Gems Akademia
Global School
Thakurpukur, Kolkata

Accounting

MONTH	TOPIC	MODE OF ASSESSMENT	REINFORCEMENT PORTION	ADDITIONAL RESOURCES
APRIL	3.1.2 Partnerships	Class Test-1, Class Test-2 Unit Test-1, Unit Test-2 Half Yearly Exams		www.cambridgeiinternational.org Past Paper and Worksheet
MAY	3.1.4 Manufacturing businesses 3.3.1 Business acquisition and merger			www.cambridgeiinternational.org Past Paper and Worksheet
SUMMER	BREAK		SUMMER	BREAK
JUNE	3.5.1 Analysis and communication of accounting information 4.1.1 Activity based costing		Class Test-1	www.cambridgeiinternational.org Past Paper and Worksheet
JULY	4.2.1 Standard costing 4.3.1 Budgeting and budgetary control		Unit Test-1 19-07-2024 FRIDAY	www.cambridgeiinternational.org Past Paper and Worksheet
AUGUST	4.4.1 Investment appraisal		Class Test-2	www.cambridgeiinternational.org Past Paper and Worksheet

Revision for Half Yearly Examination

3.1.2 Partnerships

3.1.4 Manufacturing businesses

3.3.1 Business acquisition and merger

3.5.1 Analysis and communication of accounting information

4.1.1 Activity based costing

4.2.1 Standard costing

4.3.1 Budgeting and budgetary control

4.4.1 Investment appraisalESL

Monthly Syllabus for the session 2024-25
Grade XII (CAIE)

Gems Akademia
Global School
Thakurpukur, Kolkata

Biology

MONTH	TOPIC	MODE OF ASSESSMENT	REINFORCE-MENT PORTION	ADDITIONAL RESOURCES
APRIL				
MAY				
SUMMER			SUMMER	BREAK
JUNE	12.Energy and respiration	Solving ESQ + ITQ		www.science.smith.edu/departments/Biology/Bio231/etc.html, www.sumanasinc.com/webcontent/animations/content/cellularrespiration.html, www.biologymad.com/master.html?http://www.biologymad.com/PhotosynResp/PhotosynResp.htm
JULY	13.Photosynthesis: 19.Genetic Technology	Solving ESQ + ITQ	Revision for UT 2	www.vcbio.science.ru.nl/en/fesem/applets/chloroplast/ www.nasa.gov/content/goddard/seeing-photosynthesis-from-space-nasa-scientists-use-satellites-to-measure-plant-health/
AUGUST	19, Genetic Technology	Solving ESQ + ITQ	Revision for Half yearly	www.sumanasinc.com/webcontent/animations/content/pcr.html www.bioinformaticaindeklas.nl/en/ https://learn.genetics.utah.edu/content/labs/gel/

HALF YEARLY SYLLABUS
12.Energy and respiration
13.Photosynthesis
19, Genetic Technology

Business Studies

MONTH	TOPIC	MODE OF ASSESSMENT	REINFORCE-MENT PORTION	ADDITIONAL RESOURCES
APRIL	**6.1 External influences on business activity** 6.1.1 Political and legal 6.1.2 Economic 6.1.3 Social and demographic 6.1.4 Technological 6.1.5 Competitors and suppliers 6.1.6 Internationa 6.1.7 Environmental **6.2 Business strategy** 6.2.1 Developing business strategy 6.2.2 Corporate planning and implementation	Class Test-1, Class Test-2 Unit Test-1, Unit Test-2 Half Yearly Exams		www.cambridgeiinternational.org Past Paper and Worksheet
MAY	**7.1 Organisational structure** 7.1.1 The relationship between business objectives and organisational structure 7.1.2 Types of structure: functional, hierarchical (flat and narrow), matrix 7.1.3 Delegation and accountability 7.1.4 Control, authority and trust 7.1.5 Centralisation and decentralisation 7.1.6 Line and staff **7.2 Business communication** 7.2.1 Purposes of communication 7.2.2 Methods of communication 7.2.3 Channels of communication 7.2.4 Barriers to communication 7.2.5 The role of management in facilitating communication			www.cambridgeiinternational.org Past Paper and Worksheet
SUMMER	BREAK		SUMMER	BREAK
JUNE	**6.1 External influences on business activity** 6.1.1 Political and legal 6.1.2 Economic 6.1.3 Social and demographic 6.1.4 Technological 6.1.5 Competitors and suppliers 6.1.6 Internationa 6.1.7 Environmental **6.2 Business strategy** 6.2.1 Developing business strategy 6.2.2 Corporate planning and implementation	Class Test-1, Class Test-2 Unit Test-1, Unit Test-2 Half Yearly Exams		www.cambridgeiinternational.org Past Paper and Worksheet
JULY	**7.1 Organisational structure** 7.1.1 The relationship between business objectives and organisational structure 7.1.2 Types of structure: functional, hierarchical (flat and narrow), matrix			www.cambridgeiinternational.org Past Paper and Worksheet

