PHYSICS(HONOURS)

PAPER: DC-2P

[CBCS]

Full Marks: 15   **Time:3h. 30min.**

Answer any five questions from the following:

1. Why does the coefficient of viscosity of water fall off with increasing temperature ? **[3]**

2. When does the minimum period of a compound pendulum occur ? **[3]**

3. Define the terms "centre of suspension'' and "centre of oscillation''. What would happen if the centre of suspension coincides with the C.G.?

   [1+1+1=3]

4. If the vertical axis through the centre of gravity of the rotating body (cylinder or bar) does not coincide with the axis of the suspension wire what will happen? **[3]**

5. What do you mean by neutral layer of a bent beam ? **[3]**

6. Does the weight of the bar have any effect ? **[3]**

7. How do you ensure that in your experiment the elastic limit is not exceeded ? **[3]**