

SUBJECT CODE NO:- K-195
FACULTY OF ENGINEERING AND TECHNOLOGY
F. E. Examination Oct/Nov 2016
Engineering Graphics
(Old)

[Time:Four Hours]

[Max. Marks:80]

Please check whether you have got the right question paper.

- N.B
- i) Solve any three questions from each section.
 - ii) Assume suitable data if necessary and mention it clearly.
 - iii) Figures to the right indicate full marks.

Section A

- Q.1 The end A of line AB is in Hp and 15mm in front of VP. The end B is 50mm behind VP and 40mm below HP. The distance between end projectors is 50mm. Draw the projections of AB and determine its true length and true inclinations with the two planes. 13
- Q.2 A 90mm long line PQ is inclined at 45° to HP and 30° to VP. The end P is 20mm above HP and in VP. Draw its projections and locate the traces. 13
- Q.3 A regular pentagonal plane ABCDE of side 40mm is resting on one side AB on HP. Its surface is inclined to HP such that, the corner opposite to the resting side is 50mm above HP. Draw the projections of the plane when the side AB is 30° inclined to VP. Also find inclinations of surface with HP. 13
- Q.4 A pentagonal pyramid with side of base 25mm and height of axis 70mm is resting on one of its base edge on HP 14 which is 30° inclined to VP. White the triangular face containing that edges makes an angle of 45° with HP. Draw the projections of the pyramid.
- Q.5 A cone, base diameter 60mm and axis 75mm long, is resting on its base on HP. It is cut by a section plane perpendicular to VP. and 45° inclined to HP and cutting the axis at a point 35mm from the base. Draw its front view, sectional top view and true shape of the section. 13

Section B

- Q.6 A Hexagonal prism, side of base 25mm and height 70mm is resting on its base in HP with one of its rectangular faces parallel to VP. A hole of diameter 50mm is cut in it. The axis of the hole is perpendicular to VP and 10mm away from the axis of the prism. Develop the lateral surface of the prism, when the axis of the hole is 35mm above HP. 13

Q.7 Draw the orthographic projections of the object shown in fig. 1.

14

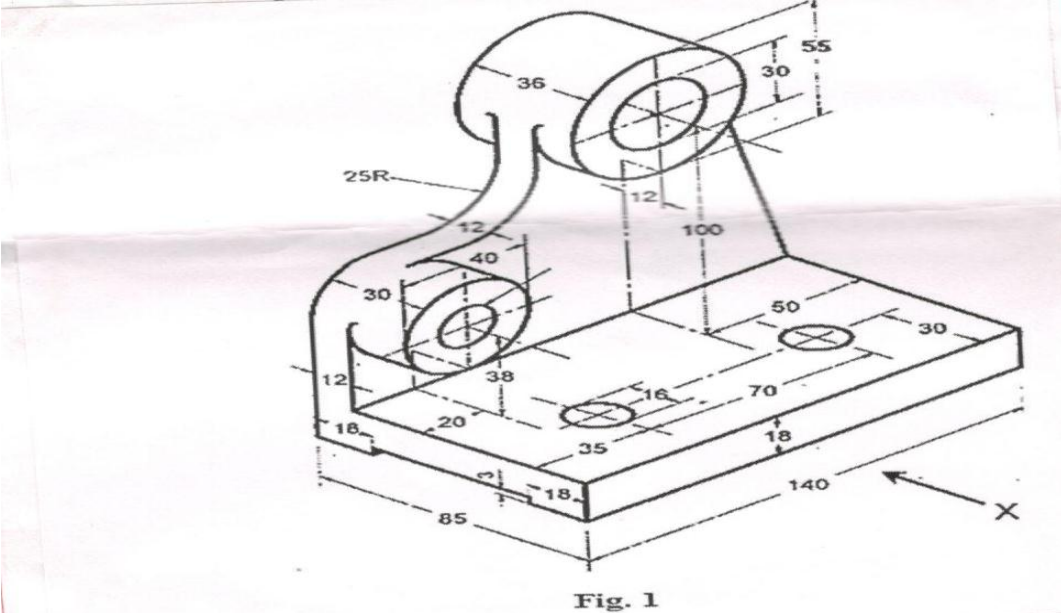


Fig. 1

Q.8 Two views of an object are given in fig. 2.