	7.1.3 Delegation and accountability 7.1.4 Control, authority and trust 7.1.5 Centralisation and decentralisation 7.1.6 Line and staff **7.2 Business communication** 7.2.1 Purposes of communication 7.2.2 Methods of communication 7.2.3 Channels of communication 7.2.4 Barriers to communication 7.2.5 The role of management in facilitating communication			
AUGUST	**6.1 External influences on business activity** 6.1.1 Political and legal 6.1.2 Economic 6.1.3 Social and demographic 6.1.4 Technological 6.1.5 Competitors and suppliers 6.1.6 Internationa 6.1.7 Environmental **6.2 Business strategy** 6.2.1 Developing business strategy 6.2.2 Corporate planning and implementation	Class Test-1, Class Test-2 Unit Test-1, Unit Test-2 Half Yearly Exams		www.cambridgeiinternational.org Past Paper and Worksheet

Revision for Half Yearly Examination

6.1 External influences on business activity
6.2 Business strategy
7.1 Organisational structure
7.2 Business communication
7.3 Leadership
7.4 Human resource management (HRM) strategy
8.1 Marketing analysis
8.2 Marketing strategy
9.1 Location and scale
9.2 Quality management
9.3 Operations strategy
10.1 Financial statements

Physics

MONTH	TOPIC	MODE OF ASSESSMENT	REINFORCEMENT PORTION	ADDITIONAL RESOURCES
APRIL	CH-12 Motion in a circle CH-13 Gravitational fields	BRAINSTROMING SESSION Periodic test Group discussion Quiz,		http://www.physicsclassroom.com/cla ss/circles/Lesson-1/Mathematics-of-Circular-Motion http://www.tap.iop.org/mechanics/circular/225/page_46483.html http://www.antonine-education.co.uk/Pages/Physics_4/Fu rther_Mechanics/FMC_03/Fmech_page_3.htm
MAY	CH-14 Temperature CH-15 Ideal gases	BRAINSTROMING SESSION Periodic test Group discussion Quiz,		http://www.tutorvista.com/physics/animations/thermal-equilibrium-animation http://www.miniphysics.com/2011/07/thermometric-property.html
			SUMMER	BREAK
JUNE	CH-16 Thermodynamics CH- 17 Oscillations	BRAINSTROMING SESSION Periodic test Group discussion Quiz,		http://www.tap.iop.org/electricity/emf/122/page_46061.html http://www.s-cool.co.uk/a-level/physics/simple-harmonic-motion-and-damping/revise-it/simple-harmonic-motion

JULY	CH-18 Electric fields CH-19 Capacitance	BRAINSTROMING SESSION Periodic test Group discussion Quiz,		http://www.tap.iop.org/electricity/capacitors/127/page_46171.html http://www.s-cool.co.uk/a-level/physics/capacitors/revise-it/capacitors-in-series-and-parallel http://www.youtube.com/watch?v=vAfwte8-7d4
AUGUST	CH-20 Magnetic fields CH-21 Alternating currents	BRAINSTROMING SESSION Periodic test Group discussion Quiz,		http://solar-center.stanford.edu/magnetism/magneti cfields.html http://www.ndt-ed.org/EducationResources/HighSchool/ Magnetism/magneticfields.htm

