

[This question paper contains 2 printed pages]

Sr. No. of Question Paper :

Your Roll No.....

Unique Paper Code : 32223906

Name of the Paper : Technical Drawing

Name of the Course : **B.Sc. Hons. Physics + B.Sc. Prog. (CBCS) – Skill Enhancement Course**

Name of the Department : Physics

Semester : III

Question Paper Set Number : 3

Duration : 3 Hours

Maximum Marks : 50

Instructions for Candidates

1. Attempt any **Four** questions.
2. **All** questions carry equal marks.
3. Use A3/A4 sheets for drawings.

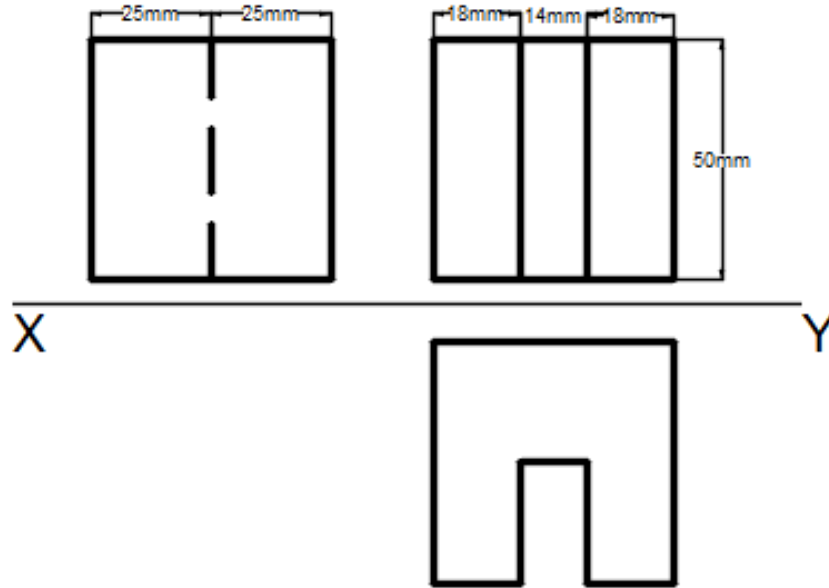
Q1. Construct a vernier scale to show readings of $1/10^{\text{th}}$ of a meter when 3 cm represents 10 m. The scale should be long enough to measure up to 60 m. Mark the distances of 35.3 m and 47.3 on the scale. (12.5)

Q2. Draw a hyperbola by eccentricity method when the distance of the focus from the directrix is equal to 40 mm and eccentricity is $3/2$. Draw the tangent and normal at a point P on the curve such that P is at a distance of 45 mm from one of its foci. (12.5)

Q3. A cylinder of base diameter 40 mm and height 70 mm rests with its base on HP. A section plane perpendicular to VP, inclined at 60° to HP and passing through a point on the axis, 12 mm below from its top. Draw the development of its lateral surface. (12.5)

Q4. A square pyramid, side of base 30 mm and axis 60 mm long, rests with one of the edges of its base on HP and its axis is inclined at 30° to HP and parallel to VP. Draw its top and front views. (12.5)

Q5. In the following fig., orthographic projections of an object are given. Draw the isometric view of the object. (12.5)



Q6. What is a block? What are the different types of blocks in AutoCad? How are these created and inserted in an AutoCad workspace? (12.5)