English Language Literacy

Following are the contents of study to prepare for the English admission test for Cambridge IGCSE classes. You can use any CAIE English 0510 (Extended) paper for the guidance about question types.

Year 10 (IG-II)

GRAMMAR

- **Sentence structure:** compound sentence, complex sentence, compound-complex (identification, joining, conversion)
- **Narration:** Direct & Indirect speech (conversion, application)
- **Phrase and clause:** identification, use, conversion
- **Conditional sentences:** type-I, type-II, type-III

READING

- Cambridge exam style reading comprehension exercise
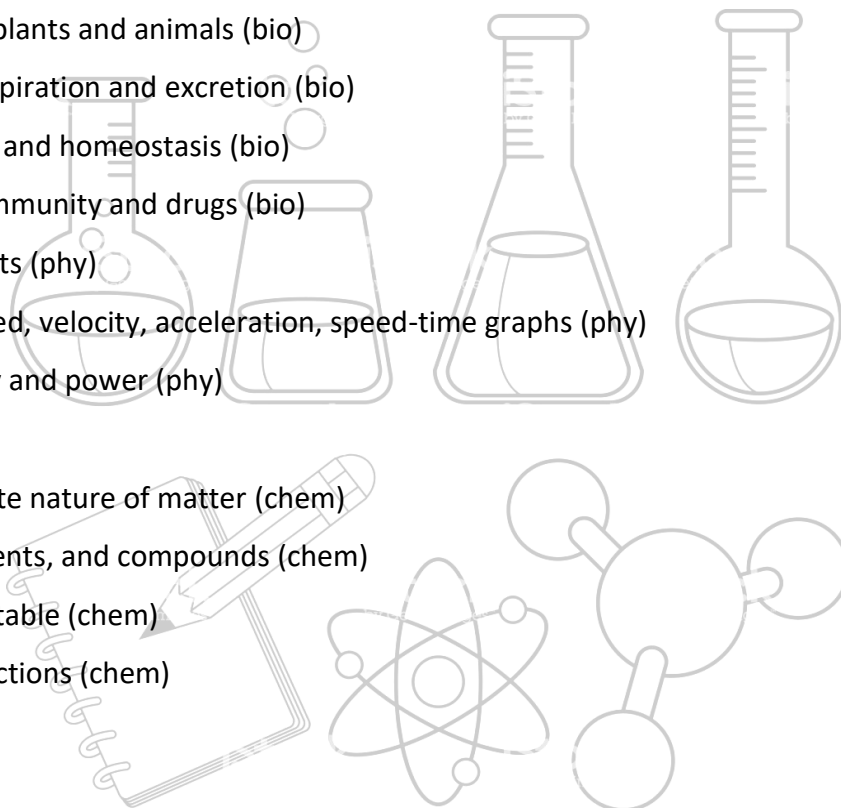
COMPOSITION

- email writing
- Article writing/Review writing/Report writing

Science Literacy

Following are the contents of study to prepare for the science admission test for Cambridge IGCSE classes. A specimen question paper, containing science section, is attached to give you an idea of the paper pattern and division of marks.

Year 10 (IG-II)

- Transport in plants and animals (bio)
- Nutrition, respiration and excretion (bio)
- Coordination and homeostasis (bio)
- Pathogens, immunity and drugs (bio)
- Measurements (phy)
- Motion - speed, velocity, acceleration, speed-time graphs (phy)
- Work, energy and power (phy)
- Forces (phy)
- The particulate nature of matter (chem)
- Atoms, elements, and compounds (chem)
- The Periodic table (chem)
- Chemical reactions (chem)

Math (Numeracy) Literacy

Following are the contents of study to prepare for the math admission test for Cambridge IGCSE classes. A specimen question paper, containing math section, is attached to give you an idea of the paper pattern and division of marks.

Year 10 (IG-II)

Numbers:

- Demonstrate an understanding of ratio and proportion that involve numerical problems. Increase and decrease a quantity by a given ratio
- Calculate a given percentage of a quantity. Express one quantity as a percentage of another.
- Calculate percentage increase or decrease. Carry out calculations involving reverse percentages. e.g., finding the cost price given the selling price and the percentage profit.

