

## Scheme – I

### SAMPLE QUISTION PAPER

**Program Name** : Mechanical Engineering Program Group

**Program Code** : AE/ME/PT/PG

**Semester** : Second

**Course Title** : Engineering Drawing

**Marks** : 70

**22207**

**Time: 4 Hrs.**

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#### Instructions:

1. All questions are compulsory
2. Figures to the right indicate full marks
3. Assume suitable data if necessary
4. Use only H / 2H grade pencils.
5. Line work and cleanliness will be given due weightage.
6. Retain all construction lines and nomenclature.

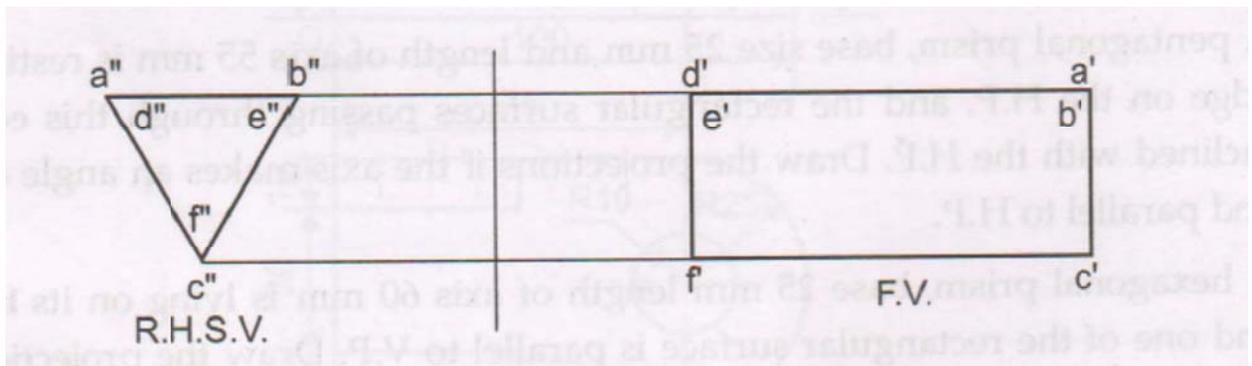
#### Q.1. Solve ANY FIVE.

**Marks-10**

- a) Draw neat and proportionate free hand sketch of Single Riveted Lap Joint.
- b) Draw neat and proportionate free hand sketch of Lewis foundation Bolt.
- c) Draw neat and proportionate free hand sketch of Muff Coupling. d) Draw the conventional representation of following welded joint—
  - i) Square Butt
  - ii) All round fillet weld .
- e) Draw the conventional representation of following materials in section.
  - i) Brass
  - ii) Glass .
- f) If a line is parallel to VP and inclined to HP, state whether following statements are true or false.
  - i) Front view of the line shows its true length.
  - ii) Top view of the line is inclined to XY.
- g) With a simple sketch explain revolved section. .

**Q.2 Solve ANY THREE.****Marks-12**

- The top view of a 75 mm long line AB measures 65 mm . Its one end A is in the H.P. and 12 mm in front of the V.P. Draw the projections of AB.
- A pentagonal lamina side 30 mm , has one side in H.P. Lamina is inclined at  $60^\circ$  to H.P. and perpendicular to V.P. Draw three views.
- A square plate of side 60 mm has a central hole of 36 mm diameter. It is resting on one of its sides in H.P. with its surfaces perpendicular to V.P. and inclined at  $45^\circ$  to H.P. Draw its projections.
- Fig- 1 shows front view and right hand side view of a triangular prism. State the position of planes ADEB and ABC with respect to reference planes.



e) Fig-1

- A cylinder is lying on its curved surface on HP with its axis parallel to VP. The side view of cylinder will be-
  - Circle
  - Rectangle
  - Ellipse.
- What will be the front view ?

