

Code No: 181AG

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech I Year I Semester Examinations, September - 2023

COMPUTER AIDED ENGINEERING GRAPHICS

(Common to EEE, IT, CSIT, CE (SE), CSE (CS), CSE(DS), CSD)

Time: 3 Hours

Max. Marks: 60

Note: This question paper contains two parts A and B.i) **Part- A** for 10 marks, ii) **Part - B** for 50 marks.

- Part-A is a compulsory question which consists of ten sub-questions from all units carrying equal marks.
- Part-B consists of **ten questions** (numbered from 2 to 11) **carrying 10 marks each**. From each unit, there are two questions and the student should answer one of them. Hence, the student should answer five questions from Part-B.

PART- A**(10 Marks)**

- Differentiate Cycloid an epicycloid. [1]
- Where do we use scales? [1]
- What is oblique plane? [1]
- Define traces of a line. [1]
- What is polyhedral? [1]
- What is the true shape of the section if a plane is cutting the axis of the cone perpendicular to the axis? [1]
- What is parallel line development? [1]
- Which shape is obtained when a cone is developed? [1]
- What is isometric axis? [1]
- What is isometric graph? [1]

PART - B**(50 Marks)**

- Draw an ellipse whose eccentricity is $\frac{2}{3}$ and distance between focus and directrix is 50 mm. [10]
- OR**
- Prove that hypo cycloid of a rolling circle whose diameter is half of directing circle is a straight line. [10]
 - Draw the projections of point in all the quadrants if it is 20 mm from HP and 30 mm from VP.
 - Draw the projections of a line AB 30 mm if it is parallel to HP & VP and perpendicular to HP and parallel to VP. One end A being 20 mm above HP and in front of VP. [5+5]

OR

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11. Draw the orthographic front, top and side projections of the following isometric view.(Figure 2) [10]

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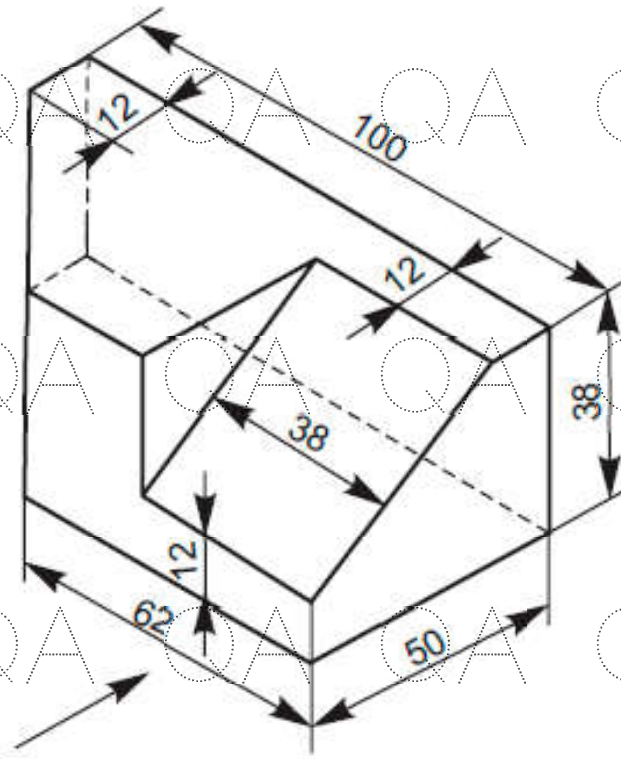


Figure 2

All dimensions are in mm

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