

535/2
PHYSICS
PRE-REGISTRATION
FEB/MAR

UGANDA CERTIFICATE OF EDUCATION
NEW LOWER SECONDARY CURRICULUM
PHYSICS
2HOURS

INSTRUCTIONS TO CANDIDATES

- *This paper consists of two examination items*
- *Attempt only one item in all*
- *The candidate should first prepare for 15minutes before the opening of the paper*
- *Graph is provided*
- *Scores are only awarded for only correct records*

Item 1

The mechanic who operates in Mbale city giving services to motorcyclist wants to store other springs for installing in motor cycles of force constant between 12Nm^{-1} to 30Nm^{-1} . However, the mechanic do not know how to find out the clear springs of the required force constant but his brother who is in S4 vacation operates with him and knows to find the force constant of each spring.

Task: you have been provided one of the spring of force constant of similar to those mechanic had to stock, help the mechanic to find out the force constant of one of the spring provided and prove that the cost will be favorable.

Given that one spring cost ugxsh 2000perNm^{-1} and he had ugxsh 56000.

Item 2

Your grandmother is suffering from teeth pain, when she approached to the dentist, he said that the instrument used to view it clearly is a mirror of focal length of m but the mother doesn't know what a mirror is. She went back home and asked her child who is staying with her to explain what is the type of the mirror used to view her tooth and its appropriate focal length whose dentist called it m .

Task: you have been provided with a mirror **M** which has Same property like that of dentist had, help the grandmother to know the type of the mirror used and its focal length **M**.

END