

Syllabus

Grade-IX

Session: 2024-2025



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Ten Basic Tips to Help Stop Climate Change

Climate is defined as an area's long-term weather patterns. The simplest way to describe climate is to look at average temperature and precipitation over time. Other useful elements for describing climate include the type and the timing of precipitation, amount of sunshine, average wind speeds and directions, number of days above freezing, weather extremes, and local geography. You must consider all the factors that work together to determine climate. Don't have a lot of time, but want to take action? Here are ten, simple, everyday things each of us can do to help stop climate change.

Change a light: Replacing a regular light bulb with a compact fluorescent one saves 150 pounds of carbon dioxide each year.

Drive less: Walk, bike, carpool, take mass transit, and/or trip chain. All of these things can help reduce gas consumption and one pound of carbon dioxide for each mile you do not drive.

Recycle more and buy recycled: Save up to 2,400 pounds of carbon dioxide each year just by recycling half of your household waste.

Check your tires: Properly inflated tires mean good gas mileage. For each gallon of gas saved, 20 pounds of carbon dioxide are also never produced.

Use less hot water: It takes a lot of energy to heat water. Reducing the amount used means big savings in not only your energy bills, but also in carbon dioxide emissions.

Avoid products with a lot of packaging: Preventing waste from being created in the first place means that there is less energy waste and fewer resources consumed.

Adjust your thermostat: Keeping your thermostat at 68 degrees in winter and 78 degrees in summer not only helps with your energy bills, but it can reduce carbon dioxide emissions as well.

Plant a tree: A single tree can absorb one ton of carbon dioxide over its lifetime.

Turn off electronic devices when not in use: Simply turning off your TV, VCR, computer and other electronic devices can save each household thousands of pounds of carbon dioxide each year.

Stay informed: Use the Earth 911 Web site to help stay informed about environmental issues, and share your knowledge with others. Together, we can and do make Every Day Earth Day!

Ref: <http://earth911.com/blog/2001/04/02>

Few Words on the Syllabus of 2024-2025

It is our utmost pleasure to introduce you to the syllabus of grade-III to X for the academic year of 2024-2025. We believe a syllabus should help students becoming more effective learners in the course. Hard work and regular studies only can enable students to achieve their desired academic success. To accomplish this aim, unit heads of those classes had been assigned for making and developing the syllabus of 8 subjects taught in different grades. Then the unit heads, with the help of subject-teachers, produce this example of collective effort to give a detailed outline about the topics and readings to be covered in the whole session. We have included CT and Hall test syllabus, question patterns and marks distribution for first and final semester of the current academic year. We have followed Cambridge Curriculum System to make it a useful learning tool. Therefore, learners of SJIS are expected to follow them and take preparations accordingly. Educational institutions should facilitate the scholastic and cognitive development (physical, mental, moral and spiritual) of the young aspirants. In order to achieve this objective, a well-planned syllabus is an essential means. As this is written on our school monogram, advancing in wisdom and virtue, we are dedicated to develop stimulated intellect of our students.

In about 182 years earlier, after the French Revolution, founder of the Congregation of Holy Cross, Blessed Basil Anthony Moreau, C.S.C established the congregation with some enthusiast and dedicated brothers and prioritized education to develop his country. In order to follow his legacy Holy Cross Brothers are also serving in different educational institutions to help students transforming into an ideal human being till date.

Since some subjects might not incorporate CT syllabus but the chapters name only, students are asked to discuss these issues with the respective subject-teachers.

In addition, I want to extend my sincere thanks and appreciation to all the soul worked to develop this syllabus. Moreover, any observations or suggestions regarding this syllabus will be highly regarded. With thanks



Brother Victor Bikash D' Rozario, CSC
Vice Principal

English Language 1123

Objectives:

- Continuing O level syllabus with the learners.
- R1 demonstrate understanding of explicit meanings
- R2 demonstrate understanding of implicit meanings and attitudes
- R3 analyse, evaluate and develop facts, ideas and opinions, using appropriate support from the text
- R4 demonstrate understanding of how writers achieve effects and influence readers
- R5 select and use information for specific purposes.
- W1 articulate experience and express what is thought, felt and imagined
- W2 organise and structure ideas and opinions for deliberate effect
- W3 use a range of vocabulary and sentence structures appropriate to context
- W4 use register appropriate to context
- W5 make accurate use of spelling, punctuation and grammar.

Book: English language for Cambridge, O Level, course book - Relevant topics from this book will be used for paper 1 and paper 2.

Half Yearly Syllabus 2024

Name of the exam	Chapters	Pattern	Marks
Half Yearly Examination	<p>Grade VIII lessons will be included</p> <p>Paper 1</p> <ul style="list-style-type: none"> • Comprehension - understanding of explicit meanings, understanding of implicit meanings and attitude, understanding of how writers achieve effects and influence readers. • Summary - understanding of explicit meanings, select and use information for specific purposes, organise and structure ideas and opinions for deliberate effect, use a range of vocabulary and sentence structures appropriate to context, demonstrate understanding of implicit meanings and attitudes. • Partial units from chapters 1 to 4 - English language for Cambridge, O Level, course book. <p>Paper 2</p> <ul style="list-style-type: none"> • Directed Writing – writing email, formal letters and article. • Composition – • Descriptive: A descriptive piece of writing describes a person, place or situation (including atmosphere) in detail so that the reader can picture it. • Narrative: A narrative piece of writing tells a story containing a sequence of connected events which may be real or imaginary • Task to improve the quality of English language – formal and informal English, sentence constructions, figurative language, crafted writing, contextualised vocabulary, basic grammar, punctuation. • Partial units from chapters 6 to 9 - English language for Cambridge, O Level, course book. 	<p>Paper 1: 50 marks</p> <p>and</p> <p>Paper 2: 50 marks</p>	Marks will be converted into 60.

