

Yio Chu Kang Secondary School

2022 Mid-Year Examination



Sec 4E5N	Subject: English		
	Topic tested in Mid-Year Exam	Format of Paper	Marks (Weightings)
	Paper 1: Writing Editing Situational Writing Continuous Writing	Paper 1 (1 h 50 min) Section A Section B Section C (Choose 1 out of 4)	Total: 70 marks (45%) 10 marks 30 marks 30 marks
	Paper 2: Comprehension Text 1: Visual Text Text 2: Narrative Text Text 3: Information Text	Paper 2 (1 h 50 min) Section A Section B Section C	Total: 50 marks (45%) 5 marks 20 marks 25 marks
	Paper 3: Listening	Paper 3 (approximately 45 min)	30 marks (10%)
	Paper 4: Oral Communication Reading Aloud Spoken Interaction	Paper 4 (approximately 20 min) Part 1 Part 2	Total: 30 marks 10 marks 20 marks (marks will be used for End of Year Exam calculation)

Sec 4E5N	Subject: Mathematics		
	Topic tested in Mid-Year Exam	Format of Paper	Marks (Weightings)
	Numbers and Algebra - Numbers and their operations - Ratio and Proportion - Percentage - Rate and Speed - Algebraic expressions and Formulae - Functions and Graphs - Equations and Inequalities - Set Language and Notation - Matrices - Problems in Real World Context Geometry and Measurement - Angles, Triangles and Polygons - Congruence and Similarity - Properties of Circles - Pythagoras Theorem and Trigonometry - Mensuration - Coordinate Geometry - Problems in Real World Context Statistics and Probability - Data Analysis - Probability	Paper 1 (2 h) Paper 2 (2 h 30 m) Answer all Questions for both Paper 1 and Paper 2	80 marks (50%) 100 marks (50%)

Sec 4E5N	Subject: 5076/5078 Science(Chemistry)		
	Topic tested in Mid-Year Exam	Format of Paper	Marks (Weightings)
	Paper 1 & 3 Chapter 1: Kinetic Particle Theory Chapter 2: Measurement and Experimental Techniques Chapter 3: Separation and Purification Chapter 4: Elements, Compounds and Mixtures Chapter 5: Atomic Structure Chapter 6: Chemical Bonding Chapter 7: Writing Chemical Equations Chapter 8: The Mole Chapter 9: Chemical Calculations Chapter 10: Acids and Bases Chapter 11: Salts Chapter 12: Oxidation and Reduction Chapter 13: Metals Chapter 14: The Periodic Table Chapter 15: Energy Changes Chapter 16: Speed of Reaction Chapter 17: The atmosphere and Environment	Paper 1 (30 min) 20 MCQ Paper 3 (1h 15 min) Section A - Structured Questions Section B - Free Response Questions (Choose 2 out of 3 questions)	Total: 20 marks Total: 65 marks 45 marks 20 marks

Sec 4E5N	Subject: Physics		
	Topic tested in Mid-Year Exam	Format of Paper	Marks (Weightings)
	Textbook Ch 01 Measurement Ch 02 Kinematics Ch 03 Forces Ch 04 Mass, Weight and Density Ch 05 Turning Effect of Forces Ch 06 Energy, Work and Power Ch 07 Pressure Ch 08 Temperature Ch 09 Kinetic Model of Matter Ch 10 Transfer of Thermal Energy Ch 11 Thermal Properties of Matter Ch 12 Light Ch 13 Waves Ch 14 Electromagnetic Waves Ch 15 Sound Ch 16 Static Electricity Ch 17 Current Electricity Ch 18 D.C. Circuits Ch 19 Practical Electricity Ch 20 Magnetism	<u>Paper 1 (1 h)</u> 40 MCQ <u>Paper 2 (1 h 45 min)</u> Section A Structured Qns Section B One data-based Qn & One compulsory Qn One Either / Or Qn	Total: 40 marks (40%) Total: 80 marks (60%) 50 marks 20 marks 10 marks

Sec 4E5N	Subject: Science (Physics) 5076		
	Topic tested in Mid-Year Exam	Format of Paper	Marks (Weightings)
	Textbook 1. Measurement 2. Kinematics 3. Forces & Pressure 4. Mass, Weight and Density 5. Turning Effect of Forces 6. Energy, Work and Power 7. Kinetic Model of Matter 8. Transfer of Thermal Energy 9. Thermal Properties of Matter 10. Light 11. Waves 12. Electromagnetic Waves 13. Sound 14. Static Electricity 15. Current Electricity	<u>Paper 1 (30 min)</u> 20 MCQ <u>Paper 2 (1 h 15 min)</u> Section A Structured Qns Section B Choose 2 out of 3 questions	Total: 20 marks (11.8%) Total: 65 marks (38.2%) 45 marks 20 marks