HALF YEARLY SYLLABUS

CH-12 Motion in a circle

CH-13 Gravitational fields

CH-14 Temperature

CH-15 Ideal gases

CH-16 Thermodynamics

CH-17 Oscillations

CH-18 Electric fields

CH-19 Capacitance

CH-20 Magnetic fields

2.1.6 Training and development

ENGLISH GENERAL PAPER

MONTH	TOPIC	MODE OF ASSESSMENT	REINFORCE -MENT PORTION	ADDITIONAL RESOURCES
APRIL	UNIT 1.1 SYLLABUS OUTLINE UNIT 4.1 USE OF ENGLISH	Formative	Key skills Content of the syllabus Benefits of EGP How assessment is done Type of questions needed to focus on PARTS OF SPEECH	https://www.cambridgeinternational.org/programmes-and-qualifications/cambridge-igcse-EGP-8021/past-papers
MAY	UNIT 1.2 CORE COURSE KNOWLEDGE UNIT 4.2 PARTS OF SPEECH THAT ADD DETAIL	Formative	Learn to write for a specific purpose and audience Break down essay questions Different approach of writing Select style of writing Identifying common errors PREPOSITIONAL , ADJECTIVAL, ADVERBIAL PHRASES DESCRIPTIVE PARTS OF SPEECH PUNCTUATION	https://www.cambridgeinternational.org/programmes-and-qualifications/cambridge-igcse-EGP-8021/past-papers
SUMMER BREAK -FROM 18-03-2024 TO 12-06-2024				

JUNE	UNIT 1.3 READING COMPREHENSION UNIT 4.3 ESSENTIAL PATRS OF SPEECH	Formative	Observe the work of other writers Set a purpose for your reading Use close reading and other strategies Apply critical comprehension skills to text Demonstrate reading comprehension through both logical reasoning and analysis of prose TYPES OF NOUNS, PRONOUNS, VERBS DETERMINE THEIR FUNCTION	https://www.cambridgeinternational.org/programmes-and-qualifications/cambridge-igcse-EGP-8021/past-papers
JULY	UNIT 2.1 SUMMARISING AND EXPLAINING WHAT YOU READ UNIT 4.4 ADDING COMPLEXITY TO YOUR WRITING	Formative UT 2	How information is organized to achieve a purpose How to put information into your own words Strategies for summarizing information Using expository skills to develop arguments ADDING VARIETY TO YOUR SENTENCE CONJUNCTIONS PREPOSITIONS PUNCTUATIONS	https://www.cambridgeinternational.org/programmes-and-qualifications/cambridge-igcse-EGP-8021/past-papers

	UNIT 2.2: PLANNING AND ORGANISING	Formative	Strategies to generate ideas How to generate ideas in a timed writing situation Organizing ideas before drafting Analyse ,interpret words in a question to determne its scope and limits	https://www.cambridgeinternational.org/programmes-and-qualifications/cambridge-igcse-EGP-8021/past-papers
AUGUST	**HALF YEARLY SYLLABUS** Paper 12 composition Paper 22 comprehension GRAMMAR – PARTS OF SPEECH, PREPOSITIONAL , ADJECTIVAL, ADVERBIAL PHRASES CONJUNCTIONS PREPOSITIONS PUNCTUATIONS			
	Disclaimer-The dates and assessment schedules are tentative and subject to change			

Computer Science

MONTH	TOPIC	MODE OF ASSESSMENT	REINFORCEMENT PORTION	ADDITIONAL RESOURCES
JUNE	1. Data Representation 2. Algorithms	-	-	Model Questions Previous years Question Papers
JULY	3. Communication & Internet Technologies 4. Recursion	**Class Test – 1 (Written Test)** **Max Marks - 10** The following chapters are included: Data Representation Algorithms	**Unit Test 1 Syllabus** **1.** Data Representation **2.** Algorithms	Model Questions Previous years Question Papers
SUMMER	BREAK		SUMMER	BREAK
AUGUST	5. Hardware and Virtual Machines 6. Programming Paradigms 7. System Software	**Class Test – 2 (Written Test)** **Max Marks – 10** The following chapters are included: Recursion, Communication & Internet Technologies	-	Model Questions Previous years Question Papers
SEPTEMBER	8. Logic Circuits and Boolean Algebra	**Class Test – 3 (Written Test)** **Max Marks - 10** The following chapters are included: Communication & Internet Technologies, Algorithms	**Unit Test 2 Syllabus** Communication & Internet Technologies, Recursion, Hardware and Virtual Machines	Model Questions Previous years Question Papers

HALF YEARLY SYLLABUS

The following chapters are included in the Half Yearly Examination.