	<ul style="list-style-type: none"> Necessary handouts will be provided by the teachers to strengthen the quality of English language. 		
CT-1	<ul style="list-style-type: none"> Comprehension - understanding of explicit meanings, understanding of implicit meanings and attitude, understanding of how writers achieve effects and influence readers. Summary - understanding of explicit meanings, select and use information for specific purposes, organise and structure ideas and opinions for deliberate effect, use a range of vocabulary and sentence structures appropriate to context, demonstrate understanding of implicit meanings and attitudes. Partial units from chapters 1 to 4 - English language for Cambridge, O Level, course book. 	Focused on Paper 1 question patterns. Marks-15	Marks will be converted into 40.
CT-2	<ul style="list-style-type: none"> Directed Writing – writing email, formal letters and article. Composition – Descriptive: A descriptive piece of writing describes a person, place or situation (including atmosphere) in detail so that the reader can picture it. Narrative: A narrative piece of writing tells a story containing a sequence of connected events which may be real or imaginary Task to improve the quality of English language – formal and informal English, sentence constructions, figurative language, crafted writing, contextualised vocabulary, basic grammar, punctuation. Partial units from chapters 1 to 9 - English language for Cambridge, O Level, course book. 	Focused on Paper 2 question patterns. Marks-15	
	SBA	10	
	Assignment/ Presentation	10	

Annual Term Syllabus 2025

Name of the exam	Chapters	Pattern	Marks
Annual Examination	<p>Grade VIII and Grade IX Half Yearly lessons are included in the Annual Term.</p> <p>Paper 1</p> <ul style="list-style-type: none"> Comprehension - understanding of explicit meanings, understanding of implicit meanings and attitude, understanding of how writers achieve effects and influence readers. Summary - understanding of explicit meanings, select and use information for specific purposes, organise and structure ideas and opinions for deliberate effect, use a range of vocabulary and sentence structures appropriate to context, demonstrate understanding of implicit meanings and attitudes. 	<p>Paper 1: Marks- 50</p> <p>and</p> <p>Paper 2: Marks- 50</p>	Marks will be converted into 60.

	<ul style="list-style-type: none"> Rest of the units from chapters 1 to 4 - English language for Cambridge, O Level, course book. <p>Paper 2</p> <ul style="list-style-type: none"> Directed Writing – writing persuasive speech, report, informal letters. Composition – Descriptive: A descriptive piece of writing describes a person, place or situation (including atmosphere) in detail so that the reader can picture it. Narrative: A narrative piece of writing tells a story containing a sequence of connected events which may be real or imaginary Task to improve the quality of English language – formal and informal English, sentence constructions, figurative language, crafted writing, contextualised vocabulary, basic grammar, punctuation. Rest of the units from chapters 6 to 9 - English language for Cambridge, O Level, course book. Necessary handouts will be provided by the teachers to strengthen the quality of English language. 		
CT-1	<ul style="list-style-type: none"> Comprehension - understanding of explicit meanings, understanding of implicit meanings and attitude, understanding of how writers achieve effects and influence readers. Summary - understanding of explicit meanings, select and use information for specific purposes, organise and structure ideas and opinions for deliberate effect, use a range of vocabulary and sentence structures appropriate to context, demonstrate understanding of implicit meanings and attitudes. Rest of the units from chapters 1 to 4 - English language for Cambridge, O Level, course book. 	<p>Focused on Paper 1 question patterns. Marks- 15</p>	<p>Marks will be converted into 40.</p>

CT-2	<ul style="list-style-type: none"> Directed Writing – writing persuasive speech, report, informal letters. Composition – Descriptive: A descriptive piece of writing describes a person, place or situation (including atmosphere) in detail so that the reader can picture it. Narrative: A narrative piece of writing tells a story containing a sequence of connected events which may be real or imaginary Task to improve the quality of English language – formal and informal English, sentence constructions, figurative language, crafted writing, contextualised vocabulary, basic grammar, punctuation. Rest of the units from chapters 6 to 9 - English language for Cambridge, O Level, course book. 	Focused on Paper 2 question patterns. Marks- 15	
	SBA	10	
	Assignment/Presentation	10	
Total			100

Bengali 3204

Objectives:

- enable students to communicate accurately, appropriately and effectively in writing
- enable students to understand and respond appropriately to what they read
- encourage students to enjoy and appreciate the variety of language
- complement the students' other areas of study by developing skills of a more general application (e.g. analysis, synthesis, drawing of inferences)
- promote the students' personal development and an understanding of themselves and others.