**Q.3 Solve ANY TWO.****Marks-16**

- A cylinder , 60 mm base diameter and 70 mm length of axis is lying on its curved surface on H.P. Draw the projections of it when the axis is inclined at  $30^\circ$  with V.P. and parallel to H.P.
- A right circular cone of 50 mm base diameter and axis 80mm long is resting on its base on H.P. It is cut by a section plane inclined at  $60^\circ$  to H.P. and perpendicular to V.P. bisecting the axis. Draw
  - Front view
  - Sectional top view
  - True shape of section

- c) A square pyramid of base 25 mm side and axis 60 mm long is resting on H.P. on its base with edges equally inclined to V.P. It is cut by a section plane on axis at 20 mm from the apex and inclined at  $45^\circ$  to H.P. Draw:
- Front view
  - Sectional top view
  - True shape of section.

**Q.4 Solve ANY TWO.**

**Marks-16**

- a) A pictorial view of an object is as shown in Fig- 2. Draw the following views:
- Sectional front view, section along A-B
  - Plan
- Use first angle method of projection.

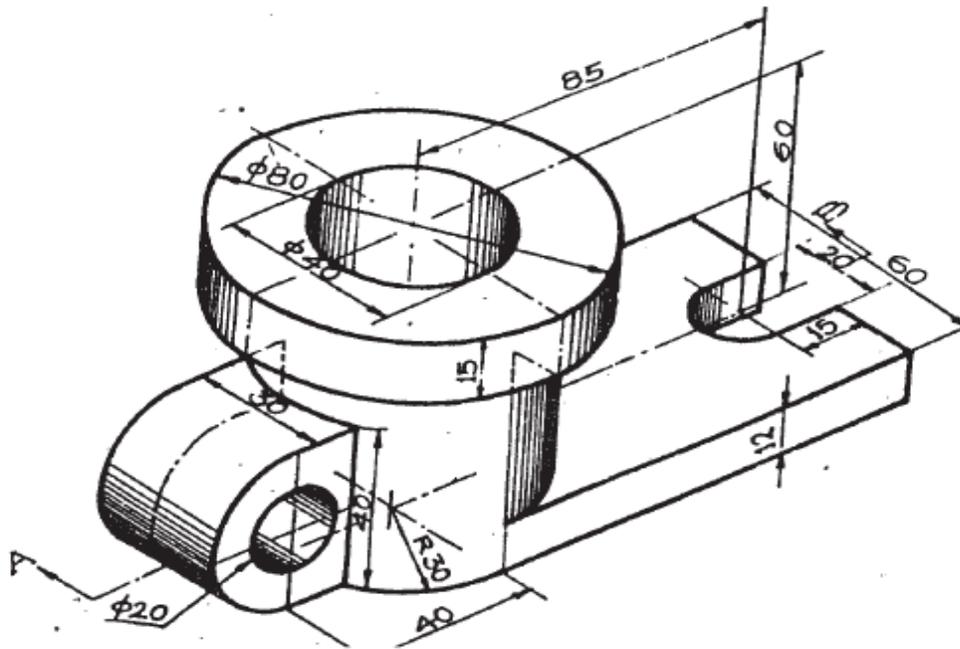


Fig-2

- b) Fig-3 shows a pictorial view of an object. Draw:
- Sectional elevation along section A-A
  - Plan

Use first angle method of projections.