Sec 4E5N	Subject: Science (Biology)		
	Topic tested in Mid-Year Exam	Format of Paper	Marks (Weightings)
	Textbook Ch 02 Cells Ch 03 Movement of Substances Ch 04 Nutrients Ch 05 Enzymes Ch 06 Nutrition in Humans Ch 07 Nutrition in Plants Ch 08 Transport in Humans Ch 09 Transport in Plants Ch 10 Respiration in Humans Ch 11 Nervous Systems Ch 12 The Human Eye Ch 13 Hormones Ch 14 Reproduction in Plants Ch 15 Reproduction in Humans	<u>Paper 1 (30 min)</u> 20 MCQ <u>Paper 4 (1 h 15 min)</u> Section A Structured Qns Section B Choose 2 out of 3 questions	Total: 20 marks (11.8%) Total: 65 marks (38.2%) 45 marks 20 marks

Sec 4E	Subject: Biology		
	Topic tested in Mid-Year Exam	Format of Paper	Marks (Weightings)
	Textbook Ch 02 Cells Ch 03 Movement of Substances Ch 04 Nutrients Ch 05 Enzymes Ch 06 Nutrition in Humans Ch 07 Nutrition in Plants Ch 08 Transport in Humans Ch 09 Transport in Plants Ch 10 Respiration in Humans Ch 11 Excretion in Humans Ch 12 Homeostasis Ch 13 The Nervous System Ch 14 The Human Eye Ch 15 Hormones Ch 16 Cell Division Ch 17 Reproduction in Plants	Paper 1 (1 h) 40 MCQ Paper 2 (1 h 45 min) Section A Structured Qns Section B One data-based Qn & One compulsory Qn One Either / Or Qn	Total: 40 marks (40%) Total: 80 marks (60%) 50 marks 20 marks 10 marks

Sec 4E	Subject: Chemistry		
	Topic tested in Mid-Year Exam	Format of Paper	Marks (Weightings)
	Chapter 1:Kinetic Particle Theory Chapter 2:Measurement and Experimental Techniques Chapter 3:Separation and Purification Chapter 4:Elements, Compounds and Mixtures Chapter 5:Atomic Structure Chapter 6:Ionic Bonding Chapter 7:Covalent and Metallic Bonding Chapter 8:Writing Chemical Equations Chapter 9:The Mole Chapter 10:Chemical Calculations Chapter 11:Acids and Bases Chapter 12:Salts Chapter 13:Oxidation and Reduction Chapter 14:Metals Chapter 15:Electrolysis Chapter 16:The Periodic Table Chapter 17:Energy Changes Chapter 18:Speed of Reaction Chapter 19:Ammonia Chapter 20:The Air and Atmosphere	Paper 1 (1 h) 40 MCQ Paper 2 (1 h 45 min) Section A Structured Qns Section B One data-based Qn & One compulsory Qn One Either / Or Qn	Total: 40 marks (40%) Total: 80 marks (60%) 50 marks 20 marks 10 marks

Sec 5N	Subject: Art		
	Topic tested in Mid-Year Exam	Format of Paper	Marks (Weightings)
	Not Applicable	Paper 1 (Coursework in Semester 1) Class Assignments	Total: 100 marks (60%)
	Drawing and Painting via Form and Tonal Values.	Paper 2 (3 hr) 1. Question paper is to be given three weeks before the Examination. 2. Students are to respond to one of six themes issued on an A3 sized paper. 3. Preparatory studies (Research, Sketches, Design Layout, Mock up of final work) of three to five A3 sized sheets of paper must be submitted together with the final work for assessment.	Total: 100 marks (40%) The five assessment domains are: 1. Investigation and Interpretation of Theme (20 marks) 2. Exploration and Development of Theme (20 marks) 3. Aesthetic Qualities (20 marks) 4. Control of Materials and Technical Processes (20 marks) 5. Personal Response (20 marks)

Sec 4E	Subject: Design and Technology (7059)		
	Topic tested in Mid-Year Exam	Format of Paper	Marks (Weightings)
	Design Technology - Structures -Mechanisms -Electronics	Paper 1 (2 hr) One case-based question based mainly on the Design content section Three design application questions relating to structures, mechanisms and electronics from the Technology section; one question on each area	Total: 80 marks (40%) Design content: 26 marks Design application questions relating to Structures: 18 marks Mechanisms: 18 marks Electronics: 18 marks
	Not Applicable.	Paper 2 (Coursework in Semester 1) Design Project	Total: 100 marks (60%)