Half Yearly Syllabus 2024

Name of the exam	Chapters	Pattern	Marks
Half Yearly Examination	Grade VIII syllabus is included in the Half Yearly Exam. Paper-1 বিভাগ: ক- চিঠি, প্রতিবেদন। বিভাগ: খ- রচনা Paper-২ বিভাগ: ক- ১।সন্ধি বিচ্ছেদ ২।বাগধারা, প্রবচন, জোড়া শব্দ ৩।বাক্য রূপান্তর ৪।ক্লোজ পরিচ্ছেদ। বিভাগ: খ- ৫। অনুচ্ছেদ পড়ে বোধ জ্ঞানের বহুবিকল্প প্রশ্ন। বিভাগ: গ- ৬। অনুচ্ছেদ পড়ে বোধ জ্ঞানের মুক্ত প্রশ্ন। ৭। শব্দার্থ। (অষ্টম শ্রেণির সিলেবাস রিভিশন হবে।)	Paper-1: Marks- 90 ১। দু'টি বিষয় থেকে যেকোনো একটি বেছে নিয়ে প্রায় ১২০ শব্দে উত্তর লেখা। ২। তিনটি রচনার মধ্যে থেকে যেকোনো একটি বিষয়ে প্রায় ২০০ শব্দে রচনা লেখা। Paper-2: Marks- 110 ১।সন্ধি বিচ্ছেদ ২।বাগধারা, প্রবচন, জোড়া শব্দ ৩।বাক্য রূপান্তর ৪।ক্লোজ পরিচ্ছেদ। বিভাগ: খ- ৫। অনুচ্ছেদ পড়ে বোধ জ্ঞানের বহুবিকল্প প্রশ্ন। বিভাগ: গ- ৬। অনুচ্ছেদ পড়ে বোধ জ্ঞানের মুক্ত প্রশ্ন। ৭। শব্দার্থ।	Marks will be converted into 60.
CT-1	প্রথম শ্রেণি পরীক্ষা চিঠি, প্রতিবেদন।	চিঠি, প্রতিবেদন। Marks- 15	Marks will be converted into 40.

CT-2	দ্বিতীয় শ্রেণি পরীক্ষা ১।সন্ধি বিচ্ছেদ ২।বাগধারা, প্রবচন, জোড়া শব্দ ৩।অনুচ্ছেদ পড়ে বোধ জ্ঞানের মুক্ত প্রশ্ন।	১।সন্ধি বিচ্ছেদ ২।বাগধারা, প্রবচন, জোড়া শব্দ ৩।অনুচ্ছেদ পড়ে বোধ জ্ঞানের মুক্ত প্রশ্ন। Marks- 15	
	SBA	10	
	Assignment/Presentation	10	
Total			100

Annual Term Syllabus 2025

Name of the exam	Chapters	Pattern	Marks
Annual Examination	Grade VIII and Grade IX Half Yearly syllabus is included in the Annual Term. Paper-1 বিভাগ: ক- কথোপকথন, ভাষণ। বিভাগ: খ- রচনা Paper-২ বিভাগ: ক- ১।সন্ধি বিচ্ছেদ ২।বাগধারা, প্রবচন, জোড়া শব্দ। ৩।বাক্য রূপান্তর, ৪।ক্লোজ পরিচ্ছেদ, ৫। অনুচ্ছেদ পড়ে বোধ জ্ঞানের বহুবিকল্প প্রশ্ন বিভাগ: গ- ৬। অনুচ্ছেদ পড়ে বোধ জ্ঞানের মুক্ত প্রশ্ন। ৭। শব্দার্থ (অষ্টম শ্রেণির সিলেবাস রিভিশন হবে।)	Paper-1: Marks- 90 ক। দু'টি বিষয় থেকে যেকোনো একটি বেছে নিয়ে প্রায় ১২০ শব্দে উত্তর লেখা। খ। তিনটি রচনার মধ্যে থেকে যেকোনো একটি বিষয়ে প্রায় ২০০ শব্দে রচনা লেখা। Paper-2: Marks- 110 ১।সন্ধি বিচ্ছেদ ২।বাগধারা, প্রবচন, জোড়া শব্দ ৩।বাক্য রূপান্তর ৪।ক্লোজ পরিচ্ছেদ। বিভাগ: খ- ৫। অনুচ্ছেদ পড়ে বোধ জ্ঞানের বহুবিকল্প প্রশ্ন। বিভাগ: গ- ৬। অনুচ্ছেদ পড়ে বোধ জ্ঞানের মুক্ত প্রশ্ন। ৭। শব্দার্থ।	Marks will be converted into 60.
CT-1	প্রথম শ্রেণি পরীক্ষা ভাষণ, কথোপকথন লেখা।	ভাষণ, কথোপকথন লেখা। Marks- 15	
CT-2	দ্বিতীয় শ্রেণি পরীক্ষা ১।বাক্য রূপান্তর, ২।ক্লোজ পরিচ্ছেদ, ৩।অনুচ্ছেদ পড়ে বোধ জ্ঞানের বহুবিকল্প প্রশ্ন।	১।বাক্য রূপান্তর, ২।ক্লোজ পরিচ্ছেদ, ৩।অনুচ্ছেদ পড়ে বোধ জ্ঞানের বহুবিকল্প প্রশ্ন। Marks- 15	Marks will be converted into 40.
	SBA	10	
	Assignment/Presentation	10	
	Total		100

Mathematics (Syllabus D) 4024

Objectives:

This syllabus is specially designed to provide valuable learning experiences to engage the hearts and minds of students sitting for the Cambridge O Level examination in Mathematics. Cambridge O Level Mathematics allows learners to gain lifelong benefits, including:

- Increase intellectual curiosity, develop mathematical language as a means of communication and investigation and explore mathematical ways of reasoning.
- Acquire and apply skills and knowledge relating to numbers, measure, and space in mathematical situations that they will meet in life.
- Acquire a foundation appropriate to their further study of mathematics and of other disciplines.
- Appreciate the pattern, structure and power of mathematics and derive satisfaction, enjoyment, and confidence from the understanding of concepts and the mastery of skills.

