Reg. No. :

Question Paper Code : AR 8121

B.Arch. DEGREE EXAMINATION, 2017
First Semester
AR 8121 – ARCHITECTURAL DRAWING – I
(Regulations 2017)

Time : Three Hours   Maximum : 100 Marks

Answer ALL questions

PART – A **(10×2=20 Marks)**

1. Draw a line of length 65 mm into 4 equal parts using compass.

2. Define a polygon and name any four.

3. What are the different conic sections that can be derived when a cone is cut by a plane at different angles ?

4. Draw the plan and elevation of a point P 30 mm in front of V.P. and 40 mm below H.P.

5. Differentiate between a paraline and a perspective drawing.

6. Draw the isometric view of a solid with the shape of alphabet H.

7. Draw the plan and elevation of the frustum of a square pyramid resting on its base of side 60 mm and frustum height 40 mm.

8. What is the representation of the following materials in section :

   i) brick

   ii) concrete.

9. What is the importance of measured drawing in building documentation ?

10. How would you measure the diameter of a circular column of a building ?

PART – B(4×20=80 Marks)

11. a) Construct an exterior tangent to two unequal circles of diameter 8 cm and 4 cm.

(OR)

b) Draw the plan and elevation of a square plane of 64 mm sides

i) When one of its diagonals is parallel to both planes, and the other makes 40 degree with the H.P.

ii) With two of its sides parallel to both planes, and its surface making 45 degree with its H.P.

12. a) A hexagonal pyramid, base 40 mm side and axis 80 mm long, is resting on its base on the ground with two edges parallel to V.P. It is cut by a section plane, perpendicular to V.P., inclined at 45 degrees to H.P. and intersecting the axis at a point 30 mm above the base. Draw the plan, front and side elevation of the cut pyramid and the true shape of the section.

(OR)

b) A hexagonal prism of base 30 mm side and height 85 mm, has a face on the ground and the axis parallel to V.P. It is cut by a vertical section plane which makes an angle of 45 degrees with V.P. and which cuts the axis at a point 30 m from one of its ends. Draw the plan and elevation of the cut prism, and the true shape of the section.

13. a) Draw the isometric view of the given object. Dimensions are in mm.

(OR)
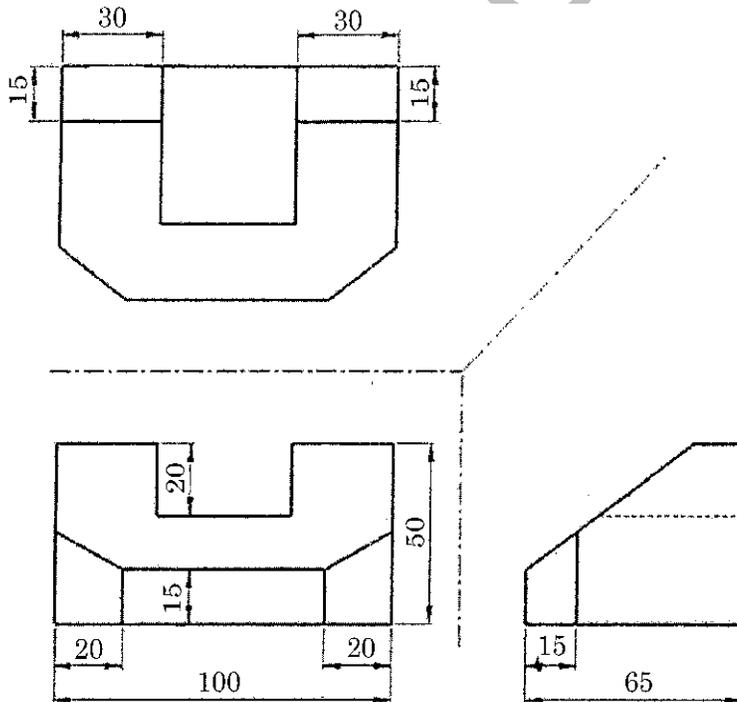
b) Draw the plan and elevation of the given view. Dimensions are in mm.
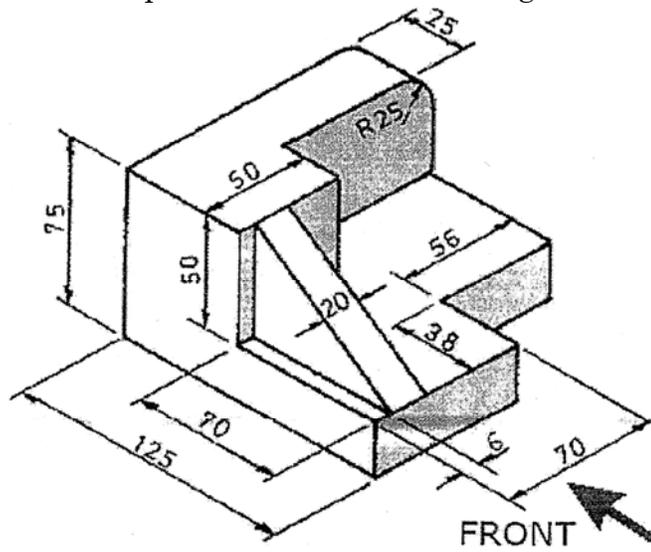
14. a) Draw a neat isometric view of a typical door / window in 1 : 10 scale. Dimension and name the parts of the door.

(OR)

b) Explain with sketches the general steps to be considered in documentation of a building façade using measured drawing.

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