Sec 4E5N	Subject: Food and Nutrition		
	Topic tested in Mid-Year Exam	Format of Paper	Marks (Weightings)
	Chap 1: Proteins Chap 2: Carbohydrates Chap 3: Fats Chap 4: Vitamins Chap 5: Minerals Chap 6: Water and Dietary Fibre Chap 7: Diet and Health Problems Chap 8: Diet and Meal Planning Chap 9: Meal Analysis Chap 10: Sustainable Food Consumption Chap 11: Preparation and Cooking of Food Chap 13: Reactions in Food during Preparation and Cooking	Paper 1 (2hr) Section A: MCQ. Section B: short-answer-type questions and data-response-type questions. Section C: Open-ended type questions.	Total: 100 marks (40%) Section A: 15 marks Section B: 55 marks Section C: 30 marks
	Not Applicable	Paper 2 (Coursework in Semester 1) <u>Assignment</u>	100 marks (60%)

Sec 4E5N	Subject: Humanities (History)		
	Topic tested in Mid-Year Exam	Format of Paper	Marks (Weightings)
	Sec 3 Chapter 1: Impact of World War I in Europe Sec 3 Chapter 2: Stalin's Soviet Union Sec 3 Chapter 3: Hitler's Germany Sec 3 Chapter 4: Outbreak of World War II in Europe Sec 3 Chapter 5: Germany's defeat in World War II Sec 3 Chapter 6: Outbreak of World War II in the Asia Pacific Sec 3 Chapter 7: Japan's defeat in World War II Sec 4 Chapter 1: Reasons for the Cold War in Europe Sec 4 Chapter 2: The Korean War Sec 4 Chapter 3: The Cuban Missile Crisis Sec 4 Chapter 4: The end of the Cold War	Duration: 1 h 40 m Section A Source-based Question (5 sub-questions) Section B Structured Essay Question (2 sub-questions)	Section A - 30 marks Section B - 20 marks

Sec 4E5N	Subject: Humanities (Social Studies)		
	Topic tested in Mid-Year Exam	Format of Paper	Marks (Weightings)
	Chapter 1 -What does it mean for me to be a citizen of my country? Chapter 2 - How do we decide what is good for society? Chapter 3 - How can we work for the good of society? Chapter 4 - What is diversity? Chapter 5 - Why is there greater diversity in Singapore now? Chapter 6 - What are the experiences and effects of living in a diverse society? Chapter 7 - How can we respond in a diverse society? Chapter 8 - What does it mean to live in a globalised world? Chapter 9 - How do we respond to tensions arising from some economic impacts of globalisation? Chapter 10 - How do we respond to tensions arising from some cultural impacts of globalisation? Chapter 11 - How do we respond to tensions arising from some security impacts of globalisation?	<u>Paper 1 (1h 45 min)</u> Section A Source-based Question (5 sub-questions) Section B Structured Reponse Question (2 sub-questions)	<u>Total: 50 marks (50%)</u> Section A - 35 marks Section B - 15 marks

Sec 4E5N	Subject: Humanities (Geography)		
	Topic tested in Mid-Year Exam	Format of Paper	Marks (Weightings)
	Sec 3: Chapter 1 - Living with tectonic hazards Sec 3: Chapter 2 - Variable weather and changing climate Sec 3: Chapter 3 - Geographical skills and investigations Sec 4: Chapter 1 - Global Tourism Sec 4: Chapter 2 - Food Resources	<u>Duration: 1h 40 mins</u> Section A - Structured Questions (Geographical Investigations) based on the topic of Global Tourism OR Variable Weather and Changing Climate. (Choose 1 out of 2 questions) Section B - Structured question will be set based on the topic of Global Tourism OR Variable Weather and Changing Climate. (Choose 1 out of 2 questions) Section C - Structured Questions based on the topic of Living with Tectonic Hazards AND/OR Food Resources. (Choose 1 out of 2 questions)	<u>Total: 50 marks (100%)</u> Section A: 13 marks (26%) Section B: 12 marks (24%) Section C: 25 marks (50%)