Books:

1. **Cambridge O Level Mathematics Coursebook (Second Edition), Author:** Audrey Simpson
2. **Cambridge O Level Mathematics (Second Edition) Hodder Education**

Author: Micheal Handbury, Jean Matthews

[The syllabus is made based on the book: Cambridge O Level Mathematics (Second Edition) Hodder Education Author: Micheal Handbury, Jean Matthews]

Half Yearly Syllabus 2024

Name of Exam	Chapter / Topic	Pattern	Marks
Half Yearly Examination	Grade VIII syllabus is included in the Half Yearly Exam. 27. Graphs in practical situations 28. Graphs of functions 29. Sketching curves 32. Geometrical terms 33. Geometrical construction 34. Scale drawing 35. Similarity 36. Symmetry 37. Angles 38. Circle theorem	Structured and unstructured questions Paper 1- Non-calculator Marks: 100 Use of a calculator is not allowed Paper 2- Calculator Marks: 100 A scientific calculator is required.	Marks will be converted into 60.
CT-1	Chapter: 27, 28, 29	Structured and unstructured questions Marks- 15	Marks will be converted into 40.
CT-2	Chapter: 32, 33, 34	Structured and unstructured questions Marks- 15	
	SBA	10	
	Assignment	10	
Total			100

Annual Term Syllabus- 2025

Exam	Chapter / Topic	Pattern	Marks
Annual Examination	Grade VIII and Grade IX Half Yearly syllabus is included in the Annual Term. 41. Pythagoras' theorem & trigonometry 42. Transformation 43. Vectors 44. Probability 45 Categorical, numerical and grouped data 46 Statistical diagram Revision of Grade 8 Half-yearly Exam & Final and Grade 9 Half-yearly Exam	Structured and unstructured questions Paper 1- Non-calculator Marks: 100 Use of a calculator is not allowed Paper 2- Calculator Marks: 100 A scientific calculator is required.	Marks will be converted into 60.
CT-1	Chapter: 41, 42	Structured and unstructured questions Marks- 15	Marks will be converted into 40.
CT-2	Chapter: 43, 44	Structured and unstructured questions Marks- 15	
	SBA	10	
	Assignment	10	
Total			100

Physics 5054

Aim: The aims describe the purposes of a course based on this syllabus.

- acquire scientific knowledge and understanding of scientific theories and practice
- develop a range of experimental skills, including handling variables and working safely
- use scientific data and evidence to solve problems and discuss the limitations of scientific methods
- communicate effectively and clearly, using scientific terminology, notation and conventions
- understand that the application of scientific knowledge can benefit people and the environment
- enjoy science and develop an informed interest in scientific matters which support study.

Knowledge with understanding

- scientific phenomena, facts, laws, definitions, concepts and theories
- scientific vocabulary, terminology and conventions (including symbols, quantities and units)
- scientific instruments and apparatus, including techniques of operation and aspects of safety
- scientific and technological applications with their social, economic and environmental implications.

Books: 1. FEDERAL PHYSICS

A course for 'O' Level

Second edition

Charles Chew, Leong See Cheng, Chow Siew Foong

2. Cambridge O Level Physics

Second edition

Tom Duncan, Heather Kennett

Half Yearly

Name of the exam	Chapters	Pattern	Marks
Half Yearly Examination	2 Thermal physics Unit 12: Transfer of Thermal Energy	Paper 1 Multiple Choice Questions	40
	3.Properties of Waves Unit 16: Sound	Paper 2 Structured Questions	80
	4. Electricity and Magnetism Unit 17: Static Electricity	Paper 3 Laboratory Question	40
	Unit 18: Current Electricity		Total
	Unit 19: D.C. Circuit		60
CT-1	2 Thermal physics Unit 12: Transfer of Thermal Energy	Structured Questions Multiple Choice Questions	15
CT-2	4. Electricity and Magnetism Unit 17: Static Electricity Unit 18: Current Electricity Unit 19: D.C. Circuit	Structured Questions Multiple Choice Questions	15
	SBA		10
	Assignment /Lab Copy / Class Performance		10
	Total		100

Final Examination

Name of the exam	Chapters	Pattern	Marks
Final Examination	4. Electricity and Magnetism Unit 20: Practical Electricity	Paper 1 Multiple Choice Questions	40
	Unit 21: Simple Phenomena of Magnetism	Paper 2 Structured Questions	80
	5. Nuclear Physics Unit 25: Radioactivity and the Nuclear Atom	Paper 3 Laboratory Question	40
	And Review		Total
	1 General Physics		60

	Unit 1: Physical quantities and SI Units Unit 2: Speed, Velocity and Acceleration Unit 3: Forces Unit 4: Mass, Weight and Density Unit 5: Turning effect of Forces Unit 6: Work, Energy and power Unit 7: Pressure 2 Thermal physics Unit 8: Temperature Unit 9,10 & 11: Thermal properties of Matter Unit 12: Transfer of Thermal Energy 3. Waves Unit 13: General properties of waves Unit 14 & 15: Light Unit 16: Sound 4. Electricity and Magnetism Unit 17: Static Electricity Unit 18: Current Electricity Unit 19: D.C. Circuit Unit 20: Practical Electricity Unit 21: Simple Phenomena of Magnetism (partially)		
CT-1	4. Electricity and Magnetism Unit 20: Practical Electricity Unit 21: Simple Phenomena of Magnetism (partially)	Structured Questions Multiple Choice Questions	15
CT-2	5. Nuclear Physics Unit 25: Radioactivity and the Nuclear Atom	Structured Questions Multiple Choice Questions	15
	SBA		10
	Assignment /Lab Copy / Class Performance		10
	Total		100

