



# 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 (Inequality Graph) | <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**

**BOOK: 1. Chemistry Matters**

<u><b>THEORY</b></u>	<u><b>PRACTICAL</b></u>
1. Chapter 13: Oxidation & Reduction 2. Chapter 14: Metals 3. Chapter 15: Electrolysis 4. Chapter 18: Speed of Reaction 5. Chapter 20: The Atmosphere and Environment	1. Experimental questions based on Theoretical Syllabus 2. Titrations and moles calculations 3. Test for Cations, Anions, Gases 4. Flame Test
<u><b>REVISION</b></u>	
1. Chapter 3: Separation and Purification 2. Chapter 4: Elements, Compounds and Mixtures 3. Chapter 5: Atomic Structure 4. Chapter 6: Ionic Bonding 5. Chapter 7: Covalent and Metallic Bonding	6. Chapter 9: The Mole 7. Chapter 10: Chemical Equations 8. Chapter 11: Acids and Bases 9. Chapter 12: Salts 10. Chapter 17: Energy Changes

<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 -2: Classification

**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

Chapter: Co-ordination Response in Plants

**SUBJECT : ACCOUNTING**

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

- **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

**SUBJECT : COMMERCE**

- Unit – 5 Wholesale Trade
- Unit – 8 Advertising
- Unit – 9 Communications
- Unit – 10 Transport
- Unit – 13 Banking

**SUBJECT : COMPUTER SCIENCE (2210)****Subject: Cambridge O Level Computer Science (2210)**

**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
<b>Book</b>	Chapter 7	Algorithm design and problem solving. (Flow chart, Pseudocode, Selection, Iteration, Array (1D & 2D), Variable concept and algorithm design.)
<b>Book</b>	Chapter 10	Boolean Logic