



INDIAN SCHOOL AL WADI AL KABIR

UNIT TEST (2024-25)

CLASS: XI

Sub: ENGINEERING GRAPHICS (046)

MAX.MARKS: 30

DATE: 04/06/2024

TIME: 01 HOUR

General Instructions:

- (i) Attempt all the questions.
- (ii) Use both sides of the drawing sheet, if necessary.
- (iii) All dimensions are in millimeters.
- (iv) Missing and mismatching dimensions, if any, may be suitably assumed.
- (v) Follow the SP: 46 – 2003 revised codes. (with first angle method of projection)

10 x 1 = 10

SECTION – A

1. In Engineering graphics, all dimensions are denoted in -----

- a) centimeters
- b) meters
- c) millimeters
- d) decimeters

2. A radius is:

- a) $\frac{1}{4}$ of diameter of a circle.
- b) $\frac{1}{2}$ of diameter of a circle.
- c) Equal to diameter of a circle.
- d) Double the diameter of a circle.

3. Scale 1:1 means:

- a) Isometric scale
- b) Half size scale
- c) Reduced size scale
- d) Full size scale

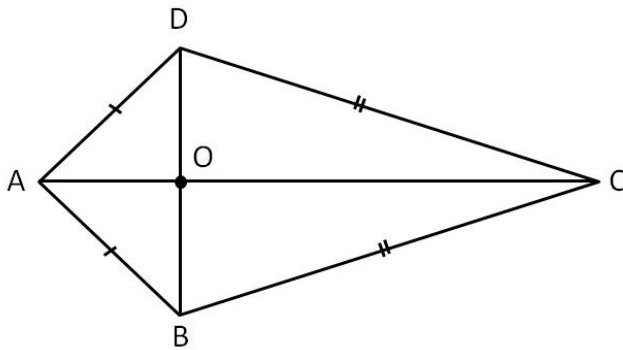
4.



Identify the type of line shown in the figure.

- a) Dashed line
- b) Axis line
- c) Hatching line
- d) Dimension line

5. Identify the given quadrilateral.



- a) Rhombus
- b) Trapezion
- c) Trapezium
- d) Rectangle

6. Pick the odd one out from the following.

- a) Octagon
- b) Square
- c) Hexagon
- d) Pentagon

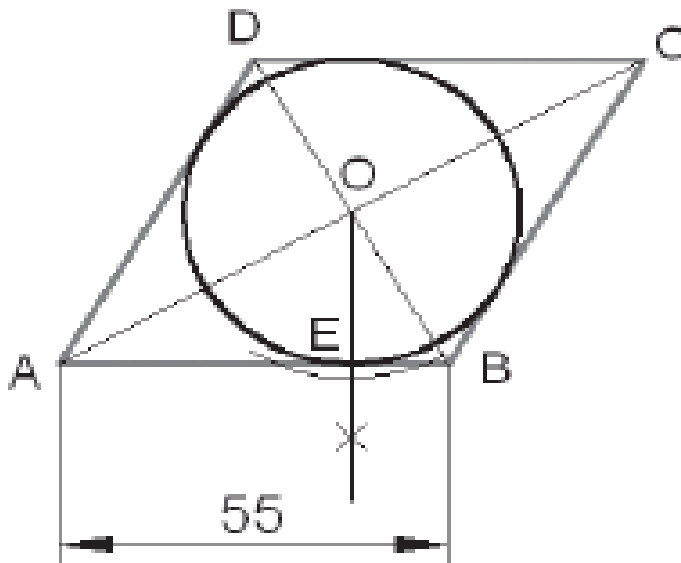
7. Match the LIST I with LIST II

LIST I – TYPES OF SHAPES	LIST II – ANGLES INCLUDED
1. Right angled triangle	i) 60 degree
2. Hexagon	ii) 108 degree
3. Equilateral triangle	iii) 90 degree
4. Pentagon	iv) 120 degree

- a) 1-iii, 2-iv, 3-i, 4-ii
- b) 1-i, 2-iii, 3-ii, 4-iv
- c) 1-iv, 2-iii, 3-ii, 4-i
- d) 1-ii, 2-i, 3-iv, 4-iii

Q.8. to Q.10: Read the following paragraph and answer the questions given below

Arjun is an Engineering graphics student of grade XI. He became very passionate with this subject. He is learning about circles and its circumferences in his EG class. Observe the figure carefully and answer the following questions.



8. Identify the quadrilateral given in the figure.

- a) Square
- b) Rhombus
- c) Trapezium
- d) Kite

9. If a circle is drawn inside a shape, it is called as -----.

- a) circumscribing of circles.
- b) bisecting of circles.
- c) inscribing of circles.
- d) division of circles.

10. Which instrument is used to draw circles?

- a) Mini drafter
- b) T scale
- c) Protractor
- d) Compasses

SECTION B

$$2 \times 2 = 4$$

11. Construct a 75-degree angle using compasses.

12. Given arc PQ, complete the circle. (arc PQ of any radius).

$$2 \times 3 = 6$$

13. Divide a straight line in the ratio 2:3:4.

14. Construct a trapezium ABCD, having AE the difference of its diagonals, equal to 20 mm.

$$2 \times 5 = 10$$

15. Construct a regular pentagon with base AB = 30 mm using protractor, now inscribe a circle in it.

16. Construct a regular hexagon of 40 mm using compasses.