Chemistry (5070)

Objectives: Cambridge O level Chemistry develops a set of transferrable skills including handling data, solving practical problems and applying the scientific methods. It aims to enable students to:

- acquire scientific knowledge and understanding of scientific theories and practice.
- develop a range of experimental skills.
- use scientific data and evidence to solve problems and discuss the limitations of scientific methods.
- understand that the application of scientific knowledge can benefit people and the environment.
- enjoy science and develop an informed interest in scientific matters which support further study.

Book: Chemistry Matters, by Toon, Kwong, Sadler and Sadler, Marshall Cavendish Education

Half Yearly Syllabus 2024

Name of Exam	Units	Question pattern	Marks
Half Yearly Examination	Grade VIII syllabus is included in the Half Yearly Exam. Unit 3: Stoichiometry 3.3: Mole and Avogadro constant	Multiple choice questions (P1) Marks- 40	Marks will be converted into 60.

	Unit 4: Electrochemistry 4.1: Electrolysis 4.2: Hydrogen-oxygen fuel cells Unit 7: Acids, bases and salts 7.1: The characteristic properties of acids and bases 7.3: Preparation of salts Unit 9: Metals 9.1: Properties of metals 9.2: Uses of metals 9.3: Alloys and their properties 9.4: Reactivity series 9.5: Corrosion of metals 9.6: Extraction of metals	Structured questions (P2) Marks- 80 Practical exam (P3)- Marks- 40	
CT 1	Unit 3.3: Mole and Avogadro constant Unit 4.1: Electrolysis	MCQ, structured and calculation questions Marks- 15	Marks will be converted into 40.
CT 2	Unit 7.1: The characteristic properties of acids and bases Unit 7.3: Preparation of salts	MCQ, structured and calculation questions Marks- 15	
	SBA	10	
	Assignment	10	
Total			100

Annual Term Syllabus 2025

Name of Exam	Units	Question pattern	Marks
Annual Examination	Grade VIII and Grade IX Half Yearly syllabus is included in the Annual Term. Unit 5: Chemical energetics 5.1: Exothermic and Endothermic reactions Unit 6: Chemical reactions 6.2: Rate of reaction 6.3: Reversible reactions and equilibrium Unit 10: Chemistry of the Environment 10.1: Water 10.2: Fertilisers 10.3: Air quality and climate Unit 11: Organic Chemistry 11.1: Formulae, functional groups and terminology 11.2: Naming organic compounds 11.3: Fuels 11.4: Alkanes 11.5: Alkenes 11.6: Alcohols 11.7: Carboxylic acids 11.8: Polymers	Multiple choice questions (P1) Marks- 40 Structured questions (P2) Marks- 80 Practical exam (P3)- Marks- 40	Marks will be converted into 60.
	Unit 5.1: Exothermic and Endothermic reactions Unit 6.2: Rate of reaction	MCQ, structured and calculation questions Marks- 15	Marks will be converted into 40.
	Unit 6.3: Reversible reactions and equilibrium Unit 10: Chemistry of the Environment	MCQ, structured and calculation questions Marks- 15	
	SBA	10	
	Assignment	10	
Total			100

Biology 5090

Objectives:

- acquire scientific knowledge and understanding of scientific theories and practice
- develop a range of experimental skills, including handling variables and working safely
- use scientific data and evidence to solve problems and discuss the limitations of scientific methods
- communicate effectively and clearly, using scientific terminology, notation and conventions
- understand that the application of scientific knowledge can benefit people and the environment
- enjoy science and develop an informed interest in scientific matters which support further study.

Book: Cambridge GCE O level biology Book D.G. Mackean, Dave Hayward

Half Yearly Syllabus 2024

Name of the exam	Chapters	Pattern	Marks
Half Yearly Examination	<p>Grade VIII syllabus is included in the Half Yearly Exam.</p> <p>Unit 13: Excretion Unit 14 Coordination and control 14.1: Nervous of System 14.2: Eye 14.3: Hormone 14.4: Homeostasis Unit 19: Relationships of organisms with one another and with the environment 19.1: Ecology 19.2: Effect of Human Activities on Ecology</p> <p>Practical Syllabus: From Unit 1 to Unit 14 of O level syllabus</p>	<p>1. Paper 1: Multiple Choice 1 hour 40 marks 30% 40 four-option multiple-choice questions</p> <p>2. Paper 2: Theory 1 hour 45 minutes 80 marks 50% Short-answer and structured questions</p> <p>3. Paper 3: Practical 1 hour 30 minutes 40 marks 20% Questions will be based on the experimental skills in Section 4</p>	Marks will be converted into 60.
CT-1	<p>Unit 14 Coordination and control 14.1: Nervous of System 14.2: Eye 14.3: Hormone 14.4: Homeostasis</p>	<p>1. Creative/Structured Questions, 2. Short-Answer Questions, 3. Fill in the blanks 4. Multiple Choice Questions, 5. Labeling/Drawing Marks 15</p>	Marks will be converted into 40.
CT-2	<p>Unit 13: Excretion Unit 19: Relationships of organisms with one another and with the environment 19.1: Ecology</p>	<p>1. Creative/Structured Questions, 2. Short-Answer Questions, 3. Fill in the blanks 4. Multiple Choice Questions, 5. Labeling/Drawing Marks 15</p>	

