JOHN EDMONDSON HIGH SCHOOL
Assessment Notification

Faculty: Mathematics **Course: Mathematics Standard 1** **Year: 12**

Assessment Task: 2

Assessment Weighting: 30% **Due: Term 1 Week 8 Date: 13/03/2022**

Task Type: Hand in Task ☐ In Class Task ☒ Practical Task ☐

Outcomes assessed (NESA)
MS1-12-1,MS1-12-3, MS1-12-6, MS1-12-8, MS1-12-9, MS1-12-10 **Please Note: Further information related to these codes can be found on the NESA website**
Task Description/Overview
Examination will be a written test and will consist of multiple choice and short answer questions. Time allowed: 1 hour 30 minutes plus 10 minutes reading time. A reference sheet will be provided. Equipment required: Black pen, NESA approved calculator, ruler.
Detailed Assessment Task Description
Topics to be assessed will be: * Networks Examination questions may require students to: use network terminology: vertices, edges, paths, the degree of a vertex, directed networks and weighted edges; solve problems involving network diagrams; draw a network to represent a given map or information given in a table; determine the minimum spanning tree by using Kruskal's or Prim's algorithms or by inspection; determine the definition of a tree and a minimum spanning tree; find a shortest path from one place to another in a network with no more than 10 vertices; recognise a circumstance in which a shortest path is not necessarily the best path or contained in any minimum spanning tree. * Types of Relationships Examination questions may require students to: develop a pair of simultaneous linear equations to model a practical situation, solve practical problems that involve finding the point of intersection of two straight-line graphs (e.g. determine and interpret the break-even point of a simple business problem). * Rates Examination questions may require students to: simplify and convert between units of rates; use rates to make comparisons such as best buys; use rates to determine cost; use rates to solve problems related to speed, distance and time; calculate the fuel consumption rate; solve problems involving heart rates and blood pressure; describe heart rate as a rate expressed in beats per minute; calculate target heart rate ranges

Test/Examination Structure	
Section Description	**Marks Available**
Section 1: 10 Multiple choice questions (10 marks)	10

Section 2: Short answer questions (40 marks)	
Networks	15
Types of Relatonships	15
Rates	15
Total Marks for this task	**55**

Satisfactory completion of courses

A course has been satisfactorily completed, when the student has:

- Followed the course developed/endorsed by the NSW Educational Standards Authority (NESA)
- Applied himself/herself with diligence and sustained effort to the set tasks and experiences provided in the course.
- Achieved some or all of the course outcomes