Condobolin High School

Notification of an Assessment Task

Name and Type of Task: Exam	
Subject: Year 10 5.1/5.2/5.3 Mathematics	**Task Number:** 1
Date Issued: Term 2, Week 1 Wednesday 1st May, 2024	**Date Due:** Term 2, Week 3 Wednesday 15th May, 2024
Total Marks: 65	**Weighting:** 30%
Class Teacher/s: Mrs Davis, Ms Verinder, Mrs Waller,	**Head Teacher:** Mrs Davis
Submission Instructions - Students are to complete the class task on Wednesday 15th May in class. The task MUST be submitted to your teacher upon completion and is NOT to be removed from the room.	

Task Context:

Throughout Term 1, you have studied the following topics in class:

- Probability
- Indices
- Surds

In this task, you will be tested on the ability to solve a range of questions from this content learnt throughout Term 1 in a formal written test.

Course Outcomes:

MA5.1-13SP	Calculates relative frequencies to estimate probabilities of simple and compound events
MA5.2-17SP	Describes and calculates probabilities in multi-step chance experiments
MA5.1-5NA	Operates with algebraic expressions involving positive-integer and zero indices, and establishes the meaning of negative indices for numerical bases
MA5.2-7NA	Applies index laws to operate with algebraic expressions involving integer indices
MA5.3-6NA	Performs operations with surds and indices

Task Description:

- You will be provided with a range of questions in the form of a one period test. The test will be separated into 3 parts, according to the topics: Probability, Indices and Harder Probability and Indices & Surds
- The test will consist of a mixture of multiple choice, short answer and multi step questions
    - 10 multiple choice questions (5 marks for each topic)
    - 16 short answer and multi step questions with multiple parts (20 marks for probability and surds + 15 marks for harder probability + surds & indices)
- You will be allowed to bring in a NESA-approved calculator.
- Marks will be allocated throughout the task.

Criteria for Assessing Learning:

You will be assessed on your ability to:

- Find the sample space for an experiment
- Calculate the probability of an event
- Solve probability problems involving single-step events
- Find the complement of an event
- Use the relative frequency to find the probability of an experimental event
- Find the likelihood of an event
- Interpret a Venn diagram
- Interpret a tree diagram
- Calculate probabilities using a two-way table
- Calculate the probabilities of multi-step experiments
- Draw and interpret a probability tree
- Calculate probabilities using probability notations
- Use index laws to solve problems
- Solve questions involving surds and fractional indices
- Rationalise the denominator

Key Verbs:

Calculate: Determine from given facts, figures or information

Compare: To describe the difference between two or more objects using mathematical terms

Draw: construct a drawing

Find: To identify the solution

Interpret: Draw meaning from

Label: Name the parts of a shape or diagram

List: Make an ordered logical set of answers

Rationalise: to make the denominator a whole number

Solve: To find the value of

Marking Guideline:

Marks are allocated to questions on the test paper.