MASTERMIND
ENGLISH MEDIUM SCHOOL
SYLLABUS FOR FINAL EXAM. 2021–2022

CLASS– IX (EDEXCEL)

SUBJECT   : ENGLISH LANGUAGE

❑ **Section – A :**
 ◈ Assesses students' understanding of, and response to, stimulus material.
  Marks primarily for content and understanding.

❑ **Section – B :**
 ◈ Assesses students' ability to write according to guidelines, in response to stimulus material. May be asked to **Inform or instruct, advise or persuade,** or **express attitudes.** Will be asked to use a recognized form of writing (e.g. letter or school magazine article or speech)

❑ **Section – C :**
 ◈ One piece of extended writing
  May be narrative, descriptive, personal, argumentative or discursive.

SUBJECT   : BANGLA

Unseen
- **Section A: Reading**
❑ Multiple-choice Words (বহু বিকল্প শব্দ নির্বাচন)
❑ Comprehension related Q/A (নিবন্ধ হতে সঠিক প্রশ্নোত্তর নির্বাচন)
❑ Short-response questions (সংক্ষিপ্ত প্রশ্নোত্তর)
❑ Open-response questions (বোধজ্ঞানের মুক্ত প্রশ্নোত্তর)
- **Section B: Writing**
❑ Essay (রচনা)
❑ E-mail (ই- মেইল)
❑ Blog (ব্লগ)
❑ Article (নিবন্ধ)
- **Section C: Translation** (অনুবাদ)
 English to Bangla (ইংরেজি থেকে বাংলা)

SUBJECT   : MATHEMATICS   SYLLABUS – B

1.   Matrix

2.   Transformation

3.   Mensuration

4.   Function

5. Vector

6. Graph (Speed-Time, Distance- Time)

7. Arithmetic

8. Algebra

SUBJECT : FURTHER PURE MATHEMATICS

BOOKS : **(i) Pure Mathematics** by – *Lee Peng Yee*
(ii) Past papers – *Edexcel O Level / IGCSE Question Papers*

- **Techniques of Differentiation**

- **Applications of Differentiation**
  (i) Stationary points: Maximum and Minimum points
  (ii) Distinguishing Maximum and Minimum points using $\frac{d^2y}{dx^2}$
  (iii) Curve Sketching: Cubic Curves
  (iv) Mensuration (Problems on Maximum and Minimum values)
  (v) Rate of Change

- **Further Applications of Differentiation**
  (i) Approximation
  (ii) Equation of Tangent and Normal to a Curve

- **Integration**

- **Applications of Integration**
  (i) Area under the Curve
  (ii) Volume of Revolution

SUBJECT : PHYSICS

BOOK: **Edexcel International GCSE (9-1) Student Book**

Unit : 1   Forces & Motion
Unit : 2   Electricity
Unit : 3   Waves
Unit : 4   Energy Resources & Energy Transfer
Unit : 5   Solids, Liquids & Gases
Unit : 6   Magnetism & Electromagnetism

SUBJECT : CHEMISTRY

BOOK: **Edexcel International GCSE (9-1) Student Book**

Chapter	10	Electrolysis
Chapter	15	Extraction and uses of metals
Chapter	18	Chemical Tests
Chapter	19	Energetics
Chapter	20	Rates of Reaction

REVISIONS :

Chapter	3	Atomic Structure
Chapter	4	Periodic Table
Chapter	5	Chemical Formulae, Equations & Calculation Part 1
Chapter	6	Chemical Formulae, Equations & Calculation Part 2
Chapter	11	Alkali Metals
Chapter	12	The Halogens
Chapter	14	Reactivity Series

SUBJECT : BIOLOGY

- □ Chapter – 9 :   Reproduction in Humans
  Chapter – 13   Reproduction in Plants
  Chapter – 14 :   Ecosystems
  Chapter – 16 :   Chromosomes Genes and DNA
  Chapter – 17 :   Cell Division
  Chapter – 18 :   Genes and Inheritance

- □ **REVISION**
  Chapter – 2 :   The Variety of Living Organism
  Chapter – 8 :   Homeostasis and Excretion
  Chapter – 10 :   Plants and Food
  Chapter – 11:   Transport in Plants

SUBJECT : ACCOUNTING

1. Bank reconciliation statements
2. Manufacturing accounts
3. Single entry and incomplete records
4. Errors not affecting the balancing of the trial balance
5. Suspense accounts and errors

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

SUBJECT   : ECONOMICS

BOOK: **Edexcel IGCSE Economics -by Rob Jones**

Text Book: Edexcel International GCSE (9-1) ECONOMICS Student Book -by Rob Jones

 Section – C   Government and the Economy   Chapter 25 –34

SUBJECT   : BUSINESS STUDIES

   # Business Operations

   # Marketing

SUBJECT   : COMMERCE

Chapter: 12 Developments in retailing
Chapter: 13 Wholesaling
Chapter: 14 E-commerce
Chapter: 15 International trade
Chapter: 16 Trading blocs and the difficulties facing exporters
Chapter: 17 Multinationals
Chapter: 18 The purposes and principles of insurance
Chapter: 19 Insurance business risks
Chapter: 20 Effecting cover, renewals and claims in insurance
Chapter: 21 Consumer protection legislation
Chapter: 22 Trade protection
Chapter: 23 Exchange rates and bad debts
Chapter: 24 The role and functions of financial institutions
Chapter: 25 Sources of finance

BOOK: **Edexcel IGCSE Economics -by Rob Jones**

SUBJECT : IGCSE (9-1) Computer Science (4CP0)

Final Examination 2021-2022Syllabus

Specification:
Pearson Edexcel International GCSE in Computer Science (4CP0) Specification

Book:

Author	Book Name	Publisher
David Waller, Chris Charles, Pete Dring, Alex Hadwen-Bennett, Jason Welch, Shaun Whorton	Edexcel GCSE (9-1) Computer Science Student Book	Publisher: Pearson Education Published: 2020 ISBN:9781292310220
Dave Duddell	Cambridge IGCSE™ and O Level Computer Science Programming Book for Java	Publisher:Cambridge IGCSE and O Level Computer Science Programming Book for Java Published: 2021 ISBN:9781108910071

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

Syllabus Overview:

Topic Name	Syllabus Section	Subsection Details
Topic 1 Problem Solving	1.1 Algorithms	1.1.3, 1.1.4, 1.1.5, 1.1.6, 1.1.7, 1.1.8, 1.1.9
	1.2 Decomposition and abstraction	1.2.1,1.2.2,1.2.3,1.2.4
Topic 2	Programming	2.1,2.2,2.3,2.4,2.5,2.6 (Algorithms and Pseudo code Variable Declaration, Selection, Iteration, Arrays, Sub Programs)
Topic 3	Data	3.4.2 Understand how encryption algorithms work (Pigpen cipher, Caesar cipher, Vigenére cipher, Rail Fence cipher)
Topic 4 Computers	4.3 Logic	Logic Gates (AND, OR, NOT, NAND, NOR, XOR, XNOR) with truth table.