	SBA	10	
	Practical Class Attendance + Lab C.W.	10	
	Total		100

Annual Term Syllabus 2025

Name of the exam	Chapters	Pattern	Marks
Annual Examination	Grade VIII and Grade IX Half Yearly syllabus is included in the Annual Term. Unit 16: Development of organisms and continuity of life. 16.1: Nuclear Division, 16.2: Asexual and sexual reproduction 16.3 Sexual reproduction in plants 16.4 Sexual reproduction in humans. Unit 17: Inheritance. Practical Syllabus: From Unit 1 to Unit 17 of O level syllabus.	1. Paper 1: Multiple Choice 1 hour 40 marks 30% 40 four-option multiple-choice questions 2. Paper 2: Theory 1 hour 45 minutes 80 marks 50% Short-answer and structured questions 3. Paper 3: Practical 1 hour 30 minutes 40 marks 20% Questions will be based on the experimental skills in Section 4	Marks will be converted into 60.
CT-1	Unit 16: Development of organisms and continuity of life. 16.1: Nuclear Division, 16.2: Asexual and sexual reproduction 16.3 Sexual reproduction in plants	1. Creative/Structured Questions, 2. Short-Answer Questions, 3. Fill in the blanks 4. Multiple Choice Questions, 5. Labeling/Drawing Marks 15	Marks will be converted into 40.
CT-2	Unit 16: Development of organisms and continuity of life. 16.1: Nuclear Division, 16.4 Sexual reproduction in humans	1. Creative/Structured Questions, 2. Short-Answer Questions, 3. Key words 4. True or False Questions, 5. Labeling/Drawing Marks 15	
	SBA	10	
	Practical Class Attendance + Lab C.W.	10	
Total			100

Additional Mathematics 4037

Objectives:

Cambridge O Level Additional Mathematics enriches learners' understanding of connections within mathematics, refining their reasoning and analytical skills. This course reinforces learners' competency, confidence, and fluency in their use of techniques with and without a calculator, strengthening mathematical understanding and communication skills. It requires a fluent and confident ability to solve problems in abstract mathematics.

Cambridge O Level Additional Mathematics encourages learners to further develop their mathematical ability in problem solving, to provide strong progression for advanced study of mathematics or highly numerate subjects. It is designed to stretch the more able candidates and provides a smooth transition to Cambridge International AS & A Level Mathematics. Our approach in Cambridge O Level Additional Mathematics encourages learners to be:

confident, in using mathematical language and more complex concepts to ask questions, explore ideas and communicate
responsible, by taking ownership of their learning to prepare for independent mathematical learning, and applying their mathematical knowledge and skills so that they can reason, problem solve and work collaboratively
reflective, by making connections within mathematics and across other subjects, and in evaluating methods and presenting logical arguments to justify solutions

innovative, by applying their knowledge and understanding to solve unfamiliar problems creatively, flexibly and efficiently, selecting from a range of mathematical techniques

engaged, by the beauty, patterns and structure of mathematics, they are curious to learn about the relevance of its many applications in society and the economy.

Books:

1. **Cambridge IGCSE and O Level Additional Mathematics Coursebook (Second Edition) Author:** Sue Pemberton
2. **New Syllabus Additional Mathematics (7th Edition), Author:** Prof Lee Peng Yee, Dr Fan Liang Huo – Shinglee Publications

The syllabus is made based on Cambridge IGCSE and O Level Additional Mathematics Coursebook (Second Edition).

Half Yearly Syllabus 2024

Name of the exam	Topics	Pattern	Marks
Half Yearly Examination	Grade VIII syllabus is included in the Half Yearly Exam.	Structured and unstructured questions Paper 1 (Non-calculator) Marks 80 Paper 2 (Calculator) Marks 80	Marks will be converted into 60.
	Chapter 5: Equations, Inequalities and Graphs		
	Chapter 8: Circular Measure		
	Chapter 10: Permutations and Combinations		
	Chapter 11: Series		
	Chapter 12: Differentiation 1		
CT-1	Chapter 5: Equations, Inequalities and Graphs	Structured and unstructured questions Marks 15	Marks will be converted into 40.
CT-2	Chapter 11: Series	Structured and unstructured questions Marks 15	
	SBA	10	
	Assignment	10	

Annual Term Syllabus 2025

Name of the exam	Topics	Pattern	Marks
Annual Examination	Grade VIII and Grade IX Half Yearly syllabus is included in the Annual Term.	Structured and unstructured questions Paper 1 (Non-calculator) Marks 80 Paper 2 (Calculator) Marks 80	Marks will be converted into 60.
	Chapter 13: Vectors		
	Chapter 14: Differentiation 2		
	Chapter 15: Integration		
	Chapter 16: Kinematics		
	Revision: Half Yearly Syllabus		
CT-1	Chapter 13: Vectors	Structured and unstructured questions Marks 15	Marks will be converted into 40.
CT-2	Chapter 14: Differentiation 2	Structured and unstructured questions Marks 15	
	SBA	10	
	Assignment	10	
Total			100

