of hormones)
- Control of hormonal secretions/ Feedback mechanism

13. The Reproductive System

- Reproduction in Humans
- Male Reproductive System – Structure and function of each part
- Female Reproductive System – Structure and function of each part
- Role of Hormones in Reproduction
- Menstrual Cycle
- Fertilisation
- Implantation and Pregnancy
- Amnion and Amniotic Fluid
- Placenta and its function
- Parturition
- Twins- Fraternal and Identical

- | | |
|-----|--|
| 12. | THE ENDOCRINE SYSTEM |
| 13. | THE REPRODUCTIVE SYSTEM |
| 14. | HUMAN EVOLUTION |
| 15. | POPULATION- THE INCREASING NUMBERS AND RISING PROBLEMS |
| 16. | POLLUTION |

CHEMISTRY

FIRST SELECTION SYLLABUS :

1. Periodic table, periodic properties and variations of properties
2. Chemical bonding
3. Acids, bases and salts
4. Analytical chemistry
5. Mole concept and stoichiometry

SECOND SELECTION SYLLABUS

Whole syllabus of class 10

MONTHLY BREAKUP OF SYLLABUS

March: Periodic table, periodic properties and variations of properties

Chemical bonding

April: Acids, bases and salts

Analytical chemistry

May: Mole concept and stoichiometry

June: Mole concept and stoichiometry continued....

July: Electrolysis

August: Electrolysis continued...,

Metallurgy

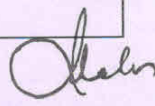
September: Hydrogen chloride

Ammonia

October: Nitric acid Sulphuric acid

November: Organic chemistry

December: Revision


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HISTORY/CIVICS

There will be **one** paper of **two** hours duration carrying 80 marks and an Internal Assessment of 20 marks.

The paper will be divided into **two** parts, Part I and Part II.

Part I (30 marks) will contain short answer questions set from the entire syllabus.

Candidates will be required to answer **all** questions.

Part II (50 marks) will consist of Section A and Section B. Candidates will be required to answer **two** out of **three** questions from Section A and **three** out of **five** questions from Section B. The sections will correspond to the sections indicated in the syllabus.

SECTION 'A': CIVICS

1. The Union Legislature

Meaning of the federal setup in India.

MAY/JUNE

- (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:

JULY

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.

- (c) Prime Minister and Council of Ministers:

SEPTEMBER

Appointment, formation of Council of Ministers, tenure, functions - policy making, administrative, legislative, financial, emergency. Position and powers of the Prime Minister. Collective and individual responsibility of the members of the Cabinet. Distinction between the Council of Ministers and the Cabinet.

3. The Judiciary

NOVEMBER

- (a) The Supreme Court:

Composition, qualifications of judges, appointment, independence of judiciary from the control of executive and legislature; Jurisdiction and functions: Original, Appellate, Advisory, Revisory, Judicial Review and Court of Record. Enforcement of Fundamental Rights and Writs.

- (b) The High Courts:

Composition, qualifications of judges, appointment; Jurisdiction and functions: Original, Appellate, Revisory, Judicial Review and Court of Record. Enforcement of Fundamental Rights and Writs.

(c) Subordinate Courts:

Distinction between Court of the District Judge and Sessions Court.

Lok Adalats: meaning and advantages.

SECTION 'B': HISTORY

1. The Indian National Movement (1857 - 1917)

(a) The First War of Independence, 1857

MARCH

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.

SEPTEMBER 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.

(c) OCTOBER First Phase of the Indian National Movement (1885-1907) - *objectives and methods of struggle of the Early Nationalists. Any two contributions of Dadabhai Naoroji, Surendranath Banerjee and Gopal Krishna Gokhale.*

Second Phase of the Indian National Movement (1905-1916) - *Brief mention of the causes of the Partition of Bengal and its perspective by the Nationalists. Brief mention of Surat Split of 1907; objectives and methods of struggle of the Radicals. Any two contributions of Bal Gangadhar Tilak, Bipin Chandra Pal and Lala Lajpat Rai. The Muslim League; Factors leading to the formation of the Muslim League and its objectives. Brief mention of the significance of the Lucknow Pact - 1916.*

2. Mass Phase of the National Movement (1915- 1947)

OCTOBER

(a) Mahatma Gandhi - *Non-Cooperation Movement : causes (Khilafat Movement, Rowlatt Act, Jallianwala Bagh Tragedy), programme and suspension – Chauri Chaura incident and impact of the Movement; the Civil Disobedience Movement: causes (reaction to the Simon Commission, Declaration of Poorna Swaraj at the Lahore Session of 1929), Dandi March, programme and impact of the Movement, Gandhi-Irwin Pact and the Second Round Table Conference; the Quit India Movement: causes (failure of the Cripps Mission, Japanese threat), Quit India Resolution and the significance of the Movement.*

(b) Forward Bloc (objectives) and INA (objectives and contribution of Subhas Chandra Bose).

(c) Independence and Partition of India – *Cabinet Mission Plan (clauses only); Mountbatten Plan (clauses and its acceptance); and the Indian Independence Act of 1947 (clauses only).*

3. The Contemporary World

(a) The First World War

APRIL

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

APRIL

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

AUGUST

(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: *UNICEF, WHO and UNESCO - function only.*

(e) Non-Aligned Movement

AUGUST

(f) Brief meaning; objectives; Panchsheel; role of Jawaharlal Nehru; Names of the architects of NAM.

PROJECT: Mahatma Gandhi - Father of Nation

{Description Of The Project}

Early life of Mahatma Gandhi, his principles and methods, his contribution in the Indian national movement from his arrival in India till his death.

GEOGRAPHY

MARCH + APRIL

1. Map Study: Interpretation of Topographical Maps

MAY + JUNE

2. The Climate of India – Distribution of Temperature, rainfall, winds in summer and winter and Factors affecting the climate of the area.