Algebra:

- Rearrange and make a subject of simple formulae
- Manipulate directed numbers. Use brackets and extract common factors. Expand products of algebraic expressions. Expand products of algebraic expressions and factorise where possible expressions of the form:

  e.g. expand $3x(2x - 4y)$
  e.g. factorise $9x^2 + 15xy$
  e.g. expand $(x + 4)(x - 7)$

- Manipulate algebraic fractions

  e.g. $\frac{x}{3} + \frac{x-4}{2}, \frac{2x}{3} - \frac{3(x-5)}{2}, \frac{3a}{4} \times \frac{9a}{10},$

  $\frac{3a}{4} \div \frac{9a}{10}, \frac{1}{x-2} + \frac{2}{x-3}$

Mensuration:

- Carry out calculations involving the perimeter and area of a rectangle, triangle, parallelogram and trapezium
- Carry out calculations involving the circumference and area of a circle. Answers may be asked for in multiples of π.
- Discuss surface area and volume of simple shapes, e.g., Cube, Cuboid, Cylinder, Cone and Sphere.

Graphs:

- Interpret and use graphs in practical situation – travel graph and conversion graphs (Distance -Time Graph).
- Construct and interpret table of values to discuss linear graph $y = mx + c$

Geometry and Transformation

- Use and interpret terms point, line, parallel lines, angles, acute, reflexive, interior angles, exterior angles and related fundamental concepts
- Reflect simple plane figures in horizontal or vertical lines. Rotate simple plane figures about the origin, vertices or midpoints of edges of the figures, through multiples of 90°.

Statistics:

- Read, interpret, and draw inferences from tables and statistical diagram (Pie chart, and Histogram).
- Compare sets of data using tables, graphs, and statistical measures.

Computer Science Literacy

Following are the contents of study to prepare for the computer science admission test for Cambridge IGCSE classes. You'll be required to provide short answers only mainly showing your conceptual understanding.
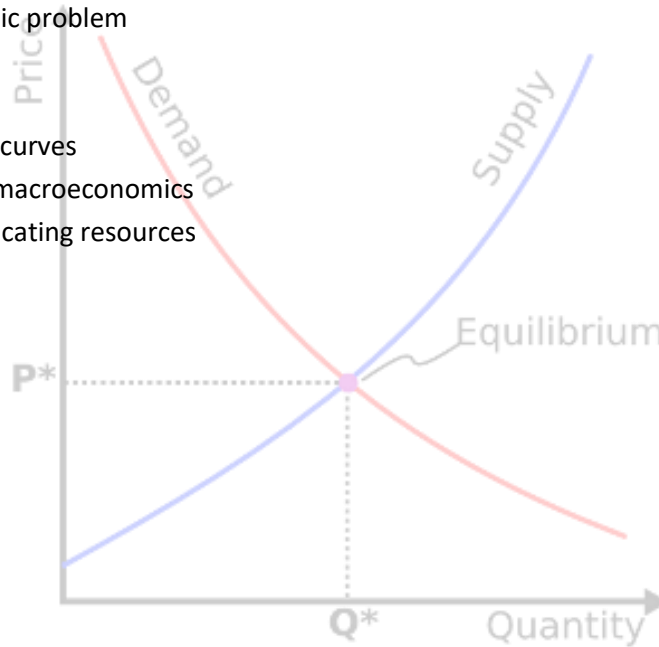
Year 10 (IG-II)

- Number System (Conversion)
  - Denary, Binary
  - Hexa-decimal
  - File compression
  - 1's compliment and 2's compliment
- Measurement of the size of computer memories
  - Data Storage devices
- Data transmission
  - Types of Data transmissions, Network Devices, Error Detection methods.
- Logic Gates
  - Logic Circuit & Truth Tables.
- Computer Architecture
  - Operating System & Interrupts, Memories and parts of CPU.
- Working with Integrated Development Environment (IDE)
- Programming Languages
- Databases

Economics Literacy

Following are the contents of study to prepare for the economics admission test for Cambridge IGCSE classes. You'll be required to provide short answers only mainly showing your conceptual understanding.

Year 10 (IG-II)

- The nature of economic problem
- Factors of production
- Opportunity cost
- Production possibility curves
- Microeconomics and macroeconomics
- Role of markets in allocating resources
- Demand and
- Supply
- Price determination
- Price change
- Economic systems
- Market failure
- Money and banks
- Trade union
- Workers
- Costs and revenue

Accounting Literacy

Following are the contents of study to prepare for the accounting admission test for Cambridge IGCSE classes. You'll be required to provide short answers only mainly showing your conceptual understanding.

Year 10 (IG-II)

- Introduction to accounting
- Double entry book-keeping – Part A
- The trial balance
- Double entry book-keeping – Part B
- Petty cash books
- Business documents
- Books of prime entry
- Financial statements A
- Financial statements B
- Accounting rules
- Other payables and receivables