

**Bartley Secondary School**  
**End-of-Year Exam Component/Topics 2023**  
**Secondary Three Normal (Technical)**

<b>SUBJECT</b>	<b>COMPONENT/TOPIC</b>
<b>English</b>	Paper 1: Section A: Editing Section B: Situational Writing Section C: Continuous Writing  Paper 2: Language Use and Comprehension  Paper 3: Listening Comprehension
<b>Mathematics</b>	Sec 3 Textbook Chapter 1 Indices and standard form Chapter 2 Maps and Scale Chapter 3 Algebraic Expansion, Fractions, and Expression for nth Term of a number sequence Chapter 4 Factorisation and Formulae Chapter 5 Arc Length and Sector Areas Chapter 6 Pyramid, Cone and Spheres Chapter 7: Cumulative Frequency  Lower Secondary Topics <ul style="list-style-type: none"> <li>● Numbers</li> <li>● Ratio, rate &amp; Percentages</li> <li>● Rate and speed</li> <li>● Triangles and Pythagoras' Theorem</li> <li>● Cylinders</li> <li>● Statistics</li> <li>● Money</li> </ul>
<b>Mathematics (OOS)</b>	Sec 3 Textbook Chapter 1 Algebraic Manipulation Chapter 2 Quadratic Equations Chapter 3 Graphs of Quadratic Functions Chapter 4 Indices Chapter 5 Congruence and Similarity Chapter 6 Coordinate Geometry Chapter 7 Functions and Graphs Chapter 8 Trigonometric Ratios Chapter 9 Further Trigonometry  Lower Secondary Topics Numbers Factors and Multiples Ratio, Rate & Percentages Polygon

SUBJECT	COMPONENT/TOPIC		
<b>Science</b>	1. Energy 2. Electricity 3. Wave 4. Effects of Force 5. Food Chemistry		
<b>Science (Chem) OOS</b>	1. Experimental Design 2. Methods of Purification and Analysis 3. Kinetic Particle Theory 4. Elements, Compounds and Mixtures 5. Atomic Structure 6. Chemical Bonding and Structure 7. Chemical Calculations (Ar, Mr, Mole Concept) 8. Patterns in the Periodic Table 9. Metals		
<b>Science (Bio) OOS</b>	1. Cell Structure 2. Movement of Substances 3. Biological Molecules 4. Nutrition in Humans 5. Nutrition and Transport in Plants		
<b>Basic Chinese</b>	试卷一 (e-SBA) 1. 实用文 2. 语文应用 3. 阅读理解一 4. 阅读理解二	试卷二 • 口试 (completed in T3)	试卷三 • 听力
<b>Basic Malay</b>	<b><u>Kertas 1 (JATI, e-SBA)</u></b> • Part 1 – Penulisan Fungsional  • Part 2 - Bahasa/Kefahaman	<b><u>Kertas 2</u></b> • Lisan (completed in T3)	<b><u>Kertas 3</u></b> • Kefahaman Mendengar
<b>Basic Tamil</b>	<b>தாள் 1:- (மின்வழி)</b> • பகுதி 1:- மின்னஞ்சல் / குறுந்தகவல்  • பகுதி 2:- கருத்தறிதல் விளம்பரம் கதைப்பனுவல் செய்திப்பனுவல்	<b>தாள் 2:-</b> • வாசிப்பு  • உரையாடல்  (completed in T3)	<b>தாள் 3:-</b> • கேட்டல் கருத்தறிதல்
<b>Computer Applications</b>	Paper 1: • Computer Fundamentals, • Media Elements (Inkscape & Openshot), • Document Processing (MS Word),		

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	<ul style="list-style-type: none"> <li>● Multimedia Communication (MS Powerpoint),</li> <li>● Spreadsheet (MS Excel),</li> <li>● Animation and Game Making (Scratch)</li> </ul> Paper 2 (Practical): <ul style="list-style-type: none"> <li>● Media Elements (Inkscape),</li> <li>● Document Processing (MS Word),</li> <li>● Multimedia Communication (MS Powerpoint)</li> </ul> Paper 3 (Practical): <ul style="list-style-type: none"> <li>● Media Elements (Openshot),</li> <li>● Spreadsheet (MS Excel),</li> <li>● Animation and Game Making (Scratch)</li> </ul>
<b>Mobile Robotics</b>	Paper 1: <ul style="list-style-type: none"> <li>● Mobile Robots</li> <li>● Basic Electricity</li> <li>● Basic Electronics</li> <li>● Digital Electronics</li> <li>● Input and Output Devices</li> </ul>
<b>NFS</b>	All Topics tested
<b>D&amp;T</b>	Chapter 2: Formulating your Design Brief and Specifications Chapter 3 : Generating and Developing Your Ideas Chapter 4: Communication your Proposed Design Solution Chapter 6:Material Chapter 9:Electronic Chapter 10:Mechanism