



## **INDUS INSTITUTE OF TECHNOLOGY & ENGINEERING**

Constitute Institution of Indus University

05

		Sample Paper	
Course:	В.ТЕСН.	Semester:	II
Branch:	All Branch	Subject	Engineering Graphics
Date:		Name:	
Day:		Subject Code:	
Time:		Max. Marks:	40 Marks

## **Instructions:**

- 1. Assume necessary data.
- 2. Figures to the right indicate full marks
- 3. Use of steam table/data book/ordinary scientific calculator are permissible

## Q.1 A Draw the projection of given points on a common reference line. 04

- i. A, 25 mm above H.P. and 35 mm in front of V.P.
- ii. B, 30 mm above H.P. and 40 mm behind V.P.
- iii. C, 35 mm below H.P. and 25 mm in front of V.P.
- iv. D, on H.P. and 35 mm in front of V.P.
- **B** Draw an Ellipse having major axis 120 mm and minor axis 80 mm. Use **06** concentric Circle method.
- C A line AB, 80 mm long, has its end A 15 mm below H.P. and 20 mm 05 behind V.P. The end B is 55 mm below H.P. and 70 mm behind V.P. Draw the projections of line AB and find its inclinations with H.P. and V.P.
- Q.2 A See Fig.1, Draw (i) Front View (ii) Top View. Use first angle method 06
  - B Construct the in-volute of a hexagon having sides 20 mm.

OR

- **B** Draw an Archimedean spiral of 1.5 convolutions, the greatest and least **05** radius being 80 mm and 20 mm respectively.
- C A line PQ has its end P, 20 mm above H.P. and 15 mm in front of V.P. **05** The end Q is 60 mm above H.P. The distance between the end projectors is 55 mm. The line is inclined to H.P. by 30°. Draw the projections and find its inclination with V.P. and true length of line PQ.

## OR

C A circle of 30 mm radius is rolling on a straight line without slip. Point P 05 is at the point of contact between generating circle and directing line. Draw the locus of point P and name the curve.

Q.3 A See Fig.2, Draw (i) Elevation (ii) Plan (iii) LHSV. Use First Angle Method. 09

A See Fig.3, Draw (i) Full Sectional Elevation (ii) Plan and (iii) Left Hand
09 Side view by first angle method.





Fig.1

Fig.2