Computer Science 2210

Objective:

Students who learn how to code and who understand the basics of computer science develop few potentials such as

- a higher level of integral thinking, algorithmic thinking, creativity, and even teamwork skills. This whole skill-set is valuable and helpful in any field, whether or not it is related to computers and technology.
- be able to apply problem solving skills to formalize general problem statements into precise algorithmic solutions.
- demonstrate an understanding of the interplay between theory and practice

Book: Cambridge IGCSE™ and O Level Computer Science (Second Edition) by – David Watson & Helen Williams
Half Yearly Syllabus 2024

Name of the exam	Chapters	Pattern	Marks
Half Yearly Examination	Grade VIII syllabus is included in the Half Yearly Exam. Paper: 1 Chapter-4:- Software 4.1 Types of software and interrupts 4.2 Types of programming language, translators and integrated development environments (IDEs) (Repetition of selected topics from Chapter 4) Chapter-6: Automated and emerging technologies 6.1 Automated systems 6.2 Robotics 6.3 Artificial intelligence (AI) Paper: 2 Chapter: 9 => Database 9.1 Databases Selected topics from Chapter 7 and Chapter 8	T/F, F/B, MCQ, One sentence Q/A, S/Q, B/Q, Creative questions Paper 1: Theory- Marks- 75 Paper 2: Algorithm, Programming and Logic Marks- 75	Marks will be converted into 60.

CT-1	Chapter-6: Automated and emerging technologies 6.1 Automated systems 6.2 Robotics 6.3 Artificial intelligence (AI)	T/F, F/B, MCQ, One sentence Q/A, S/Q, Creative questions Marks 15	Marks will be converted into 40.
CT-2	Chapter-7: Algorithm design and Problem Solving(Selected Topics) Chapter-8: Programming=>(Selected Topics)	T/F, F/B, MCQ, One sentence Q/A, S/Q, Creative questions Marks 15	
	SBA	10	
	Assignment	10	
Total			100

Annual Term Syllabus 2025

Name of the exam	Chapters	Pattern	Marks
Annual Examination	Grade VIII and Grade IX Half Yearly syllabus is included in the Annual Term. Paper 1: Chapter-5: The internet and its uses 5.1 The internet and the World Wide Web (WWW) 5.2 Digital currency 5.3 Cyber security Paper 2: Chapter-7: Algorithm design and Problem Solving=> 7.1: The Program Development Life Cycle. 7.2: Computer System, Sub-system and decomposition. 7.3: Explaining the purpose of the Algorithm. 7.4: Standard methods of Solution. 7.5: Validation and Verification 7.6: Test data 7.7: Trace table to document dry runs of algorithm. 7.8: Identifying errors in Algorithm. 7.9: Writing and amending Algorithm. Chapter-8: Programming=> 8.1: Programming Concepts 8.2: Arrays 8.3: File Handling	T/F, F/B, MCQ, One sentence Q/A, S/Q, B/Q, Creative questions	Marks will be converted into 60.
CT-1	Chapter-5: The internet and its uses (Selected Topics)	T/F, F/B, MCQ, One sentence Q/A, S/Q, Creative questions Marks 15	Marks will be converted into 40.
CT-2	Chapter-7: Algorithm design and Problem Solving=>(Selected Topics) Chapter-8: Programming=>(Selected Topics)	T/F, F/B, MCQ, One sentence Q/A, S/Q, Creative questions Marks 15	

	SBA	10	
	Assignment	10	
Total			100

Economics (2281)

Objectives: Students will gain lifelong skills, including: •an understanding of economic theory, terminology and principles •the ability to apply the tools of economic analysis •the ability to distinguish between facts and value judgements in economic issues •an understanding of, and an ability to use, basic economic numeracy and literacy •the ability to take a greater part in decision-making processes in everyday life •an ability to use examples from a variety of economies •an excellent foundation for advanced study in economic

Books: Cambridge IGCSE® and O Level Economics Coursebook (Second Edition)

Author: Susan Grant

Half Yearly Syllabus 2024

Name of the exam	Topics	Pattern	Marks
Half Yearly Examination	Grade VIII syllabus is included in the Half Yearly Syllabus. <ul style="list-style-type: none"> Workers Trade unions Firms Firms and production Firms' costs, revenue and objectives Market structure 	<ul style="list-style-type: none"> Short questions Descriptive analysis Problem solving MCQ Case Study Paper-1: Marks - 30 Paper-1: Marks - 90	Marks will be converted into 60.
CT-1	<ul style="list-style-type: none"> Workers Trade unions Firms 	<ul style="list-style-type: none"> Short questions Problem solving Marks- 15	Marks will be converted into 40.
CT-2	<ul style="list-style-type: none"> Firms and production Firms' costs, revenue and objectives Market structure 	<ul style="list-style-type: none"> Short questions Problem solving Marks- 15	
	SBA	10	
	Assignment/Class Copy/ Presentation	10	
Total			100