13

Draw

1. Sectional front view –section A-A
2. Right hand side view
3. Redraw top view

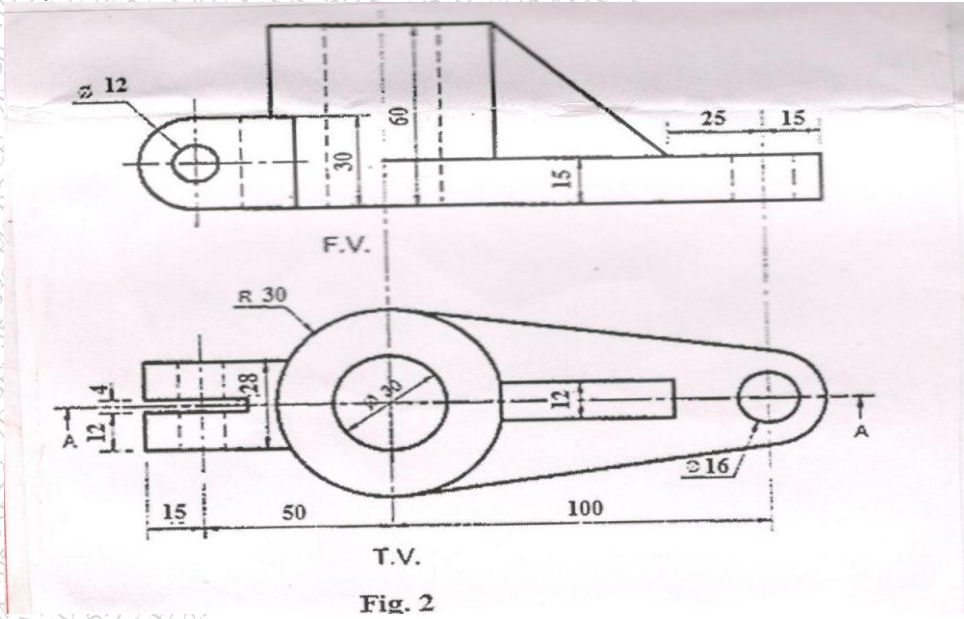
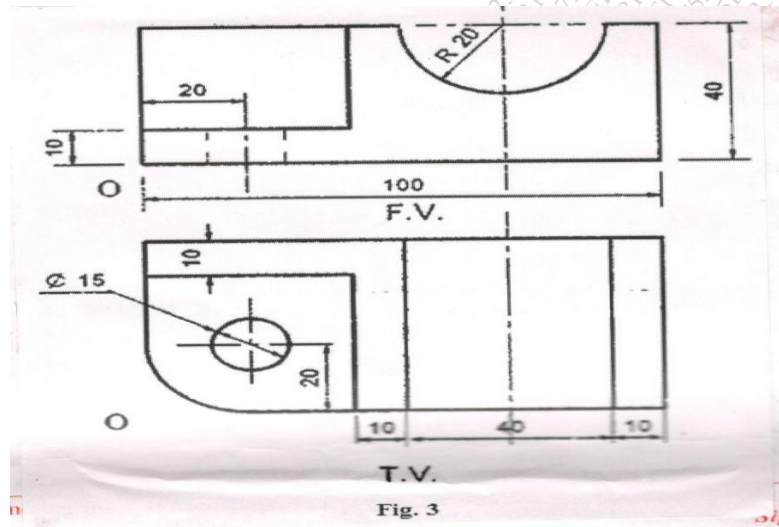


Fig. 2

Q.9 Two views of an object are given in fig.3. draw its isometric view

13



Q.10 Draw freehand sketches of the following. (any three)

13

- a. Hexagonal Nut
- b. Woodruff Key
- c. Buttress thread
- d. Eye foundation Bolt
- e. Single Riveted Lap Joint