

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(3rd Edition)** by – *D Rayner*
 (ii) **New Syllabus Mathematics – 3 (7th 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,
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

SUBJECT	:	BANGLA
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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)

SUBJECT	:	PHYSICS
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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**

SUBJECT : CHEMISTRY

- 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)

SUBJECT : BIOLOGY

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

SUBJECT : COMMERCE

- Unit – 7 International Trade
- Unit – 8 Advertising
- Unit – 9 Communications
- Unit – 10 Transport
- Unit – 13 Banking

SUBJECT : COMPUTER SCIENCE (2210)
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Book:1:Cambridge IGCSE™ and O Level Computer Science Coursebook, Published 2021, Sarah Lawrey and Victoria Ellis,ISBN-9781108915144

2. Book2:Cambridge IGCSE™ and O Level Computer Science Programming Book for Java, Published 2021, Dave Duddell,ISBN-9781108910071

3. Book3:Cambridge IGCSE™ and O Level Computer Science(Second Edition) , Published 2021, David Watson and Helen Williams,ISBN-9781398318281

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

BOOK 3	CHAPTER 3	3.1.3 Cores, cache, and internal clock 3.1.4 Instruction set 3.1.5 Embedded systems 3.2 Input and output devices 3.2.1 Input devices (PAGE-81 TO PAPGE-95) 3.3 Data storage 3.3.1 Primary memory 3.3.2 Secondary and off-line storage 3.3.3 Magnetic, optical, and solid-states storage (PAGE-119 TO PAGE-128(FIRST PART))
BOOK 3	CHAPTER 7	Flowcharts Page (262-264) Pseudocode Variables, Assignment Statements, If statements, While loops, repeat until loops, for loops (Page 265-270) Standard Algorithms Counting, totaling Page 272 only
BOOK 3	CHAPTER 8	Programming 8.1 Programming concepts Variable, Constant, Data type, Assignment, Arithmetic operators, Relational operators, Selection, Iteration
BOOK 3	CHAPTER 10	Boolean logic 10.1 Standard logic gates symbols 10.2 The function of the six logic gates 10.3 Logic circuits, logic expressions, truth tables and problem statements