1. Data Representation
2. Algorithms
3. Communication & Internet Technologies
4. Recursion
5. Hardware and Virtual Machines
6. Programming Paradigms
7. System Software
8. Logic Circuits and Boolean Algebra

Economics

MONTH	TOPIC	MODE OF ASSESSMENT	REINFORCEMENT PORTION	ADDITIONAL RESOURCES
APRIL	APRIL	The price system and the macroeconomy (unit 7.1-7.2)	Definition and calculation of total utility and marginal utility Equi-marginal principle Limitations of marginal utility theory and its assumptions of rational behaviour	
MAY	MAY	The price system and the macroeconomy (unit 7.1-7.2)	Meaning of an indifference curve and a budget line Income, substitution and price effects for normal, inferior and Giffen goods Limitations of the model of indifference curves	
SUMMER	BREAK		SUMMER	BREAK
JUNE	JUNE	The price system and the macroeconomy (unit 7.3)	Definitions of Productive and allocative efficiency Pareto optimality Definition of Dynamic efficiency Reasons for market failure	
JULY	JULY	The price system and the macroeconomy (unit 7.4-7.6)	Definition and calculation of social costs (SC) as the sum of private costs (PC) and external costs (EC), including marginal social costs (MSC), marginal private costs (MPC) and marginal external costs (MEC). Definition and calculation of social benefits (SB) as the sum of private benefits (PB) and external benefits (EB), including marginal social benefits (MSB), marginal private benefits (MPB) and	Ut 2: unit 7.1,7.2,7.3

			marginal external benefits (MEB) Definition of positive externality and negative externality Definition and calculation of social benefits (SB) as the sum of private benefits (PB) and external benefits (EB), including marginal social benefits (MSB), marginal private benefits (MPB) and marginal external benefits (MEB) Deadweight welfare losses arising from positive and negative externalities Short-run production function: fixed and variable factors of production Short-run production function – law of diminishing returns	
AUGUST	AUGUST	The price system and the macroeconomy (unit 7.7-7.8))	Definition and calculation of total, average and marginal costs (TC, AC, MC), including average total cost (ATC), total and average fixed costs (TFC, AFC) and total and average variable costs (TVC, AVC Long run production function	

Probability & Statistics

MONTH	TOPIC	MODE OF ASSESSMENT	REINFORCEMENT PORTION	ADDITIONAL RESOURCES
APRIL				
MAY				
SUMMER	BREAK		SUMMER	BREAK
JUNE				
JULY				
AUGUST				
HALF YEARLY SYLLABUS				