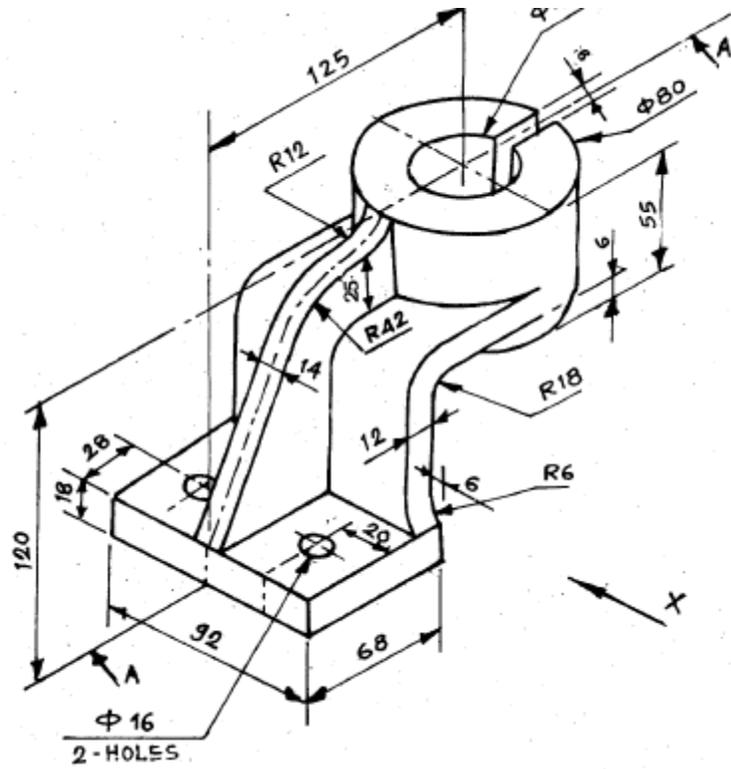


Fig-3

c) Fig-4 shows the Front view and Left hand side view of the object. Draw the given views and project an partial auxiliary top view looking in the direction of X.

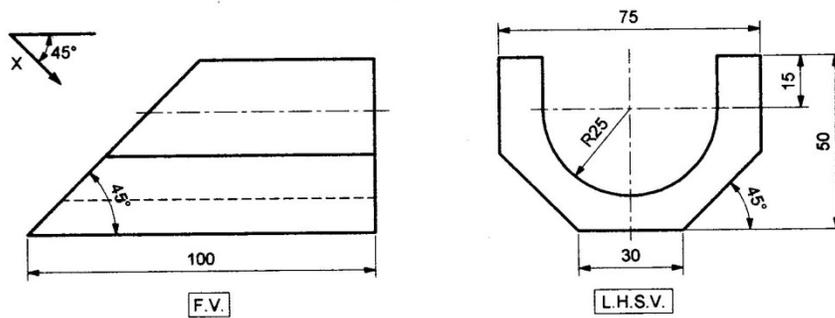


Fig-4

**Q.5 Solve ANY TWO.**

**Marks-16**

- a) Fig-5 shows front and top views of an object. Draw the following views using first angle method. --
- Front View
  - Top View

iii) Left Hand Side View.

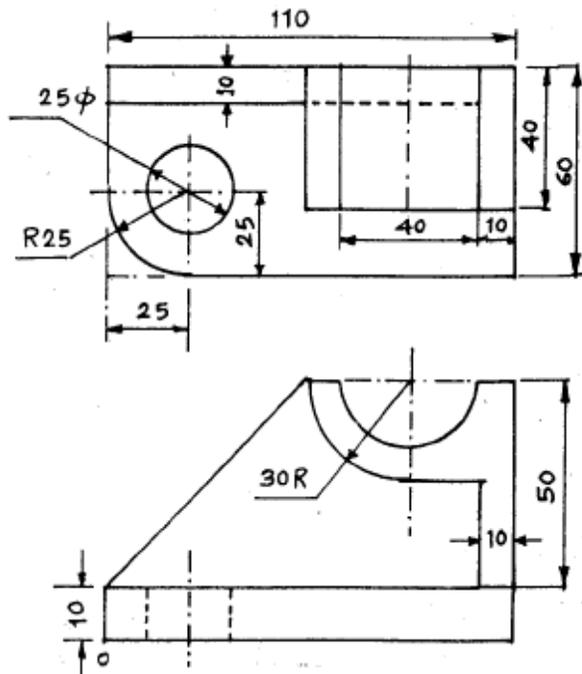


Fig-5

b) Fig-6 shows R.H. side view and Front view of a object. Draw the following views of the object. Use first angle method of projection.

