

2056
B.E., Second Semester
ESC-X04: Engineering Graphics
(Common with MEC, CSE, IT, BIO)

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit. Use third-angle projections. Draw neat, fully dimensioned figures.

X-X-X

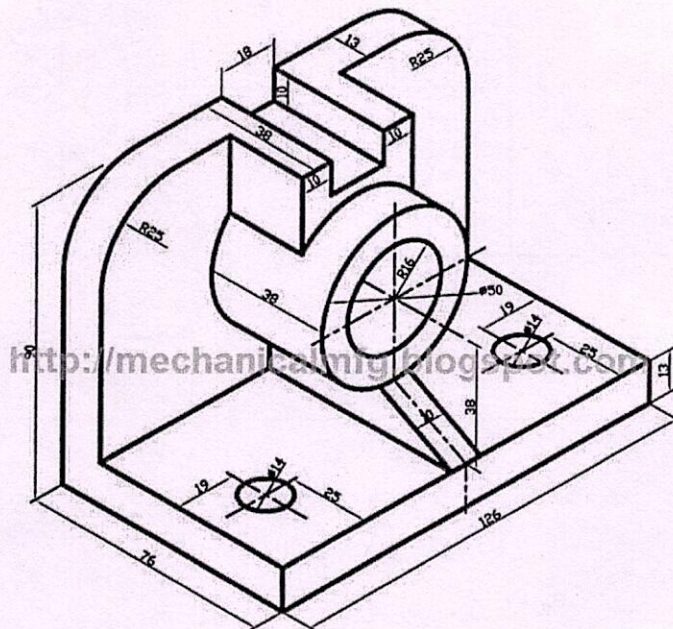
1. Answer the following:-
 - a) Define orthographic projection.
 - b) State one use of OSNAP.
 - c) What is true length of a line?
 - d) Define trace of a line.
 - e) Differentiate between plane and lamina.
 - f) What is a cutting plane?
 - g) State one purpose of development of surfaces.
 - h) What is hatching?
 - i) Distinguish between isometric projection and isometric drawing.
 - j) Define fillet and chamfer.

(10x1)

UNIT - I

2. With reference to below Figure, draw freehand the front view, top view and left -side view of the given object. Show hidden edges, centre lines. Assume the missing dimensions.

(10)



3. A regular hexagonal lamina of side 30 mm rests on H.P. on one of its sides. The surface is inclined at 50° to H.P., and the resting side makes an angle of 30° to V.P. Draw its projections.

(10)

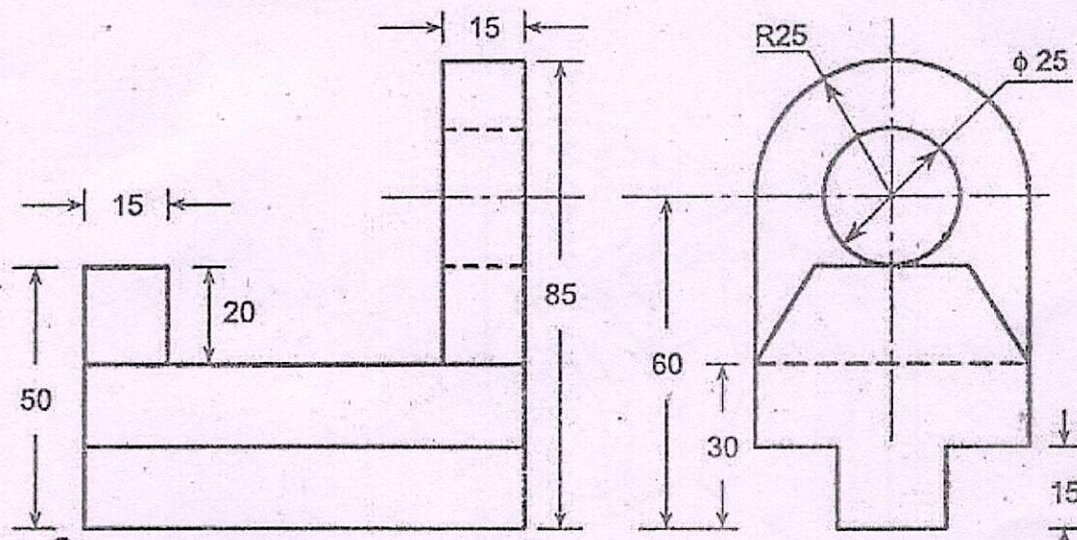
P.T.O.

(2)

4. A hexagonal prism of base side 25 mm and axis length 70 mm rests on H.P. on its base with one side perpendicular to V.P. Draw its projections when the axis is inclined at 40° to H.P. and parallel to V.P. (10)

UNIT - II

5. A square pyramid of base side 50 mm and axis height 80 mm rests on H.P. on its base. It is cut by a plane perpendicular to V.P. and inclined at 45° to H.P., passing through a point on the axis 40 mm above the base. Draw the front view, sectional top view and true shape of section. (10)
6. A right circular cone of base diameter 60 mm and axis height 75 mm rests on H.P. on its base. It is cut by a plane perpendicular to V.P. and inclined at 30° to H.P., passing through a point on the axis 45 mm above the base. Draw the top view, front view and development of the truncated cone. (10)
7. Draw the isometric projection of the object below. (10)



x-x-x