Physics

MONTH	TOPIC	MODE OF ASSESSMENT	REINFORCEMENT PORTION	ADDITIONAL RESOURCES
APRIL	CH-12 Motion in a circle CH-13 Gravitational fields	BRAINSTROMI NG SESSION Periodic test Group discussion Quiz,		http://www.ph ysicsclassroo m.com/cla ss/circles/Les son1/Mathematic s-ofCircularMotion http://www.ta p.iop.org/mec hanics/circ ular/225/page _46483.html http://www.an tonineeducation.co. uk/Pages/Ph ysics_4/Fu rther_Mecha nics/FMC_03 /Fmech_pa ge_3.htm
MAY	CH-14 Temperature CH-15 Ideal gases	BRAINSTROMI NG SESSION Periodic test Group discussion Quiz,		http://www.t utorvista.com /physics/anim ations/therma l-equilibriumanimation http://www. miniphysics.c om/2011/07/t h ermometricproperty.html
SUMMER	BREAK		SUMMER	BREAK
JUNE	CH-16 Thermodynamics CH- 17 Oscillations	BRAINSTROMI NG SESSION Periodic test Group discussion Quiz,		http://www.t ap.iop.org/ele ctricity/emf/1 22/ page_46061.h tml http://www.scool.co.uk/alevel/ physics/ simpleharmonicmotionanddam ping/revis e-it/simpleharmonicmotion
JULY	CH-18 Electric fields CH-19 Capacitance	e BRAINSTROMI NG SESSION Periodic test Group discussion Quiz,		http://www.t ap.iop.org/ele ctricity/capaci t ors/127/page _46171.html http://www.scool.co.uk/alevel/ physics/ capacitors/rev iseit/capacitorsin-series-andparallel http://www.y outube.com/ watch?v=vAf wt e8-7d4
AUGUST	CH-20 Magnetic fields CH-21 Alternating currents	BRAINSTROMI NG SESSION Periodic test Group discussion Quiz,		http://solarcenter.stanfor d.edu/magnet ism/magneti cfields.html http://www.n dted.org/Educat ionResources/ HighSchool/ Magnetism/m agneticfields. htm
HALF YEARLY SYLLABUS				
CH-12 Motion in a circle CH-13 Gravitational fields CH-14 Temperature CH-15 Ideal gases CH-16 Thermodynamics CH-17 Oscillations CH-18 Electric fields CH-19 Capacitance CH-20 Magnetic fields				

Mathematics

MONTH	TOPIC	MODE OF ASSESSMENT	REINFORCEMENT PORTION	ADDITIONAL RESOURCES
APRIL	Bridge Class			
MAY	Algebra	Revision + Real life application. Quiz, Solving end of chapter questions, HOTS questions worksheet.		Worksheet-2 PYQs
SUMMER	BREAK		SUMMER	BREAK
JUNE	Logarithmic and exponential functions, Trigonometry	Revision + Real life application. Solving end of chapter questions, Quiz. HOTS questions worksheet.		Worksheet-3 PYQs
JULY	Differentiation, Integration, Further calculus.	Revision + Real life application. Solving end of chapter questions, Quiz. HOTS questions worksheet.	Unit Test-1 Algebra, Logarithmic and exponential functions, Trigonometry.	Worksheet-4 PYQs
AUGUST	Further Algebra, Vectors	Revision + Real life application. Solving end of chapter questions, Quiz. HOTS questions worksheet.		Worksheet-5 PYQs

HALF YEARLY SYLLABUS
    Algebra
    Logarithmic and exponential functions,
    Trigonometry
    Differentiation
    Integration
    Further calculus
    Further Algebra
    Vectors

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Computer Science

MONTH	TOPIC	MODE OF ASSESSMENT	REINFORCEMENT PORTION	ADDITIONAL RESOURCES
June	1. Data Representation 2. Algorithms			Model Questions Previous years Question Papers
July	3. Communication & Internet Technologies 4. Recursion	Class Test – 1 (Written Test) Max Marks - 10 The following chapters are included: Data Representation Algorithms	Unit Test 1 Syllabus 1. Data Representation 2. Algorithms	Model Questions Previous years Question Papers
SUMMER	BREAK		SUMMER	BREAK
August	5. Hardware and Virtual Machines 6. Programming Paradigms 7. System Software	Class Test – 2 (Written Test) Max Marks – 10 The following chapters are included: Recursion, Communication & Internet Technologies		Model Questions Previous years Question Papers
September	8. Logic Circuits and Boolean Algebra	Class Test – 3 (Written Test) Max Marks - 10 The following chapters are included: Communication & Internet Technologies, Algorithms	Unit Test 2 Syllabus Communication & Internet Technologies, Recursion, Hardware and Virtual Machines	Model Questions Previous years Question Papers

The following chapters are included in the Half Yearly Examination.
1. Data Representation
 2. Algorithms
3. Communication & Internet Technologies
4. Recursion
5. Hardware and Virtual Machines
6. Programming Paradigms
7. System Software
8. Logic Circuits and Boolean Algebra