Total No. of Questions : 10]

SEAT No. :

PF-12254

[Total No. of Pages : 4

[6624]-606
F.E.
ESC-103-MEC : ENGINEERING GRAPHICS
(2024 Pattern) (Semester - I)

Time : 3 Hours] *[Max. Marks : 60*

Instructions to the candidates:

1) ***Attempt Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8, Q.9 or Q.10.***
2) ***Figures to the right indicate full marks.***
3) ***State clearly the assumptions made, if any.***
4) ***Use of non-programmable calculator is allowed.***
5) ***Assume suitable data if necessary.***

Q1) A Point of line AB is in HP and 15mm in front of VP its front view and top view makes an angle of 51° and 48° with the HP and VP respectively. Draw the projection of line AB if its end point B is 51mm above HP. Find its True length and True inclinations. **[10]**

OR

Q2) A line AB 90mm long, having its endpoint A 10mm above HP and 20mm in front of VP. The plan length of the line AB is 70mm and makes an angle of 40° with XY. Draw the projection of line AB. Find True inclinations. **[10]**

Q3) A regular pentagonal plane of side 35 mm is resting on horizontal plane on one of its edges. Its surface is inclined with respect to horizontal plane with 40° angle and the resting edge is making 55° angle with respect to vertical plane. Draw the projections of the plane. **[10]**

OR

Q4) A square ABCD with side 45mm is resting on horizontal plane on its corner A. Its surface is making an angle 45° with horizontal plane. The diagonal BD is making an angle of 60° with vertical plane. Draw the projections of the plane. **[10]**

P.T.O.

SPPUQuestionPapers.com
CEGP019671
103.157.122.163 15/06/2026 13:39:45 in-pnq-static-163-122-157-103

Q5) a) Construct an ellipse by directrix and focus method if distance of focus from the directrix is 51mm. take eccentricity e=1/2 **[6]**

b) Draw the development of the lateral surface of a square prism with edge of base 30 mm and axis length 60 mm resting on its base on H.P. , with all sides of the base are equally incline to V.P. **[6]**

OR

Q6) a) Construct and name the curve having eccentricity e 4/2 and distance of the focus from the directrix is 60 mm. **[6]**

b) Draw the development of the lateral surface of the square pyramid of base side 30 mm and axis height 60 mm, when one side of base is parallel to V.P. **[6]**

Q7) Fig 1. Shows pictorial view of object. Using first angle method of projections Draw the following views : **[14]**

a) Front View of object **[5]**

b) Top View **[4]**

c) Left Hand Side View **[4]**

d) Give Dimensions **[1]**

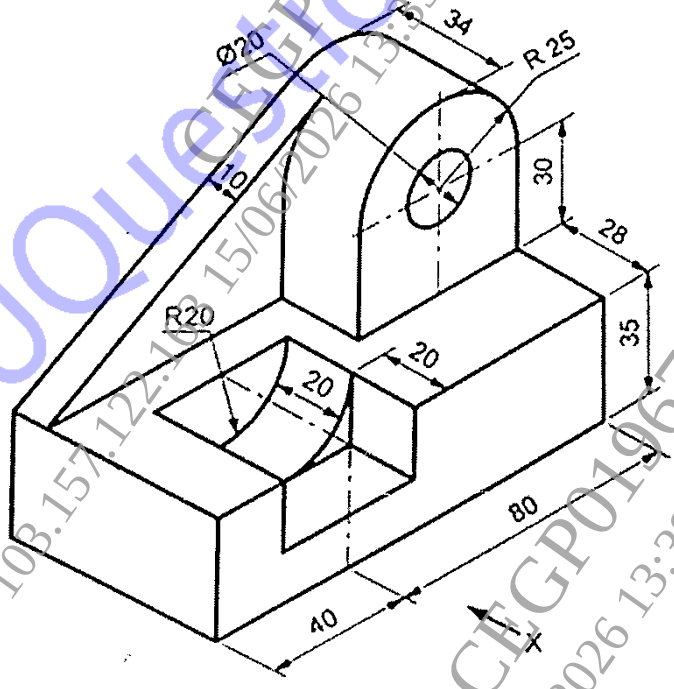


Fig. 1

OR

SPPUQuestionPapers.com
CEGP019671
103.157.122.163 15/06/2026 13:39:45 in-pnq-static-163-122-157-103

