



SHRI VISHWAKARMA SKILL UNIVERSITY

(A State Skill University, setup by an Act of Legislature in 2016)

185035

Course : D.Voc. Industrial Electronics
Subject : Applied Physics
Subject Code : ZDSC-109
Semester : First
Duration : 3 Hours
Maximum Marks : 35

Instructions to the Students

1. This Question paper consists of two Sections. All sections are compulsory.
2. **Section A** comprises 10 questions of objective type in nature. All questions are compulsory. Each question carries 1 mark.
3. **Section B** comprises 8 essay type questions out of which students need to do any 5. Each question carries 5 marks.
4. Read the questions carefully and write the answers in the answer sheets provided.
5. Do not write anything on the question paper.
6. Wherever necessary, the diagram drawn should be neat and properly labelled.

Roll Number

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SECTION -A (OBJECTIVE TYPE QUESTIONS)

(10x1=10 Marks)

- Q1 (a) What is the dimensional formula of coefficient of viscosity?
(b) What is the S.I. unit of universal gas constant?
(c) Water rises up to a height h_1 in a capillary tube of radius r . the mass of the water lifted in the capillary tube is M . if the radius of the capillary tube is doubled, what will be the mass of water that will rise in the capillary tube?
(d) If the surface of a liquid is plane, then what is the angle of contact of the liquid with the walls of container?
(e) What vibration means?
(f) Define thermoelectric effect.
(g) Explain Lee's Disc method.
(h) What causes conduction?
(i) What are basic properties of light?
(j) Define overhead projector and its components.

SECTION -B (ESSAY TYPE QUESTIONS)

(5x5=25 Marks)

- Q2 (a) Explain the types of errors in measurements of physical quantity.
(b) How to measure very small distances by Using Avogadro's Hypothesis?
- Q3 (a) Explain Surface tension.
(b) How to find out the coefficient of viscosity of water by Poiseuille's flow method?
- Q4 What is spring mass system? Explain Energy variation in the spring-damper system.
- Q5 (a) What is platinum resistance thermometer?
(b) Explain platinum resistance thermometer and what is its accuracy?
- Q6 (a) Explain the law of reflection & refraction.
(b) How do you calculate heat transfer by conduction?
- Q7 Write down the principle and construction of viscometers.
- Q8 Explain an Epidiascope projector with diagram.
- Q9 Illustrate laws of radiations.

-----End of Paper-----