Annual Examination 2025

Name of the exam	Chapters	Pattern	Marks
Annual Examination	Grade VIII and Grade IX Half Yearly syllabus is included in the Annual Term. <ul style="list-style-type: none"> The role of government The macroeconomic aims of government Fiscal policy Fiscal policy continued Monetary policy Supply-side policy Economic growth Employment and unemployment Inflation and deflation Living standards Poverty 	<ul style="list-style-type: none"> Short questions Descriptive analysis Problem solving MCQ Case Study Paper-1: Marks - 30 Paper-1: Marks - 90	Marks will be converted into 60.
CT-1	<ul style="list-style-type: none"> The role of government The macroeconomic aims of government Fiscal policy Fiscal policy continued 	<ul style="list-style-type: none"> Short questions Problem solving Marks- 15	Marks will be converted into 40.
CT-2	<ul style="list-style-type: none"> Monetary policy Supply-side policy Economic growth Employment and unemployment Inflation and deflation Living standards Poverty 	<ul style="list-style-type: none"> Short questions Problem solving Marks- 15	
	SBA	10	
	Assignment/Class Copy/ Presentation	10	
	Total		100

Accounting 7707

Book's name: 1. Business Accounting 1; Author: Alan Sangster with Lewis Gordon (14th edition)
2. Cambridge IGCSE and O Level Accounting. Course book. Catherine Coucom. 2nd edition.
3. Question paper bank (Paper 1 and Paper 2)

Objective:

The objects are to enable students to develop:

- knowledge and understanding of the principles and purposes of accounting for individuals, businesses, non-trading organizations and society as a whole
- an understanding of accounting concepts, principles, policies, techniques, procedures and terminology
- improved skills of numeracy, literacy, communication, enquiry, presentation and interpretation
- improved accuracy, orderliness and the ability to think logically
- an excellent foundation for advanced study.

Half Yearly Syllabus 2024

Name of the exam	Topic	Pattern	Marks
Half Yearly Examination	Grade VIII syllabus is included in the Half Yearly Syllabus. 1. Final account with adjustment (Sole trader) 2. Accounts of Manufacturing business 3. Accounts of Partnership business 4. Accounts of Limited Liabilities Company	Paper 1 (MCQ) Marks 35 Paper 2 (Structured written paper) Marks 100	Marks will be converted into 60.
CT 1	Accounts of Manufacturing business	Structured written paper Marks 15	Marks will be converted into 40.
CT 2	Accounts of Partnership business	Structured written paper. Marks 15	
	SBA	10	
	Assignment	10	
Total			100

Annual Term Syllabus 2025

Name of the exam	Topic	Pattern	Marks
Annual Examination	Grade VIII and Grade IX Half Yearly syllabus is included in the Annual Term. 1. Errors and Suspense account 2. Incomplete records 3. Irrecoverable debts and provision for doubtful debts 4. Calculation and understanding accounting ratios 5. Interpretation of accounting ratios a. Inter-Farm comparison b. Interested parties	Paper 1 (MCQ) Marks 35 Paper 2 (Structured written paper) Marks 100	Marks will be converted into 60.
CT 1	Business documents Books of prime entry Accounts of Manufacturing business Accounts of Partnership business Accounts of Limited Liabilities Company Bank reconciliation statement	MCQ-15 marks	Marks will be converted into 40.
CT 2	Errors and Suspense account Calculation and understanding accounting ratios	Structured written paper- 15 marks	
	SBA	10	
	Assignment	10	
Total			100

Business Studies 7115

Objectives: Learners will be able to: •understand different forms of business organisations, the environments in which businesses operate and business functions such as marketing, operations and finance •appreciate the role of people in business success.

Books: Cambridge IGCSE and O Level Business Studies (5th Edition) by Karen Borrington, Peter Stimpson
Half-yearly Syllabus 2024

Name of the exam	Topics	Pattern	Marks
Half Yearly Examination	Grade VIII syllabus is included in the Half Yearly Exam. Section 3: Marketing Chapter- 13: Marketing mix: Price Chapter- 14: Marketing mix: Place – distribution channels Chapter- 15: Marketing mix: Promotion Chapter- 16: Technology and the marketing mix Chapter- 17: Marketing strategy Section-4: Operations Management Chapter-18: Production of goods and services	Cambridge O’Level Pattern Paper-1: Data Response Marks- 80 Paper-2: Case Study Marks- 80	Marks will be converted into 60.
CT-1	Chapter- 13: Marketing mix: Price Chapter- 14: Marketing mix: Place – distribution channels	Paper-1: Data Response Marks- 15	Marks will be converted into 40.
CT-2	Chapter- 15: Marketing mix: Promotion Chapter- 16: Technology and the marketing mix	Paper-1: Data Response Marks- 15	
	SBA	10	
	Assignment/Class Copy/ Presentation	10	
Total			100

Annual Term Syllabus-2025

Name of the exam	Chapters	Pattern	Marks
Annual Examination	Grade VIII and Grade IX Half Yearly syllabus is included in the Annual Term. Section-4: Operations Management Chapter-19: Costs, scale of production and break-even analysis Chapter-20: Achieving quality production Chapter-21: Location decisions Chapter-22: Business finance: needs and sources Chapter-23: Cash-flow forecasting and working capital Chapter- 24: Income Statement	Cambridge O’Level Pattern Paper-1: Data Response Marks- 80 Paper-2: Case Study Marks -80	Marks will be converted into 60.
CT-1	Section-4: Operations Management Chapter-19: Costs, scale of production and break-even analysis Chapter-20: Achieving quality production	Paper-1: Data Response Marks- 15	Marks will be converted into 40.

CT-2	Chapter-21: Location decisions Chapter-22: Business finance: needs and sources	Paper-1: Data Response Marks-15	
	SBA	10	
	Assignment/Class Copy/ Presentation	10	
Total			100