

**Mock JMSS Entrance Exam**

Science Report Writing Sample Exam

**Question & Answer Book**

* You have 30 Minutes to Complete this Exam.

**Materials Supplied**

* Question & Answer Book of 5 pages
* Stimulus sheet (Included)

**Instructions**

* Follow the Instructions on your stimulus sheet
* At the end of the examination, place your stimulus sheet inside the front cover of this book.

Students are **not** permitted to bring mobile phones and/or any unauthorised electronic devices into the examination room.

**Contents** Pages

**Section A** (1 Questions, 10 Marks) 2-5

**Student’s Name:**

**Student’s Email:**

**Date & Time:**

**Marks:**

**Section A**

**Instructions**

* Read the information provided carefully before answer before writing your report.
* Make sure to write your report in the Writing Space provided.

Stimulus:

You are part of a physics research team investigating the effects of different surface types on the movement of objects down an inclined plane. Understanding how surfaces affect motion is essential in many engineering and design applications, particularly when objects are moving or sliding. The angle of the plane was varied, and a block was placed at the top of the ramp and was released from rest. The distance travelled was measured on different surfaces, with a fixed start position and angle of ramp. The average distance travelled (in centimetres) was measured for each surface at a set angle of 35 degrees:

|  |  |
| --- | --- |
| Surface  | Average distance travelled (cm) |
| Smooth wood | 42 |
| Rough wood | 27 |
| Sandpaper | 18 |
| Felt  | 12 |

A prior experiment was performed, which measured the smallest angle of the ramp (in degrees) at which the object starts to slide. The data is provided in the table below.

|  |  |
| --- | --- |
| Surface  | Ramp Angle |
| Smooth wood | 14 |
| Rough wood | 23 |
| Sandpaper | 27 |
| Felt  | 35 |

Task:

Using the information above, write a formal practical report based on the experiment data provided.

**Writing Space:**

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End of Examination