

Question Paper Code: R22A11ME02/R22A12ME02

**ANURAG Engineering College**

(An Autonomous Institution)

**COMPUTER AIDED ENGINEERING GRAPHICS****I B.Tech I Semester Regular/Supplementary Examinations, Jan/Feb-2024  
(COMMON TO CSE & AIML)**

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**I B.Tech II Semester Supplementary Examinations, Jan/Feb-2024  
(COMMON TO CIVIL, EEE, ECE & IT)****Time: 3 Hours****Max. Marks: 60****Section – A (Short Answer Type Questions)****(10 Marks)****Answer All Questions**

	Course Outcome	B.T Level	Marks
1. List the design commands in CAD.	CO1	L1	1M
2. Define cycloid.	CO1	L2	1M
3. Define projection of planes.	CO2	L1	1M
4. Draw the projections of Point A is 40 mm above HP and 60 mm in front of V.P.	CO2	L2	1M
5. What do you meant by cylinder?	CO3	L1	1M
6. Define projections of solids.	CO3	L2	1M
7. Define development of surfaces?	CO4	L1	1M
8. How's cone surface developed.	CO4	L1	1M
9. What is orthographic projection?	CO5	L1	1M
10. What do you mean Isometric drawing?	CO5	L2	1M

**Section B (Essay Questions)****Answer all questions, each question carries equal marks.****(5 X 10M = 50M)**

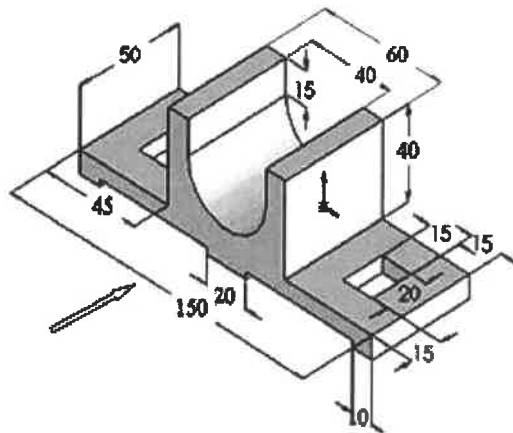
11. A) Draw a hyperbola when the distance between its focus and directrix is 53 mm and eccentricity is  $4/2$ . CO1 L3 10M
- OR**
- B) Construct a scale to be used with a map, the scale of which is 1cm = 500m. The maximum length to be read is 5km. Mark on the scale a distance of 3.85 km. CO1 L3 10M
12. A) A point 30 mm above xy line is the top view of two points P and Q. The front view of P is 45 mm above the HP while that of the point Q is 35mm below the HP. Draw the projections of the points. State the quadrant in which they lie. CO2 L3 10M
- OR**
- B) A rectangular plane of sides 50 mm and 25 mm has shorter side on the HP. The surface of the plane is inclined at  $60^0$  to the HP and perpendicular to VP. Draw its projections. If the shorter edge also makes an angle of  $45^0$  with the VP, draw the projections. CO2 L3 10M
13. A) Draw the projections of a pentagonal prism of base side 40 mm and axis length 80 mm rests on the HP on one of the base corners with the base edges containing it being equally inclined to HP. The axis is inclined at  $45^0$  to the HP and parallel to the VP. CO3 L3 10M
- OR**
- B) A cone with 50 mm diameter and axis 65 mm has one of its generators in the VP and inclined at  $45^0$  to the HP. Draw the projections of the cone. CO3 L3 10M

14. A) A rectangular pyramid, side of base 30 mm × 40 mm and axis 50 mm long, stands with its base on the HP and a diagonal of its base parallel to the VP. It is cut by a section plane perpendicular to the VP, inclined at 45° to the HP and intersecting the axis at a point 20 mm from the base. Draw the development of the lateral surface of the truncated pyramid. CO4    L3    10M

**OR**

- B) Draw the development of the lower portion of a cylinder, diameter of 50 mm and axis 75 mm, when it is cut by a plane perpendicular to the VP, inclined at 45° to the HP and passing through the mid-point of the axis. CO4    L3    10M

15. A) Draw the front view, top view and any one side view of the block shown in Figure. All dimensions are in mm. The arrow indicates the front view. CO5    L3    10M



**OR**

- B) Draw the isometric view of square prism with a side of base 30mm and axis 50mm long when its axis is vertical. CO5    L3    10M