Sec 4E5N	Subject: Additional Mathematics		
	Topic tested in Mid-Year Exam	Format of Paper	Marks (Weightings)
	Sec 3 Work - Chpt 1 Quadratic Functions - Chpt 2 Equations & Inequalities - Chpt 3 Surds - Chpt 4 Polynomials, Cubic Equations & Partial Fractions - Chpt 5 Binomial Theorem & its Applications - Chpt 6 Exponential & Logarithmic Functions - Chpt 7 Coordinate Geometry - Chpt 8 Linear Law Sec 4 Work - Chpt 9 Trigonometric Functions & Graphs - Chpt 10 Trigonometric Equations & Identities - Chpt 11 Gradients, Derivatives & Differentiation Techniques - Chpt 12 Applications of Differentiations - Chpt 13 Differentiation of Trigonometric, Exponential & Logarithmic Functions & its Applications	<u>Paper 1 (2h 15 mins)</u> Answer all Questions <u>Paper 2 (2h 15 min)</u> Answer all Questions	<u>Total: 90 marks (50%)</u> <u>Total: 90 marks (50%)</u>

Sec 4E5N	Subject: POA		
	Topic tested in Mid-Year Exam	Format of Paper	Marks (Weightings)
	Chapter 1: Introduction to Accounting Chapter 2: Accounting Information System Chapter 3: Elements of Financial Statements and the Accounting Equation Chapter 4: Double-entry Recording Chapter 5: Trial Balance and Financial Statements Chapter 6: Revenue and Other Income Chapter 7: Cost of Sales and Other Expenses Chapter 8: Cash Chapter 9: Inventories Chapter 10: Trade Receivables Chapter 11: Non-current Assets Chapter 12: Trade Payables Chapter 13: Long-term Borrowings Chapter 14: Equities Chapter 15: Correction of Errors Chapter 17: Scenario-based Questions	Paper 1 (1 h) 3-4 Compulsory Structured Questions	40%
	Chapter 1: Introduction to Accounting Chapter 2: Accounting Information System Chapter 3: Elements of Financial Statements and the Accounting Equation Chapter 4: Double-entry Recording Chapter 5: Trial Balance and Financial Statements Chapter 6: Revenue and Other Income Chapter 7: Cost of Sales and Other Expenses Chapter 8: Cash Chapter 9: Inventories Chapter 10: Trade Receivables Chapter 11: Non-current Assets Chapter 12: Trade Payables Chapter 13: Long-term Borrowings Chapter 14: Equities Chapter 15: Correction of Errors Chapter 17: Scenario-based Questions	Paper 2 (2 h) Answer 4 compulsory structured questions. <ul style="list-style-type: none"> One question requires the preparation of financial statements for a business for one financial year. (20 marks) A scenario-based question (7 marks) will be part of one of the 3 remaining questions. 	60%

Sec 4E	Subject: Exercise & Sports Science		
	Topic tested in Mid-Year Exam	Format of Paper	Marks (Weightings)
	There are five areas of study on which the assessment is based: <ul style="list-style-type: none"> Exercise Physiology Biomechanics Sports Psychology Sports Sociology Motor Learning and Development 	Paper 1 (2 hours. Answer all the questions in Section A, B and C) Section A Variety of item types e.g. Multiple-choice Questions, Matching, Drag and Drop, Checking of Boxes and Fill in the Blanks. Section B Short answer and Structured Questions based on texts and pictures. Section C Structured Questions based on ONE video.	Paper (100% - 80 Marks) Section A - 20 Marks Section B - 40 Marks Section C - 20 Marks

Sec 4E	Subject: Pure Geography		
	Topic tested in Mid-Year Exam	Format of Paper	Marks (Weightings)
	Sec 3: Chapter 1 - Coasts Sec 3: Chapter 2 - Living with tectonic hazards Sec 3: Chapter 3 - Variable weather and changing climate Sec 3: Chapter 4 - Geographical skills and investigations Sec 4: Chapter 1 - Global Tourism Sec 4: Chapter 2 - Food Resources Sec 4: Chapter 3 - Heath and Diseases	Paper 1 Section A - Structured Questions (Geographical Investigations) based on the topic of Coasts and Global Tourism (Choose 1 out of 2 questions) Section B - Structured question will be set based on the topic of Coasts and Global Tourism. (Choose 1 out of 2 questions) Paper 2 Section A - Structured Questions based on the topic of Living with Tectonic Hazards and Variable Weather and Changing Climate (Choose 1 out of 2 questions) Section B - Structured Questions based on the topic of Food Resources and Health and Diseases (Choose 1 out of 2 questions)	Paper 1 (50 marks) Section A (25m) Section B (25m) Paper 2 (50 marks) Section A (25m) Section B (25m)