Monsoon and its mechanism.

Seasons – Summer, Monsoon, Retreating and Winter.

3. Soils of India

Types of soil – Alluvial, Black, Red and Laterite

Distribution, Composition and Characteristics such as colour, texture, minerals and crops associated.

Soil Erosion- causes, prevention and conservation.

4. Natural Vegetation of India

Importance of Forests

Types of vegetation – tropical evergreen, tropical deciduous, tropical desert, littoral and mountain.

Distribution and correlation with their environment

Forest conservation.

JULY

5. Water Resources

Sources – Surface and ground water

Need for conservation and conservation practices – Rain water harvesting and its importance.

Irrigation- importance and methods.


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AUGUST +SEPTEMBER

6. Minerals and Energy Resources
Iron ore, manganese, copper, bauxite – Uses and their distribution
Conventional Sources: Coal, Petroleum, Natural gas (distribution, advantages and disadvantages)
Hydel power: Bhakra Nangal and Hirakud Dam.
Non- Conventional Sources: Solar, wind, tidal, geo-thermal, nuclear and bio- gas (generation and advantages).
7. Mineral based industries
Iron and Steel (TISCO, Bhilai, Rourkela, Vishakhapatnam), Petro Chemical and Electronics.


OCTOBER + NOVEMBER

8. Agriculture in India
Indian Agriculture- Importance, problems and reforms.
Types of farming in India – subsistence and commercial: shifting, intensive, extensive, plantation and mixed.
Agricultural seasons – rabi, kharif, zayad
Climatic conditions, soil requirements, methods of cultivation, processing and distribution of:
Rice, wheat, millets and pulses
Sugarcane, oilseeds (groundnut, mustard, soyabean)
Cotton, jute, tea and coffee
9. Agro based industries
Importance and classification
Sugar, Textile (Cotton and Silk)

DECEMBER


10. Transport
Importance and Modes – roadways, railways, airways and waterways – Advantages and Disadvantages
11. Waste Management
Impact of waste accumulation – spoilage of landscape, pollution, health hazards, effect on terrestrial, aquatic (fresh and marine) life.
Need for waste management
Methods of safe disposal- segregation, dumping and composting.
Need and methods of reducing, reusing and recycling waste.
12. Map Work:
Location and Relief features of India
Climate
Soil
Distribution of Minerals,
Cities and Population

PROJECT TOPIC: DEVELOPMENT OF TOURISM IN INDIA



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Computer Applications Syllabus for Class X(2023 - 2024)

APRIL-MAY	1. Revision of Topics taught in class IX (i) Introduction to Object Oriented Programming concepts, (ii) Elementary Concept of Objects and Classes, (iii) Values and Data types, (iv) Operators in Java, (v) Input in Java, (vi) Mathematical Library Methods, (vii) Conditional constructs in Java, (viii) Iterative constructs in Java, (ix) Nested for loops.
MAY-JUNE	2.Functions Need of functions. Types of functions (pure and impure). Function declaration and definition, ways of calling functions (call by value and call by reference)Returning information/messages from the functions and use of multiple functions and more than one function with the same name (function overloading).. 3. Constructors Constructor and its types. Default constructor, parameterized constructor, constructor with default parameter and constructor overloading
JULY-AUGUST	4. Using Library Classes Simple input/output. String, packages and import statements. libraries and illustrating their use. The following functions have to be covered :String library functions: Char char At (unti), intcompare To (String1, String2)String concat (String str) boolean endsWith (String str) boolean equals(String str)booleanequalsIgnore Case (String str) int index Of(char ch) int last Index Of (char ch) int length ()String replace (char old Char, charnew Char) booleanstarts With(String str)String substring (int begin Index, int end Index)String to Lower Case()String toUpper Case()String trim()String value Of(all types), to String()Mathematical Library Functions: pow (x,y), log(x), sqrt(x), ceil(x), floor(x), rint (x),abs(a), max(a, b), min(a,b), random(), sin(x), cos (x),tan (x), asin (), acos(), atan ().
SEPTEMBER	5. Class as a User Defined Type Class as a composite type, distinction between primitive type and composite or class types. Class may be considered as a new data type created by the user, that has its own functionality. (The distinction between primitive and composite types should be discussed through examples. Show how classes allow user defined types in programs. All primitive types have corresponding class wrappers. The following methods are to be covered: int parseIn t(String s), int value Of(String s),long parse Long(String s), long value Of(String s),float parse Float(String s), float valueOf(String s),double parse Double(String s),double value Of(String s), booleanis Digit (char ch), booleanis Letter (char ch),ooleanis Letter Or Digit(char ch),booleanis Lower Case(char ch),booleanisUpper Case(char ch),booleanis Whitespace(char ch),char to Lower Case (char ch) to Upper Case(char ch)
OCTOBER	6. Class as the Basis of all Computation Objects and Classes Objects encapsulate state and behaviour & numerous examples; member variables; attributes or features.Variables define state; member functions; Operations/methods/ messages/ functions define behaviour. Classes as abstractions for sets of objects; class as anobject factory; concept of type, primitive data types, composite data types. Variable declarations for bothtypes; difference between the two types. Objects as instances of a class.
NOVEMBER	7.Arrays Arrays storing, retrieving and arranging data, Arrays and their uses, sorting algorithms - selection sort and bubble sort; Search algorithms & linearsearch and binary search Example of a composite type. Array creation. Sorting and searching algorithms should be discussed


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	8. Encapsulation Access specifiers and scope and visibility Access specifiers æ private and public. Visibility rules for private, package and public access specifiers. Scope of variables, instance variables, argument variables, local variables.
DECEMBER onwards.	Revision Model Test papers


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