Portions for Entrance Exam 2023-2024

Year 9

English

Grammar:

- Reported Speech
- Active and Passive Sentences
- Degrees of comparison
- Suffix and Prefix
- Collocations
- Punctuation
- Determiners

Writing:

- Persuasive/ Argumentative writing
- Magazine Article
- Book Review
- Formal & Informal Letter writing
- News Report

Reading & Response

- Unseen comprehension
- Poetry All literary/poetic devices

Mathematics

- Numbers: Fractions, Percentage, Decimals, Prime Numbers
- Algebra: Simplifying and solving linear equations, Indices

- Geometry: Co-ordinate geometry, Circles, Properties of Angles, Shapes, and Angles
- Statistics: Mean, Median, Mode
- Probability: Calculating Probability, probability Scale

Science

1 Respiration

- The human respiratory system
- Gas exchange
- Breathing
- Respiration.

2 Properties of materials

- Dissolving
- Solutions and solubility
- Planning a solubility investigation.
- Paper chromatography.

3 Forces and energy

- Forces and motion
- Speed
- Describing movement.
- Turning forces.
- Pressure between solids
- Pressure in liquids and gases
- Particles on the move



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Year 10

English

Reading and Response

• Unseen comprehension (Poetry or Prose)

Grammar

- Direct & Indirect Speech
- Types of Sentences
- Sentence Structure
- Discourse markers
- Conditional Sentences
- Punctuation Marks (Colon, semi-colon, hyphen, apostrophe)

Writing

- Blog post Writing
- Letter Writing
- Magazine Article
- News report & News Article
- Argumentative, Persuasive, Discursive & Descriptive Writing

Mathematics

- Numbers: Working with Fractions, Decimals, Significant figures, Order of Operations, Ratio and Proportions, Prime Numbers
- Algebra: Simplifying and solving linear equations Expanding Brackets, Indices, Inequalities, Simplifying Algebraic Fractions
- Geometry: Pythagoras Theorem, Area, Properties of Angles, Shapes
- Statistics: Mean, Median, Mode
- Handling Data: Sets Notations and Venn Diagram, Presenting Data

Science

1. Physics

- Density
- Heat and Temperature
- Conservation of Energy
- Moving from hot to cold.
- Ways of transferring thermal energy.
- Cooling by evaporation
- Electricity
- Electrical Circuits

2. Chemistry

- Periodic table
- Reactivity series
- Chemical equations
- Atomic Structure

3. Biology

- Photosynthesis
- More about photosynthesis
- The carbon cycle
- Climate change
- Excretion in humans



Portions for Entrance Exam 2023-2024

Year 11

English

Grammar:

• Application of Grammar topic in Writing

Writing:

- Note Taking
- Summary Writing
- Article Writing
- Report Writing
- Letter Writing

Reading & Response

• Unseen Comprehension Passage

Mathematics

- Numbers: Prime Numbers, Working with Fractions, Prime Numbers, LCM and HCF, Percentage, Order of Operations
- Algebra: Simplifying and solving linear equations, Expanding Brackets, Indices, Simultaneous Equations, Inequalities
- Geometry: Area, Properties of Angles, Polygons, Shapes
- Statistics: Mean, Median, Mode
- Handling Data: Scatter Graphs and Correlations, Stem and Leaf Diagram, Frequency Tables
- Probability: Calculating Probability

Biology

- 1 Organisation of the organism
 - Cell structure
 - Size of specimens
- 2 Movement into and out of cells
 - Diffusion
 - Osmosis
 - Active transport
- 3 Biological molecules
 - Biological molecules
- 4 Enzymes
 - Enzymes
- 5 Photosynthesis
 - Photosynthesis
 - Leaf structure
- 6 Human nutrition
 - Diet
 - Digestive system
 - Physical digestion
 - Chemical digestion
 - Absorption

Chemistry

- 1. State of Matter
 - Solids, liquids, and gases
 - Diffusion
- 2. Atoms, Elements and Compounds
 - Elements, compounds, and mixtures
 - Atomic structure and the periodic table
 - Isotopes
 - Ions and ionic bonds
 - Simple molecules and covalent bonds
 - Giant covalent structures
 - Metallic bonding
- 3 The Periodic Table
 - Arrangement of Elements
 - Group 1 Properties
 - Group VII Properties
 - Transition Elements
 - Noble Gas

Physics

- 1. Motion, forces and energy
 - Physical quantities and measurement techniques
 - Motion
 - Forces
 - Effects of forces
 - Turning effect of forces
 - Centre of gravity
 - Energy, Work and Power
 - Energy resources
 - Pressure

2. Thermal Physics

- Kinetic particle model of matter
- Particle model
- Gases and the absolute scale of temperature
- Conduction
- Convection
- Radiation

3. Waves

- General properties of waves
- Light
- Reflection of light
- Refraction of light
- Dispersion of light
- Electromagnetic spectrum
- Sound

Economics

- Basic economic problems
- Demand and Supply
- Production possibility curve

Price elasticity

Accounting

- Introduction to Accounting
- Double Entry Bookkeeping Part A
- The Trial Balance
- Double Entry Bookkeeping Part B
- Petty Cash Books
- Business Documents
- Books of Prime Entry
- Financial Statements Part A
- Financial Statements Part B-
- Accounting Rules
- Other Payables and Other Receivables
- Depreciation and Disposal of Non-Current Assets
- Bad Debts and Provisions for Doubtful Debts
- Bank Reconciliation Statements
- Journal Entries and Correction of Errors
- Control Accounts

