GENERAL MATHEMATICS   ASSESSMENT TASK

DATE: Fri 1st May, 2009   **TIME ALLOWED: 60 minutes**
ASSESSMENT WEIGHTING: 10%

BOARD OF STUDIES OUTCOMES ADDRESSED:
P1   Develops a positive attitude to mathematics and appreciates it's capacity to provide enjoyment and recreation
P2   Applies mathematical knowledge and skills to solving problems within familiar concepts
P3   Develops rules to represent patterns arising from numerical and other sources
P4   Represents information in symbolic, graphical and tabular form.
P5   Represents the relationship between changing quantities in algebraic and graphical **form**
P6   Performs calculations in relation to 2D and 3D figures
P7   Determines the degree of accuracy of measurements and calculations
P8   Models financial situations using appropriate tools
P9   Determines an appropriate form of organisation and representation of collected data
P10 Performs simple calculations in the relation to the likelihood of familiar events
P11 Justifies his/her response to a given problem using appropriate mathematical terminology

ASSESSMENT CRITERIA:
Topic 1: Units of Measurement
In this task you will be assessed on your ability to:
- Determine appropriate units to use in different situations
- Convert between different units of measurement and recognise the prefixes used.
- Recognise the accuracy of measurements and determine the limits of reading for measurements
- Calculate the percentage error in measurements
- Determine possible sources of error in reading measurements
- Repeat and average measurements to reduce errors in measurement
- Use of scientific notation and significant figures in recording measurements
- Calculate rates and conversion between units
- Calculate concentrations
- Determine overall change in a quantity following repeated percentage changes
- Find the ratio of two quantities and divide a quantity in a given ratio.
- Use the unitary method to solve problems

Topic 2: **Basic Algebraic Skills**
In this task you will be assessed on your ability to:
- Identify and generalise simple linear number patterns
- Add and subtract like terms
- Expand and simplify algebraic expressions
- Multiply and divide algebraic expressions
- Evaluate the subject of a formula through substitution of numerical values
- Solve linear equations involving up to 3 steps
- Solve equations following substitution and evaluation

INSTRUCTIONS:
- This task will be completed in class
- Approved calculators may be used
- Show all necessary working. Marks will not be given for answers where working is required.
- Answers to be completed on the assessment paper

NOTE:
Students who do not achieve the outcome (< 40%) in this assessment task will receive an official warning 'Non – Completion' of the Preliminary course.
Students will be required to resit the task.
Students will be given 2 further opportunities (supervised in their own time) to achieve the required outcome.
Failure to achieve the required outcome may result in the student receiving an 'N' determination in Mathematics.