

R.N.G.PATEL INSTITUTE OF TECHNOLOGY-RNGPIT
(An Autonomous College U/s UGC Act 1956)

B. Voc. SEMESTER-I, SEMESTER END EXAMINATION - WINTER 2024

Subject Code: 1PT103

Date: 17-12-2024

Subject Name: ENGINEERING DRAWING

Time: 11:00 AM to 01:00 PM

Total Marks: 50

Instructions

1. It is **compulsory** for students to write **Enrolment No. /Seat No.** on the question paper.
2. Attempt all questions in the question paper.
3. The figures to the right of each question indicate full marks. Make suitable assumptions with proper justification wherever required.
4. Simple, non-programmable scientific calculators are permitted.
5. BL - Bloom's Taxonomy Levels (R-Remember, U-Understanding, A-Application, N-Analyze, E-Evaluate, C-Create), CO - Course Outcomes.

Marks BL CO

Q.1 Objective-Type Questions

[05]

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| <p>(a) What is the type of scale in which the representative fraction is 1:1?</p> <p style="margin-left: 40px;"> (i) Enlarged scale (ii) Reduced scale
 (iii) Full-size scale (iv) Graphical scale </p> | <p>1 R 1</p> |
| <p>(b) If the plane cuts at an angle to the axis but does not cut all the generators then what is the name of the conics formed?</p> <p style="margin-left: 40px;"> (i) Ellipse (ii) Hyperbola
 (iii) Circle (iv) Parabola </p> | <p>1 R 2</p> |
| <p>(c) The front view of an object is shown on which plane?</p> <p style="margin-left: 40px;"> (i) Profile plane (ii) Vertical plane
 (iii) Horizontal plane (iv) Parallel plane </p> | <p>1 R 3</p> |
| <p>(d) Isometric view of a cube is drawn the angle between the edge of the cube and horizontal will be _____ degrees.</p> <p style="margin-left: 40px;"> (i) 15 (ii) 120
 (iii) 45 (iv) 30 </p> | <p>1 U 4</p> |
| <p>(e) Which of the following is permanent fastener?</p> <p style="margin-left: 40px;"> (i) Screw (ii) Bolt
 (iii) Rivet (iv) Nut </p> | <p>1 R 5</p> |

Q.2 Attempt Any Three

[15]

- (a) Draw pentagon by using the universal circle method. 5 U 1
- (b) What is different between first and third angle projection method? 5 U 3
- (c) Draw the front view from X, side view from Y and top view for figure 1 by using first angle projection method. 5 A 3
- (d) Draw the front view from X and side view from Y for figure 2 by using first angle projection method. 5 A 3

Q.3 Attempt Any Three

[15]

- (a) Write different types of lines with its application. 5 R 1
- (b) The distance between Delhi and Agra is 200 km. In a railway map it is represented by a line 5 cm long. Find its R.F. Draw a diagonal scale to show single km. And maximum 600 km. Indicate on it following distances. 1) 222 km 2) 336 km 3) 459 km 4) 569 km 5 A 1
- (c) Draw the Isometric view of shown figure 3. 5 A 4
- (d) Draw the Isometric view of shown figure 4. 5 A 4

Q.4 Attempt Any Three

[15]

- (a) Draw circle with diameter 50 mm and divide it in 12 equal parts. 5 U 2
- (b) Draw hexagon with side of 30 mm. 5 U 2
- (c) Draw types of Fasteners. 5 U 5
- (d) Draw types of Rivet heads. 5 U 5

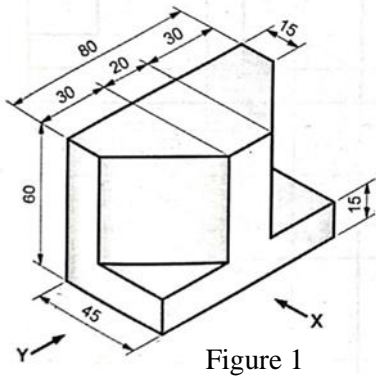


Figure 1

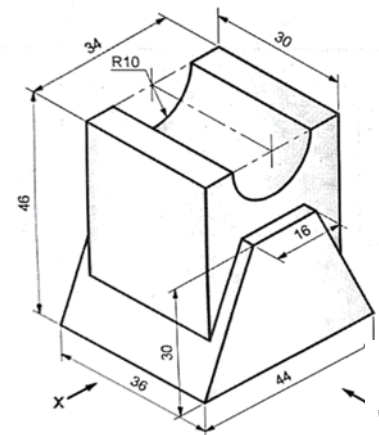


Figure 2

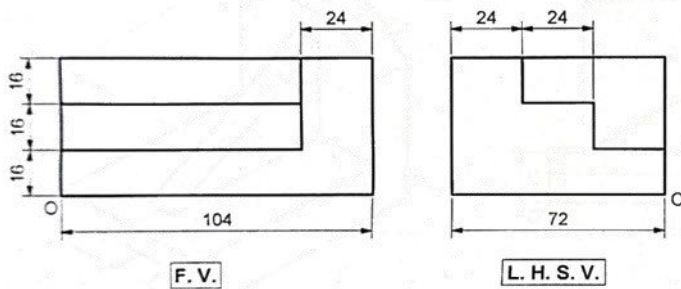


Figure 3

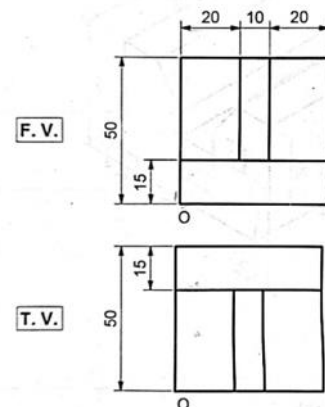


Figure 4