Business Studies

- Concept of business
- Factors of production
- Sectors and Types of business organizations
- Growth of business
- Mixed economy and Value Added

Sociology

- Theory and methods
- Culture, identity and Socialization
- Social inequality



Portions for Entrance Exam 2023-2024

Year 12

English

Reading & Writing

• Essay Writing & Comprehension Passage

Mathematics

- Numbers:
- Arithmetic Sequence, Simplifying arithmetic expressions, Scientific Notation, Sets,
- Algebra:
- Simplifying and solving linear equations, Indices, Quadratic Equations, Variation, Graphing linear and quadratic equations, inequalities, and their graphs
- Geometry:
- Co-ordinate geometry, Circles, Properties of Angles, Transformations, Dilation, Bearing, Trigonometry
- Statistics:
- Mean, Median, Mode, Charts
- Probability:
- Calculating probabilities of Independent and dependent, Types of events, Tree diagram

Physics

1. Motion, forces and energy

- Physical quantities and measurement techniques
- Motion
- Forces
- Energy, Work and Power
- Pressure

2. Thermal Physics

- Kinetic particle model of matter
- Transfer of thermal energy
- Thermal properties and temperature
- Specific heat capacity
- Melting, boiling and evaporation

3. Waves

- General properties of waves
- Light
- Electromagnetic spectrum
- Sound
- Thin lenses

4. Electricity and Magnetism

- Simple phenomena of magnetism
- Electrical quantities
- Electric circuits
- Electromagnetic effects
- Electromagnetic induction

5. Nuclear physics

- The nuclear model of the atom.
- Radioactivity

Chemistry

1 States of matter

- Solids, liquids and gases
- Diffusion

2 Atoms, elements and compounds

- Elements, compounds and mixtures
- Atomic structure and the Periodic Table
- Isotopes
- Ions and ionic bonds
- Simple molecules and covalent bonds
- Giant covalent structures
- Metallic bonding

3 The Periodic Table

- Arrangement of elements
- Group I properties
- Group VII properties
- Transition elements
- Noble gases

4 Experimental techniques and chemical analysis

- Experimental design
- Chromatography
- Separation and purification

5 Chemical energetics

• Exothermic and endothermic reactions

6 Chemical reactions

- Physical and chemical changes
- Rate of reaction
- Reversible reactions and equilibrium
- Redox

7 Metals

- Properties of metals
- Uses of metals
- Alloys and their properties
- Reactivity series
- Corrosion of metals
- Extraction of metals

Biology

1 Characteristics and classification of living organisms

- Dichotomous keys
- Features of organisms

2 Organisation of the organism

- Cell structure
- Size of specimens

3 Movement into and out of cells

- Diffusion
- Osmosis
- Active transport

4 Biological molecules

5 Enzymes

6 Photosynthesis

- Photosynthesis
- Leaf structure

7 Human nutrition

- Diet
- Digestive system

8 Transport in plants

- Xylem and phloem
- Transpiration
- Translocation

9 Transport in animals

- Circulatory systems
- Heart
- Blood vessels

10. Diseases and immunity

11 Gas exchange in humans

12 Respiration

- Respiration
- Aerobic respiration
- Anaerobic respiration

13 Excretion in humans

14 Coordination and response

- Coordination and response
- Homeostasis

Economics

- Elasticity of Demand and Supply.
- Standard of living
- Balance of payments
- Exchange rate
- International trade.

Accounting

Part I The accounting system

- Double-entry bookkeeping: cash transactions
- Double-entry bookkeeping: credit transactions
- Books of prime entry
- Balancing accounts
- The classification of accounts and division of the ledger
- The trial balance

Part II Financial accounting

- Income statements for sole traders
- Statements of financial position for sole traders
- Accounting principles or concepts
- Accruals and prepayments (the matching concept)
- Provisions for the depreciation of non-current assets}
- Irrecoverable and doubtful debts A
- Bank reconciliation statements
- Control accounts
- Suspense accounts,
- Incomplete records

Business Studies

- Business costs
- Production methods
- Operations planning
- Economies of scale & Diseconomies of scale
- Break even analysis



Portions for Entrance Exam 2023-2024

Year 13

English

Reading & Writing:

• Essay Writing & Comprehension Passage

Mathematics

- Algebraic expressions,
- Quadratics
- Equations and Inequalities
- Graphs and Transformations
- Straight line graphs
- Trigonometric Ratios
- Radians
- Differentiation
- Integration

Economics

- 1.BOP Accounts
- 2. Production possibility curve
- 3.Aggregate Demand & Aggregate Supply

4.Govt. Macro- economic Policies

Accounting

Part I The accounting system

- 1.Double-entry bookkeeping: cash transactions
- 2.Double-entry bookkeeping: credit transactions
- 3.Books of prime entry
- 4.Balancing accounts
- 5. The classification of accounts and division of the ledger
- 6.The trial balance

Part II Financial accounting

- 7.Income statements for sole traders
- 8.Statements of financial position for sole traders
- 9. Accounting principles or concepts
- 10. Accruals and prepayments (the matching concept)
- 11. Provisions for the depreciation of non-current assets
- 12.Irrecoverable and doubtful debts A
- 13. Partnership accounts
- 14. Partnership changes

Part III Cost& Management Accounting

15.Marginal Costing

Business Studies

- 1. Types of business organizations
- 2. Types of Limited Companies Public limited & Private limited
- 3. Size of business
- 4.Small business and Stakeholder's objectives

Note:

Year 12 and 13 entrance tests will be based on overall IGCSE and AS Level curriculum, respectively.