J.E.E./A.I.P.M.T. Foundation - XI Physics Worksheet

Time: 30 min   **Chapter#10: Mechanical Properties of Fluids-01**   **Full Marks: 20**

Instructions:
1. All questions are compulsory.
2. Please give the explanation for the answer where applicable.

Q1 - What is a fluid?

(1 Mark)

Q2 - What happens to the surface tension of the liquid when temperature is increased?

(1 Mark)

Q3 - What is surface energy?

(1 Mark)

Q4 - What will be the acceleration of a body falling through a viscous medium after terminal velocity is reached?

(2 Marks)

Q5 - Explain why the blood pressure in humans is greater at the feet than at the brain.

(2 Marks)

Q6 - Explain why surface tension of the liquid is independent of the area of contact of the liquid surface.

(2 Marks)

Q7 - Explain why we should blow over the paper to keep it horizontal.

(3 Marks)

Q8 - The level of water in a tank is 5 m high. A hole of area 1 cm^2 is made at the bottom of the tank. Find the rate of leakage of water from the hole?

(3 Marks)

Q9 - Water is flowing in a river. If the velocity of a layer at a distance 10 cm from the bottom is 20 cm/sec ,find the velocity of layer at a height of 40 cm from the bottom?

(5 Marks)