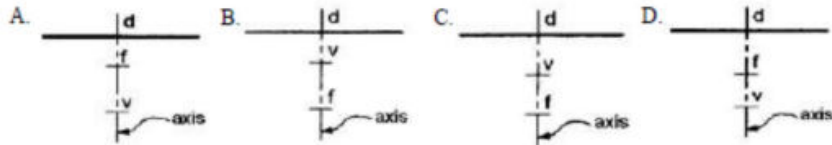


BA SANGAM COLLEGE
YEAR 13
TECHNICAL DRAWING
WORKSHEET 4

(Attempt the questions at the back of your exercise book)

1. Which of the following diagrams represents a **hyperbola**?

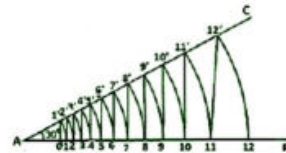


2. Which of the following angles is taken for the measurement of the required lengths for the isometric scale?

- a.) 60°
- b.) 45°
- c.) 30°
- d.) 15°

3. Which of the following spirals uses the scale given below?

- A. Conic
- B. Cylindrical
- C. Logarithmic
- D. Archimedean

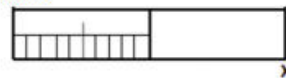


4. Which of the following symbols represents an **illuminating lamp**



5. The diagram given below shows a plain scale which measures up to 4 meters. The reading marked **X** on the scale is

- A. 0m
- B. 1m
- C. 2m
- D. 4m



6. If point P is located 15 mm outside a rolling circle which has a diameter of 40 mm and rolls inside a base circle radius 100 mm then the angle for 1 revolution would be

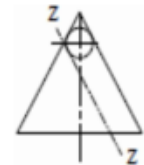
- A. 54°
- B. 72°
- C. 126°
- D. 135°

7. If the lead of $1\frac{1}{4}$ revolution helix is 120 mm and the outside diameter is 60 mm then the pitch angle would be approximately

- A. 27°
- B. 33°
- C. 39°
- D. 46°

8. Given the elevation of a cone cut by a cutting plane Z-Z, what would be the name of the shape produced?

- A. Circle
- B. Ellipse
- C. Parabola
- D. Hyperbola



9. The study of the environment for which an artifact is intended is known as

- A. ergonomics.
- B. market research.
- C. anthropometrics.
- D. ecology.

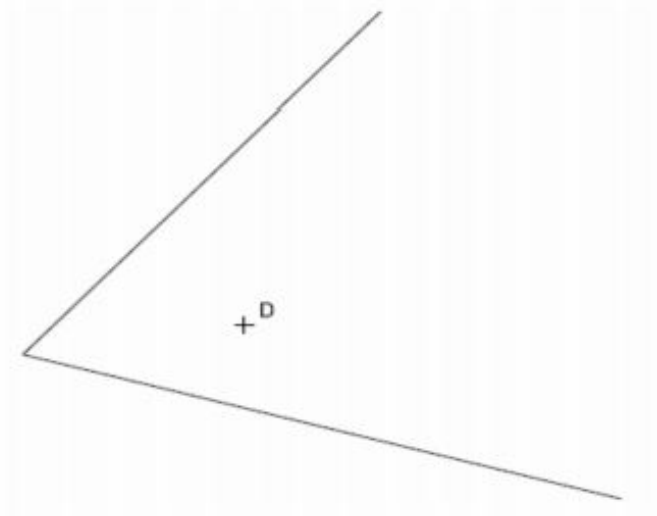
10. Which of the following is the **first step** in finding the centroid of an irregular quadrilateral?

- A. Bisect each side to locate the mid-point.
- B. Inscribe a circle around the quadrilateral.
- C. Divide the quadrilateral into two triangles.
- D. Circumscribe a circle around the quadrilateral.

PART A

Given: The asymptotes an acute angle and a point D on the curve.

Required: Construct hyperbolic curve



(5 marks)

GIVEN: The elevation of a cone by cutting plane X-X

REQUIRED: Draw the Plan

- Project the shape of section
- State the ratio of eccentricity and name the curve.

