

FEDERAL GOVERNMENT GIRL'S COLLEGE ABAJI-ABUJA

CLASS: SS ONE

TEACHER: ENGR. M.B ALHASSAN

PHYSICS TAKE HOME ASSIGNMENT.

Q1a: Define the term work and states it's unit.

Q1b: A box of mass 100kg is held at a height of 60m above the ground for 1hr. What is the workdone during this period? Give reason for your answer.

Q1c: An elevator carries d a load of 800N through a height of 60m in 90s. Calculate the workdone.

Q2a: Define energy and state the law of conservation of energy.

Q2b: List four forms of energy.

Q2c: Give five examples of energy transformation. State in each case the machine or apparatus used for the transformation.

Q3a: Define power and state it's S.I unit .

Q3b: A goat of mass 62kg ran up a flight of 12steps each 7cm high in 5sec. Find the power it used ($g=10\text{m/s}$).

Q3c: A force pump lifted 250kg of oil through a vertical height of 50cm in 9 seconds. Find the power of the pump.

Q4a: State any three differences between heat and temperature.

Q4b: State two physical properties of substances used for temperature measurement. Convert 80°C , 90°C and 35°C to Kelvin.

Q4c: Name the instrument that can be used for measuring the temperature of a body. List three type of such instrument.

Q5a: Define the term Conduction of heat. Explain conduction of heat in terms of kinetic theory of matter.

Q5b: Differentiate between conductors and Insulators. Give five examples of each.

Q5c: Explain briefly the phenomena of land and sea breezes.

Q6a: With the aid of a labelled diagram explain convectional current in water.

Q6b: Draw a labeled diagram of vacuum flask and state the functions of the labeled parts.