

Level: Bachelor

Semester: Fall

Year : 2020

Programme: BE

Full Marks: 100

Course: Engineering Drawing

Pass Marks: 45

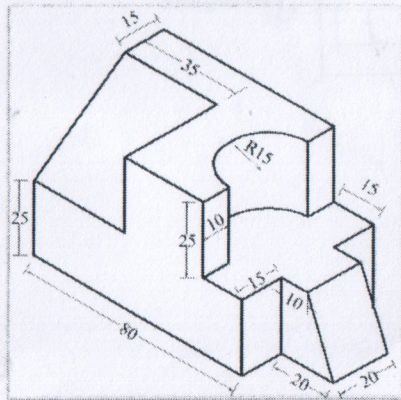
Time : 3hrs.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

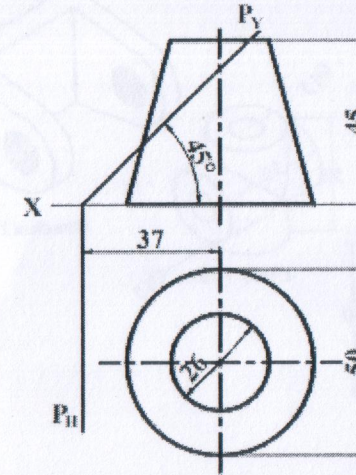
Attempt all the questions.

1. Draw a hypocycloid given the radii of rolling and directing circles as  $r=20\text{mm}$  and  $R=80\text{mm}$ , respectively. Also draw a normal and tangent at any given point on the curve. 14
2. A regular pentagon of 25 mm side is perpendicular to VP and  $45^\circ$  to HP. Draw its projections when one of its sides is in HP and its nearest point to VP is 25 mm from it. 14
3. Draw the complete orthographic views of the given object. (Figure-1) 30



(Figure-1)

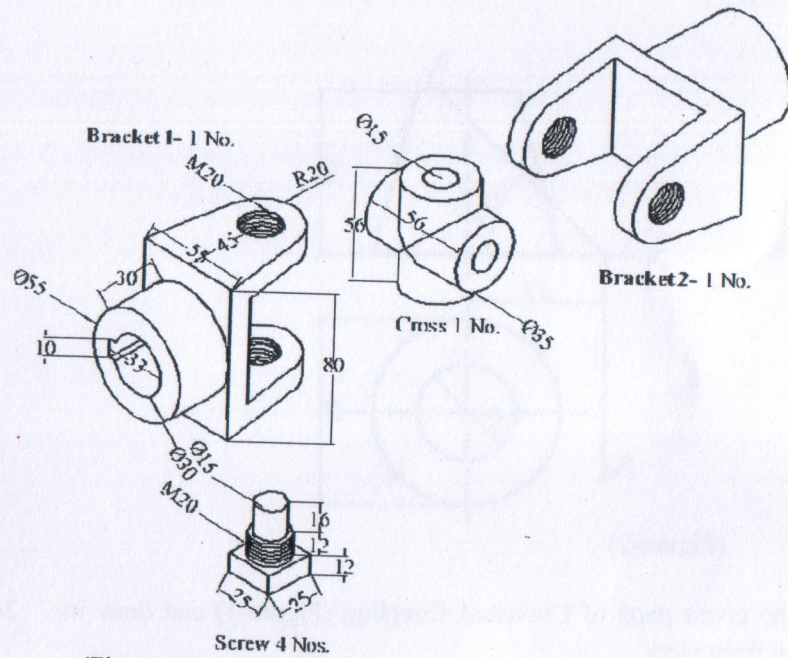
4. A circular base pyramid is cut by a cutting plane as shown in figure 2. Reproduce the given figure and draw: 18
  - a) Sectional top view.
  - b) True shape of the section.
  - c) Lateral surface development of the object.



(Figure-2)

5. Assemble the given parts of Universal Coupling (Figure-3) and draw its full sectional front view. 24





OR

Assemble the given parts of centering cone (Figure 4) and draw its full sectional front view.

