

CHITA SECONDARY SCHOOL

FORM TWO MONTHLY TEST 2

PHYSICS MARCH 2023

1. (a) Give reason for the following explanations
 - (i) Water wet the walls of its container but mercury does not
 - (ii) Antiseptics used for cuts and other wounds have a low surface
 - (iii) A blotting paper is used to soak ink
 - (iv) Small insects are able to run about on the surface of water without sinking
 - (b) Calculate the height of a turpentine oil barometer when mercury barometer stands at 76cm. Density of mercury = $13,600\text{kg/m}^3$, density of turpentine oil = 0.8g/cm^3
 - (c) Explain briefly why a fountain pen taken in a high-flying aero plane leak
2. (a)
 - i. Distinguish between capacitor and capacitance.
 - ii. list the types of capacitors that you know and their uses.
 - iii. mention appliances that use capacitors.
 - (b)

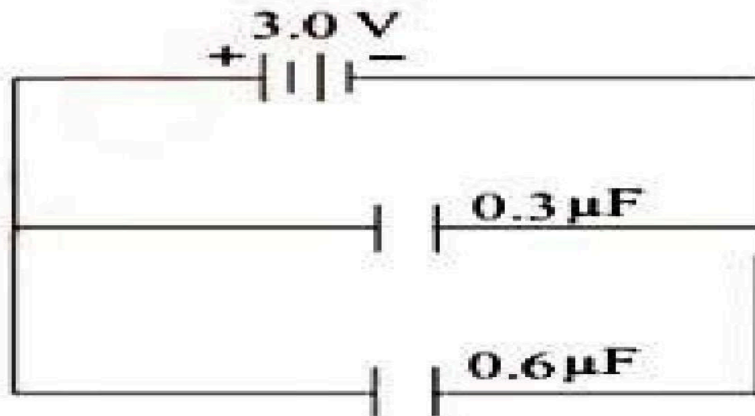


Figure 1.56

- i. determines the effective capacitance of the circuit.
 - ii. how much charge is stored?
- c). Draw a well labeled diagram of gold leaf electroscope.
- 3.(a). An object thrown vertically upwards. Which of the following could be equal zero when it reaches its Maximum altitude?
- (i)Displacement (ii)Velocity (iii)Acceleration

Explain your answers.