

**MASTERMIND**

ENGLISH MEDIUM SCHOOL

**SYLLABUS FOR FINAL EXAM. 2021–2022****CLASS– IX (CAMBRIDGE)****SUBJECT : ENGLISH LANGUAGE** **Unseen :****Students will be assessed in the following skills:-**

- (a) Ability to write an essay / story / directed writing piece using accurate spelling, punctuation and appropriate grammar.
- (b) Ability to read and understand passages (unseen) and answer questions on these.
- (c) Ability to apply the rules of grammar.

**SUBJECT : MATHEMATICS - D**

**Books :** (i) **Extended Mathematics For IGCSE( 3<sup>rd</sup> Edition)** by – *D Rayner*  
 (ii) **New Syllabus Mathematics – 3 (7<sup>th</sup> Edition)** by – *Lee Peng Yee*  
 (iii) **Past Years Question Papers.**

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|---|---|-------------------------------------|
| <input type="checkbox"/> Matrix         | <input type="checkbox"/> Function                             |                                     |
| <input type="checkbox"/> Transformation | <input type="checkbox"/> Vector                               | <input type="checkbox"/> Arithmetic |
| <input type="checkbox"/> Mensuration    | <input type="checkbox"/> Graph (Speed-Time,<br>Distance-Time) | <input type="checkbox"/> Algebra    |

**SUBJECT : ADDITIONAL MATHS**

**Books :** (i) **“New Syllabus Additional Mathematics (Seventh Edition)**  
*–Prof Lee Peng Yee*  
 (ii) **Past papers – Cambridge O Level Question Papers**

Techniques of differentiation

Rate of change and approximations

Tangent – Normal

Stationary points: Maximum and minimum points

Distinguishing maximum and minimum points using  $\frac{d^2y}{dx^2}$ 

Mensuration

Integration

Area under curve

## Proving of identities

<b>SUBJECT</b>	<b>:</b>	<b>BANGLA</b>
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**Unseen****Paper 1: Composition**

- **Section A:** Letter, Report, Dialogue or Speech (চিঠি, প্রতিবেদন, কথোপকথন অথবা ভাষণ)
- **Section B:** Essay (রচনা)

**Paper 2: Language Usage and Comprehension**

- **Section A:** Language usage questions.
  - ❑ Separation / Combinations of Words ( সন্ধি / সন্ধি বিচ্ছেদ / )
  - ❑ Idioms, Proverbs and Words in Pairs ( বাগধারা , প্রবচন এবং জোড়া শব্দ)
  - ❑ Sentence Transformation (বাক্য রূপান্তর )
  - ❑ Cloze Passage (উপযুক্ত শব্দ দিয়ে শূন্যস্থান পূরণ)
- **Section B:** Multiple-choice comprehension questions (বোধজ্ঞানের বহু বিকল্প প্রশ্নোত্তর )
- **Section C:** 1. Open-ended comprehension questions ( বোধজ্ঞানের মুক্ত প্রশ্নোত্তর)  
2. Vocabulary ( শব্দার্থ )

<b>SUBJECT</b>	<b>:</b>	<b>PHYSICS</b>
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1. Unit – 14: Reflection and refraction of light
2. Unit – 15: Converging Lens
3. Unit – 16: Sound
4. Unit – 17 : Static Electricity
5. Unit – 18 : Current Electricity
6. Unit – 19 : D.C. Circuits
7. Unit – 20 : Practical Electric Circuitry

**PRACTICAL**

- \* All experiments based on all topics covered in Class VIII and IX
- **Half-Yearly Syllabus Also Included**
- **Both Half-Yearly & Final Syllabus of Class-VIII Also Included**

<b>SUBJECT : CHEMISTRY</b>
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- CLASS IX (CAMBRIDGE) CHEMISTRY SYLLABUS 2020-2021

**BOOK: 1. Chemistry Matters**

**Final Term**

**THEORY**

1. Chapter: 13 Oxidation & Reduction
2. Chapter: 15 Electrolysis
3. Chapter: 17 Energy Changes
4. Chapter: 18 Speed of Reaction
5. Chapter: 14 Metals
6. Chapter: 3 Purification and Separation

**PRACTICAL**

1. Experimental questions based on Theoretical Syllabus
2. Titrations and moles calculations
3. Test for Cations, Anions, Gases

**REVISION**

1. Ionic Bonding (chapter -6)
2. Covalent & Metallic Bonding (chapter -7)
3. Salts (chapter -12)
4. The Moles (chapter -9)
5. Chemical Calculations (chapter -10)
6. Elements, compounds & Mixture (chapter-4)
7. Atomic structure (chapter -5)
8. Acids & Bases (chapter -11)

<b>SUBJECT : BIOLOGY</b>
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**Book :** Cambridge Biology

**Book: Biology (A Course for 'o' level) – Lam Peng Kwan & Eric Y K Lam**

**THEORY**

- Chapter-20: Reproduction in Plants  
 Chapter-21: Sexual Reproduction in Animals  
 Chapter-22: Heredity  
 Chapter – Coordination and Response in Plants

**PRACTICAL**

**BOOK: MASTERMIND LAB. MANUAL**

Experiments on topics covered in lab classes.

**REVISION**

Chapter – 8: Transport in Mammals

Chapter – 9: Transport of Materials in Flowering Plants

Chapter – 11: Excretion

Chapter – 12: Homeostasis

Chapter – 13: Co-ordination and Response: I The Nervous System in Mammals

Chapter – 14: Co-ordination and Response: II Animal Receptor Organs

Chapter – 15: Co-ordination and Response: III Hormones and Endocrine Glands

**SUBJECT : ACCOUNTING**

1.bank  
reconciliation  
2.manufacturing  
3.single entry  
4.clubs and non  
profit  
organization

- **Text Book : Business Accounting 1**
- **Question Paper (GCSE and IGCSE)**

**SUBJECT : ECONOMICS**

**Book:** IGCSE and O Level Economics by Susan Grant

Text Book: Cambridge IGCSE and O Level Economics by Susan Grant (Course book)  
Second Edition.

Chapter (24 to 35)

**SUBJECT : BUSINESS STUDIES**

Section – 03     Marketing

Section – 04     Operations Management

<b>SUBJECT    :    COMMERCE</b>
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- Unit – 7            International Trade
- Unit – 8            Advertising
- Unit – 9            Communications
- Unit – 10          Transport
- Unit – 13          Banking

<b>SUBJECT : COMPUTER SCIENCE (2210)</b>
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## **Subject: Cambridge O Level Computer Science (2210)**

**Teachers:**

**Nazir Hossain Mollah (NHM)**

**MD. Ashrafuzzaman (ASZ)**

**Mohammed Nahyan Quasem (MNQ)**

**Reezwanur Rahman Khan(RRK)**

**Book:**Cambridge IGCSE™ and O Level Computer Science(Second Edition)  
 , Published 2021, David Watson and Helen Williams,ISBN-9781398318281

### **Theoretical and Practical**

Note: All topics are not included. Some topics may not be present in the books. Follow the class notes in such case.

Reference	Chapters	Topics
<b>Book</b>	Chapter 3	Hardware:3.4-Network Hardware
<b>Book</b>	Chapter 7	Algorithm design and problem solving
<b>Book</b>	Chapter 8	Programming
<b>Book</b>	Chapter 10	Boolean Logic
<b>Programming</b>	Practical	Data types, Input and Output, Selection, Iteration, Arrays