Gan Eng Seng School
Preliminary Examination 2023
Year 4 Normal Technical

Subject	Format	Topics	Duration
English Language	PAPER ONE [70] - 30%	Not Applicable	1 h 20 min
	PAPER TWO [60] - 40% Language Use and Comprehension		1 h 20 min
	PAPER THREE [20] - 10% Listening Candidates complete a variety of listening tasks.		45 min
	PAPER FOUR [40] - 20% Oral Communication The two parts in this paper are not thematically linked.		20 min (including 10 min of
Mathematics (4046)	Paper 1: [50 Marks] There will be 11–13 short questions carrying 2–4 marks, largely free from context, testing more on fundamental concepts and skills, followed by 2 longer questions carrying 6–8 marks, developed around a context. Candidates are required to answer all questions which will cover topics from the following strands • Number and Algebra • Geometry and Measurement **Weighting: 50%**	N1 Numbers and Algebra N2 Ratio and Proportion N3 Percentage N4 Rate and Speed N5 Algebraic Expressions and Formulae N6 Functions and Graphs N7 Equations G1 Angles, triangles and quadrilaterals G2 Symmetry, congruence and similarity G3 Pythagoras' theorem and trigonometry G4 Mensuration	1 h 30 min
	Paper 2: [50 Marks] There will be 11–13 short questions carrying 2–4 marks, largely free from context, testing more on fundamental concepts and skills, followed by 2 longer questions carrying 6–8 marks, developed around a context. Candidates are required to answer all questions which will cover topics from the following strands • Number and Algebra • Statistics and Probability **Weighting: 50%**	S1 Data handling and analysis S2 Probability For more details, please refer to https://www.seab.gov.sg/docs/default-source/national-examinations/syllabus/nlevel/2023syllabus/4046_y23_sy.pdf	1 h 30 min
Science 5148	Paper 1: 40 compulsory multiple choice questions [40 marks] Weighting: 40%	1) 1.1 Energy and its Uses 2) 1.2 Energy transfer through Waves 3) 1.3 Effects of Forces 4) 1.4 Electricity 5) 1.5 Sources of Electricity 6) 2.1 Sources of Fodd 7) 2.2 Food Chemistry 8) 2.3 Food Health and Safety 9) 3.1 Digestion 10) 3.2 Breathing 11) 3.3 Fitness and Cardiac Health 12) 3.4 Staying Healthy	1 h
	Paper 2: [60 marks] Weighting: 60% Paper 2 will carry 60 marks and consist of a variable number of compulsory short-answer or structured questions. One of the questions is a data-response question, requiring candidates to interpret, evaluate or solve problems using data and/or observations. This question will carry 8–12 marks.		1 h 15 min
Computer Application (7018)	Paper 1: (Written Paper) (Total 60 marks) The paper contains two sections. Section A (20 marks) contains 20 multiple-choice questions with 4 choices per question. Section B (40 marks) contains a variable number of short-structured questions of variable mark values. There will be at least one question on representing programming instructions using flowcharts. [This paper carries 30% of the total marks for the subject grade.)	• Computer Fundamentals (CPF) • Media Elements (MEL) • Document Processing (DOP) • Spreadsheets (SST) • Interactive Multimedia Communication (IMC) • Animation and Game Making (AGM)	1 h 15 min
	Paper 2: (Lab-based) (Total 70 marks) This paper will assess candidate's ability to carry out three tasks using appropriate application software: - (21 marks) computer graphics software to create a drawing, - (28 marks) word processing software to edit and format a given document and perform mail merge using a given source data, and - (21 marks) presentation software to create a multimedia slide presentation with given media elements. The allotted time includes time for saving the required work in the candidates' computers. [This paper carries 35% of the total marks for the subject grade.)	• Media Elements (MEL) • Document Processing (DOP) • Interactive Multimedia Communication (IMC)	1 h 30 min
	Paper 3: (Lab-based))Total 70 marks) This paper will assess candidate's ability to carry out three tasks using appropriate application software: - (14 marks) video editing software to create a video file, - (28 marsk) spreadsheet software to edit a spreadsheet and create charts, and - (28 marks) programming software to create a game. The allotted time includes time for saving the required work in the candidates' computers. [This paper carries 35% of the total marks for the subject grade.)	• Media Elements (MEL) • Spreadsheets (SST) • Animation and Game Making (AGM)	1 h 30 min
Elements of Business Skills (7066)	Paper 1: [100 Marks] Answer ALL questions. [100% of the total marks for the examination] There will be 4 compulsory questions from Units 1 to 3 of the syllabus, comprising short response and structured questions: (i) with helping words; (ii) requiring short answers, not necessarily in complete sentences.	Unit 1 Understanding Business Activities Unit 2 Basic Marketing Unit 3 Customer Relations For more details, please refer to https://www.seab.gov.sg/docs/default-source/national-examinations/syllabus/nlevel/2023syllabus/7066_y23_sy.pdf	1 h 30 min
Basic Chinese Language	Paper 1: 语文运用（10分），阅读理解一（10分），阅读理解二（10分）	Not Applicable	50 min
	Paper 2: 口试 （50分）朗读 20分， 录像会话30分	Not Applicable	15 min
	Paper 3: 听力考试 （20分）	Not Applicable	30 min
Basic Malay Language	Paper 1: Bahagian A: (10 marks), Bahagian B (20 marks)	Not Applicable	50 min
	Paper 2: Lisan (50 marks)	Not Applicable	15 min
	Paper 3: Kefahaman Mendengar (20 marks)	Not Applicable	30 min
Basic Tamil Language	Paper 1:முன்னுணர்வு (10marks),வாசிப்பு (10marks), கருத்துப்படம் (10marks)	Not Applicable	50 min
	Paper 2: வாய்மொழி (50marks)	Not Applicable	15 min
	Paper 3:கேட்டல் (20marks)	Not Applicable	30 min
Mobile Robotics	Paper 1 (Written) (30 marks): 30 compulsory MCQ questions	1. Mobile Robots 2. Basic Electricity 3. Basic Electronics 4. Digital Electronics 5. Design 6. Input and Output Devices 7. Simple Mechanisms 8. Materials and Practical Processes 9. Prototyping and Troubleshooting	1 h
	Paper 3 (Practical) (80 marks): Part A: Drawing a logic circuit based on the given truth table, by using Karnaugh Maps to derive the optimal Boolean expressions on which the logic circuit will be based on Part B: Integrate and test a mobile robot with a given sub-system to perform a desired task	-	2 h

* The total marks will be converted into 100%