5.4 MATHEMATICS

1. ADVANCED MATHEMATICS

Teacher who may be contacted for further information: Mr C Maksoud

Rationale of Course/Overview

The course emphasises:

a) the theory of mathematics (an essential basis for the study of Senior Mathematics)
b) the applications to modern day living as a citizen, taxpayer, householder and consumer
c) the maintenance of basic computation skills
d) the development of problem-solving skills
e) mathematical modelling
f) appropriate communication of mathematical ideas in both symbolic and
g) written forms
h) Students are also introduced to the basic principles of computer spread sheeting and their simple applications

Course Content

Semester 1:
a. Business Mathematics III
b. Pythagoras' Theorem
c. Algebraic Expressions II
d. Algebraic Solutions II
e. Linear Relations I
f. Statistics III
g. Probability 1

Semester 2:
a. Measurement III
b. Indices
c. Algebraic Expressions III
d. Algebraic Solutions III
e. Ratio, Rate and Proportion
f. Linear functions II
g. Geometry IV

Assessment Programme
Formal testing consists of a number of class tests, one of which covers basic computation, one "take home" assignment, and an end-of-semester exam. At the end of Year 9, parents are advised if their son is experiencing difficulties and would benefit from changing to Intermediate Mathematics or Core Mathematics.

Assessment Criteria
Students need to demonstrate achievement in the two main assessment criteria of Knowledge and Procedures, Modelling and Problem Solving.