Q8) Fig 2. Shows pictorial view of an object. Using first angle method of projection draw : **[14]**

a) Sectional Front View along symmetry of object **[5]**

b) Top View **[4]**

c) Left Hand Side View **[4]**

d) Give Dimensions **[1]**

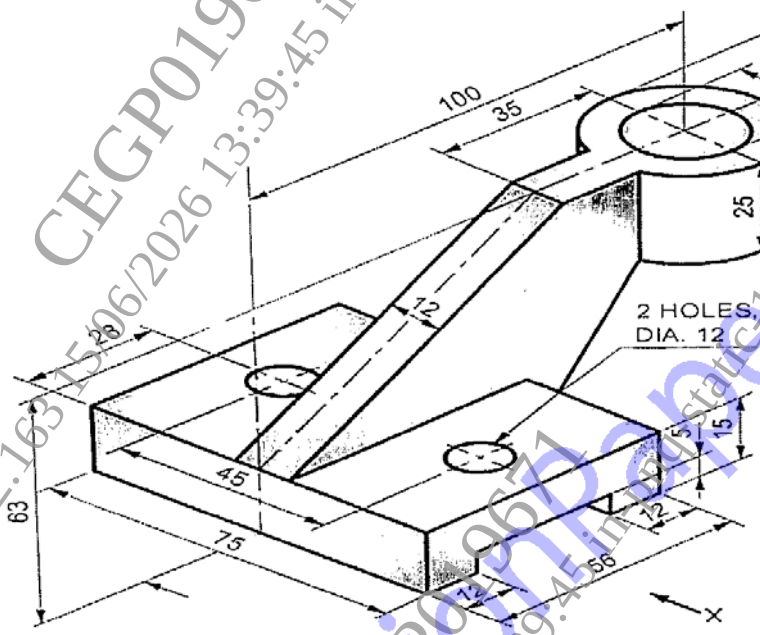
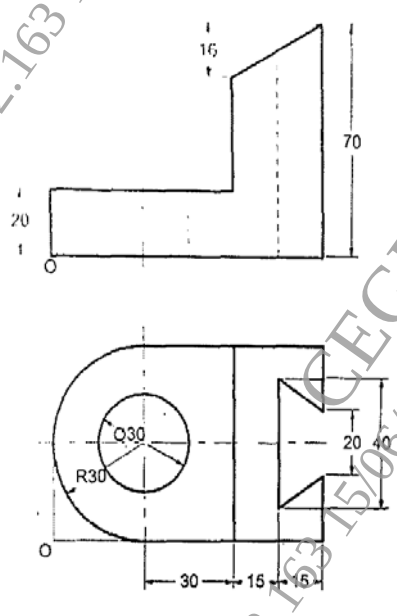


Fig. 2

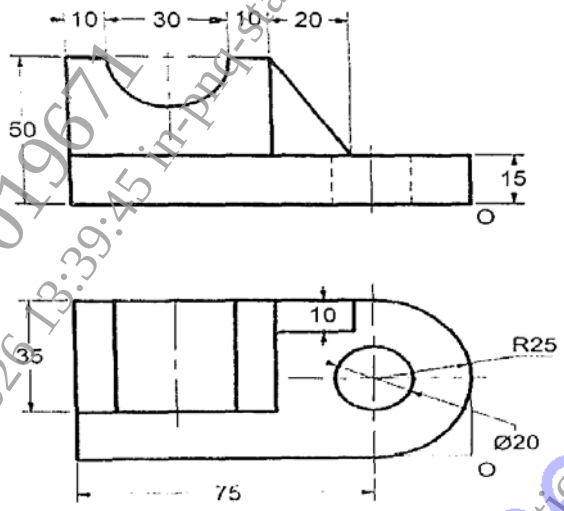
Q9) Figure show orthographic views of an object by first angle method of projection. Draw its isometric view **[14]**



SPPUQuestionPapers.com
CEGP019671
103.157.122.163 15/06/2026 13:39:45 in-pnq-static-163-122-157-103

OR

Q10)Figure show orthographic views of an object by first angle method of projection. Draw its isometric view **[14]**



CEGP019671 103.157.122.163 15/06/2026 13:39:45 in-pnq-static-163-122-157-103
SPPUQuestionPapers.com