

P535/1

Physics

Paper 1 (Theory)

April/May 2024

2 Hours



MEBU EXAMINATIONS CONSULT

UGANDA LOWER SECONDARY CERTIFICATE OF EDUCATION

END OF TERM 1 ASSESSMENT 2024

PHYSICS

PAPER 1 (THEORY)

SENIOR ONE

2 Hours

INSTRUCTIONS TO CANDIDATES

- ✓ This paper consists of **three (3) compulsory** scenario-based items carrying equal marks.
- ✓ You are required to attempt **ALL** questions from this paper.
- ✓ Silent non-programmable scientific calculators may be used.
- ✓ You may lose marks if you do not show your working or if you do not use appropriate S.I units.
- ✓ Poor handwriting and untidy work shall lead to loss of marks.
- ✓ At the end of the examination, fasten all your work securely together.

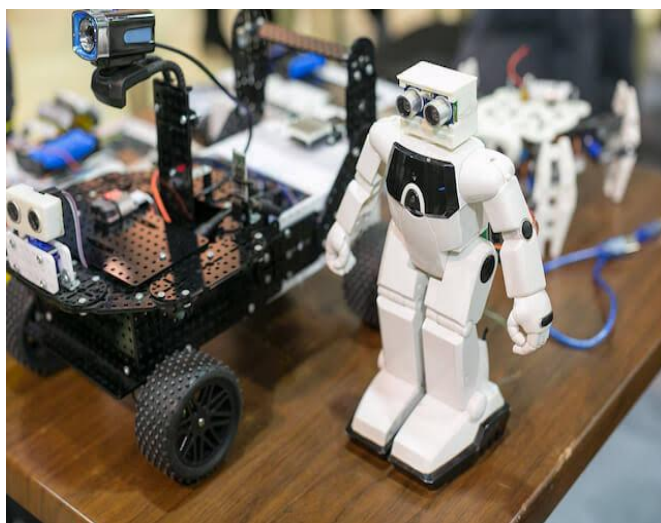
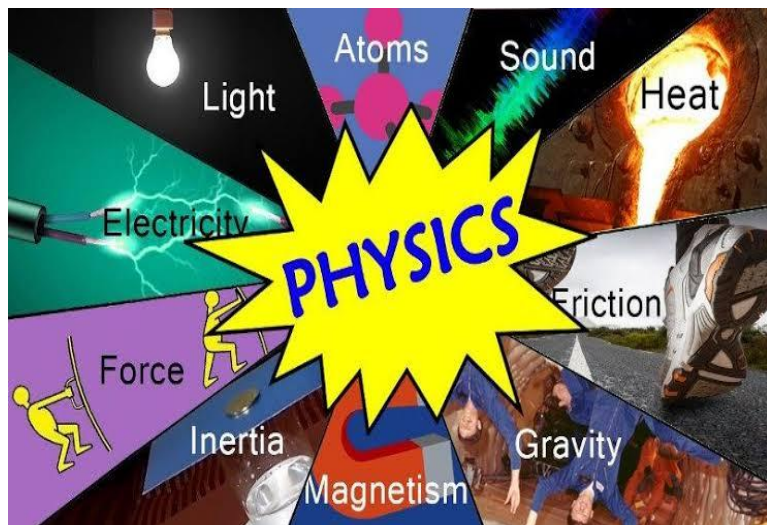
Where necessary, assume;

- Acceleration due to gravity, g $= 10 \text{ ms}^{-2}$
- Density of water $= 1000 \text{ kgm}^{-3}$
- Specific heat capacity of water $= 4200 \text{ Jkg}^{-1}\text{K}^{-1}$
- Speed of light in vacuum, C $= 3.0 \times 10^8 \text{ ms}^{-1}$



Item 1

Due to poor laboratory practices, senior one students of Ndeeba Senior Secondary School–Kayunga often get injuries in the laboratory. Following this, a debate motion stating that, “**Physics should be abolished**” has been moved by people who do not know about Physics.



Tasks

- (a) You have been chosen to enlighten the learners about the importance of Physics and its contribution in the society. Write and present a speech on how you would defend the learning of Physics. (10 scores)
- (b) It is common practice for learners to fear visiting laboratories for practical learning. As a Physics student,



(i) Identify any **five** of such fears among learners. (05 scores)

(ii) Suggest any **three** (3) ways of managing such fears. (03 scores)

(iii) Suggest the safety precautions and measures to be followed while in the laboratory. (02 scores)

Item 2

After completing Lower Secondary Education, Ibrahim and Rennet agreed to join a technical college after which they will setup a joint workshop. On completion of their technical course, they are offered space-measuring **6.5 m** by **10 m**.



Tasks

Using the knowledge of Physics and Laboratory,

- (a) Suggest activities for the workshop that are relevant to your community. (05 scores)
- (b) How best can you plan for the given space? (10 scores)
- (c) Suggest measures to ensure safety in the workshop. (05 scores)

Item 3

Roshan and his father have been living and renting in the city center. His father recently obtained a bank loan worth **UGX 18,000,000** from Centenary Bank. He later bought a piece of plotted land measuring **120ft** by **80ft** in your ancestral village to construct a self-contained residential house.



Task

- (a) Design budget to enable purchase of materials needed to finish the construction. (08 scores)
- (b) Design a good building plan (blueprint) to help in the construction. (08 scores)
- (c) What do you think are the benefits of good plan in your society? (04 scores)

*****THE END*****