- i) Front View
- ii) Top View
- iii) Sectional Right Hand Side View. Section A-A

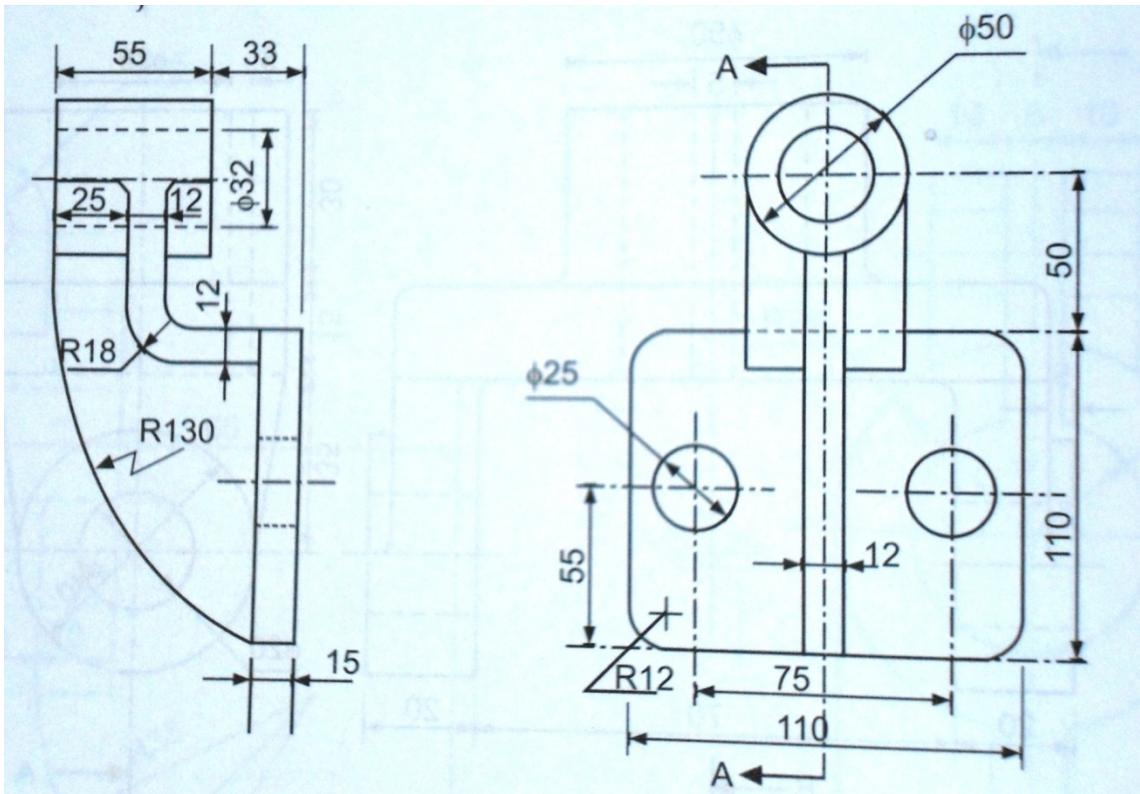


Fig-6

c) Fig-7 shows the front view, incomplete top view and auxiliary view of an object. Redraw the front view and complete the top view.

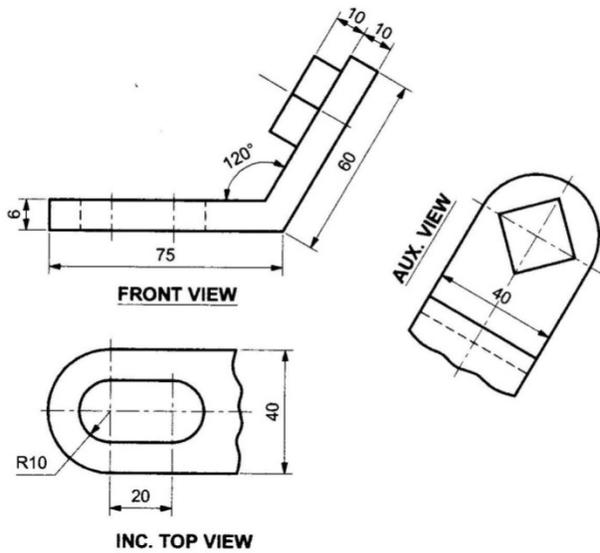


Fig-7

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## Scheme – I

### Sample Test Paper - I

**Program Name** : Mechanical Engineering Program Group

**Program Code** : AE/ME/PT/PG

**Semester** : Second

**Course Title** : Engineering Drawing

**Marks** : 20

**22207**

**Time: 1 hour 15 Minutes**

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#### Instructions:

1. All questions are compulsory
2. Figures to the right indicate full marks
3. Assume suitable data if necessary
4. Use only H / 2H grade pencils.
5. Line work and cleanliness will be given due weightage.
6. Retain all construction lines and nomenclature.

Q1] The top view of a 75 mm long line AB measures 65 mm, while the length of its F.V. is 50 mm . Its one end A is in the H.P. and 12 mm in front of V.P. Draw the projections of line AB (Two Views) **4 Marks**

OR

Q1] A circular plate of negligible thickness and 50 mm diameter has its centre 25 mm above H.P. and 35 mm in front of V.P. Its surface is perpendicular to V. P. and inclined at 45 deg to H.P. Draw its front view and Top View. **4 Marks**

**Q2] Solve ANY TWO.**

**16 Marks**

- a) A cylinder 60 mm base diameter and 70 mm length of axis is resting on its base in the H.P. It is tilted on one of its base point in such a way that the generator passing through that point makes an angle of 45 deg with the H.P. and is parallel to V.P. Draw its projections.

b) A square pyramid , side of base 40 mm and length of axis 60 mm is resting on its base corner on H.P. in such a way that base makes an angle of 30 deg with H.P.. Draw its projections.

c) A tetrahedron of 70 mm side is resting on one of its triangular surfaces on the H.P. with one of its base edge perpendicular to V.P. It is cut by a section plane perpendicular to V.P. and passing through a point 20 mm from apex along the axis and inclined at 45 deg with H.P. Draw its F.V., Sectional Top View and True Shape of the Section.

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## Scheme – I

### Sample Test Paper - II

Program Name : Mechanical Engineering Program Group

Program Code : AE/ME/PT/PG

Semester : Second

Course Title : Engineering Drawing

Marks : 20

**22207**

Time: 1 hour 15 Minutes

#### Instructions:

1. All questions are compulsory
2. Figures to the right indicate full marks
3. Assume suitable data if necessary
4. Use only H / 2H grade pencils.
5. Line work and cleanliness will be given due weightage.
6. Retain all construction lines and nomenclature.

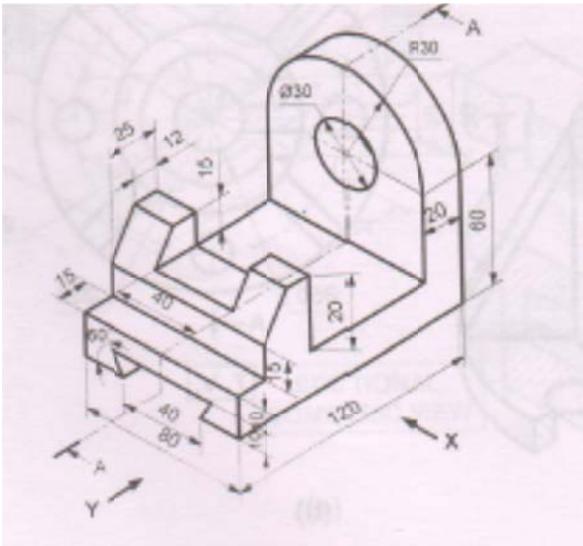
#### Q1] Solve ANY TWO.

16 Marks

a) Figure shows a pictorial view of an object. Draw:

- i) Sectional elevation along section A-A.
- ii) Plan.

