

MATHS FORM 5 (PAPER 2B) 2008-2009

Text book being used: EXTENDED MATHEMATICS FOR IGCSE

FIRST TERM

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| 1. | Transformations. | Chapter 9. |
| a. | Lines of symmetry and rotational symmetry. | |
| b. | Revision of main types of transformations: Translation, reflection, rotation and enlargement. | |
| 2. | Statistics. | STP Book 3 |
| a. | Mode, Median, and Mean. | Chapter 26. |
| b. | Collect, classify and tabulate statistical data | STP Book 4 |
| c. | Construct and use bar-charts, pie-charts, pictograms, simple frequency distributions and histograms. | Chapter 13.
Extended Maths for IGCSE
Chapter: 10. |
| 3. | Ratios and proportions. | Chapter 1 |
| 4. | Functions.
Terminology and Notation | Chapter 8 |
| 5. | Variations | STP Book 4 |
| a. | Direct and indirect variations | Chapter 19. |
| b. | Relation to graphs. | Extended Maths for IGCSE |
| 6. | Loci. | STP Book 3 |
| a. | Revision of basic geometrical constructions. | Chapter 24 |
| b. | Definition of loci. | Extended Maths for IGCSE |
| c. | Standard loci in two dimensions. | Chapter 4 |
| 7. | Bearings and two-dimensional problems. | Chapter 6. |
| 8. | Number systems: | Chapter 1. |
| a. | Rational and irrational numbers. | |
| b. | Surds | |
| 9. | Sequences. | Chapter 1. |
| a. | Patterns. | |
| b. | Definition of a sequence. | |
| c. | The n^{th} term. | |
| d. | Tessellations. | |

SECOND TERM

10. Graphs. Chapter: 7.
- Sketching of line graphs of the form $y = mx$ and $y = mx + c$.
 - Sketching of graphs of the form $y = ax^2 + bx + c$.
 - Revision of the plotting of graphs.
 - Use of graphs in the solving of simultaneous and quadratic equations.
 - Use of graphs for finding values from experimental data.
11. Interpreting Travel Graphs
- Gradient of distance/time and speed/time graphs.
 - Calculating the distance from a velocity/time graph.
12. Kinematics and rates of change. Chapter 7
13. Formal Geometry. Chapter 4.
14. Working out past Examinations Papers. RE:
Sec. Exam. Papers

Throughout the year revision is to be made of previous topics covered in previous scholastic years, especially in Forms 3 and 4, which is not included in the above syllabus. For more details refer to SEC Mathematics Syllabus.

Students are expected to use ICT software to answer valid questions appropriate to the subject matter being taught. For more detail refer to the SEC Mathematics Syllabus.

Each student is to be assessed on the following criteria:

- ◆ A number of non-calculator tests.
- ◆ A number of exercises worked out in the Computer Room where the student can use the computer.