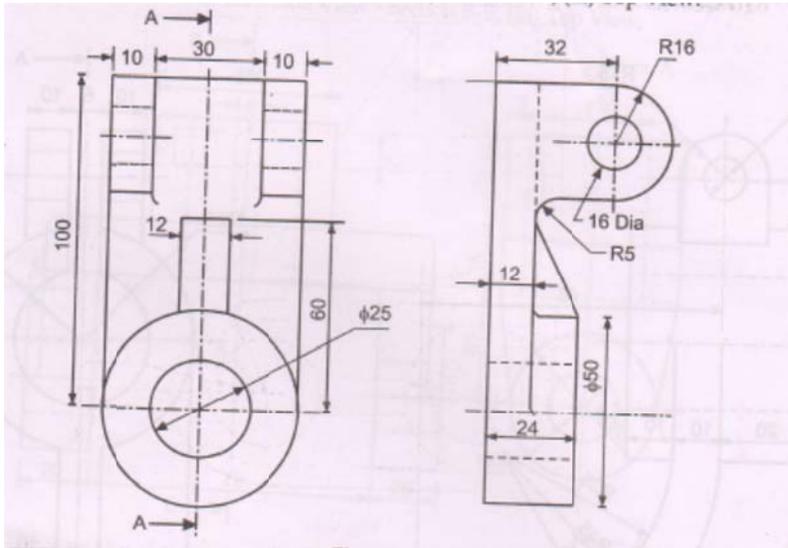
Use first angle method of projections.



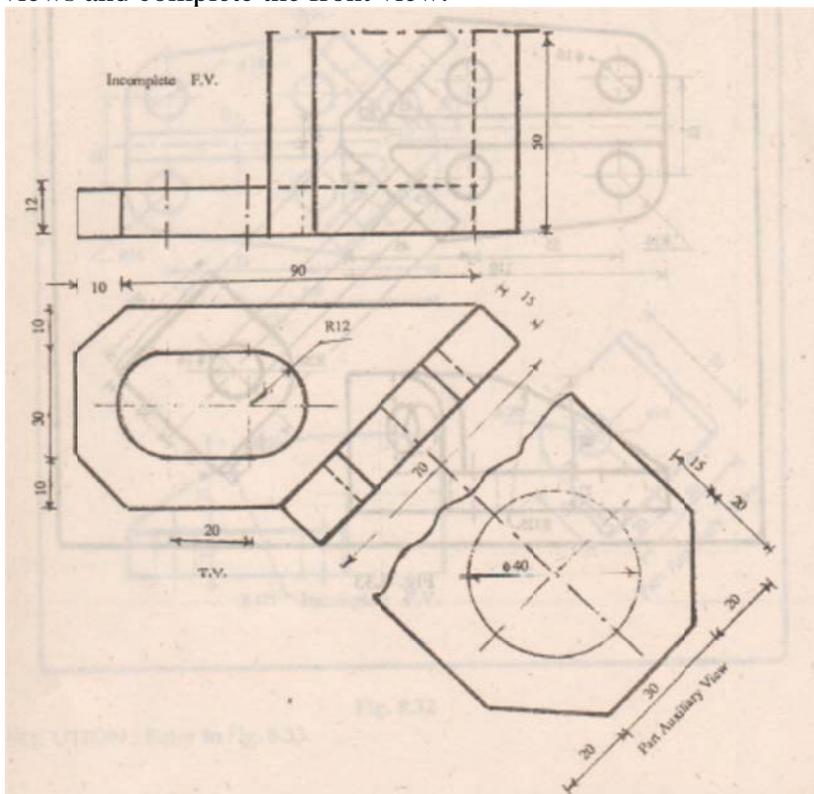
b) Figure shows two views of an object.

Draw--

- a) Front View.
- b) Top View.
- c) Sectional Left Hand Side View section A-A.



c) Figure shows top view, part auxiliary view and incomplete front view of an object. Draw the given views and complete the front view.



**Q2] Draw the free hand sketches of any two of the following-**

**04 Marks**

- a) Double riveted lap joint.
- b) Lewis foundation Bolt.
- c) Conventional representation of Single V butt joint.

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