

SUBJECT CODE NO:- P-42
FACULTY OF ENGINEERING AND TECHNOLOGY
F. E. Examination MAY/JUNE-2016
Engineering Graphics
(Revised)

[Time: Four Hours]

[Max Marks:80]

“Please check whether you have got the right question paper.”

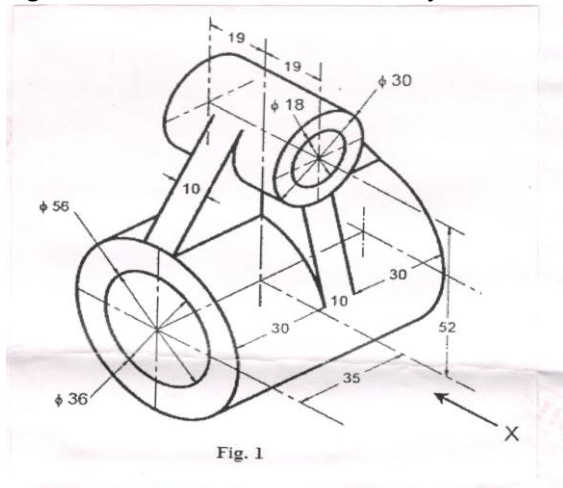
- N.B
- 1) Solve any three questions from each section.
 - 2) Assume suitable data if necessary and mention it clearly.
 - 3) Figures to the right indicate full marks.

Section A

- Q.1 A line PQ 75 mm long is inclined at 45° to HP and 30° to VP. The point P is 15mm above HP and 20mm in front of VP. Draw the projections of the line. 13
- Q.2 A line AB has end A 15mm in front of VP and 30mm above HP. Top view and front view of the line measures 75mm and 65mm respectively. Line makes 30° angles with HP. Draw its projections and find its true length and inclination of line with VP. When the end Q is in first Quadrant. 13
- Q.3 A pentagonal plane PQRST of side 40mm is having its corner P in VP and the surface inclined to VP such that, the front view of side PQ & PT measures 35mm. draw the projections when the line joining corners Q and T is parallel to VP and 30° inclined to HP. Find inclination of plane with VP. 13
- Q.4 A pentagonal prism, side of base 30mm and height of axis 60mm is resting on one of its base side on HP. Which is 50° inclined to VP. The rectangular face containing that side makes 45° to the HP. Draw the projections of prism. 14
- Q.5 A cylinder of 70mm diameter and 80mm height of axis is placed on HP on its base. It is cut by a section plane perpendicular to VP and inclined to HP, such that the true shape of section is ellipse of maximum size. Draw the projections and find the inclination of cutting plane with HP. 13

Section B

- Q.6 A vertical cylinder with base diameter 30mm and axis 70mm has a through square hole of 10mm side drilled centrally such that the axis of hole bisects the axis of cylinder at right angles and is perpendicular to VP. All the sides of hole are equally inclined to HP. Develop the lateral surface of cylinder showing true shape of hole in it. 13
- Q.7 Fig.1 shows Isometric view of an object. Draw front view, Top view and side view of it. 14



- Q.8 Fig.2 shows two view of an object ,draw:
 1) Sectional right hand side view- section A-A
 2) Top view
 3) Redraw front view

13

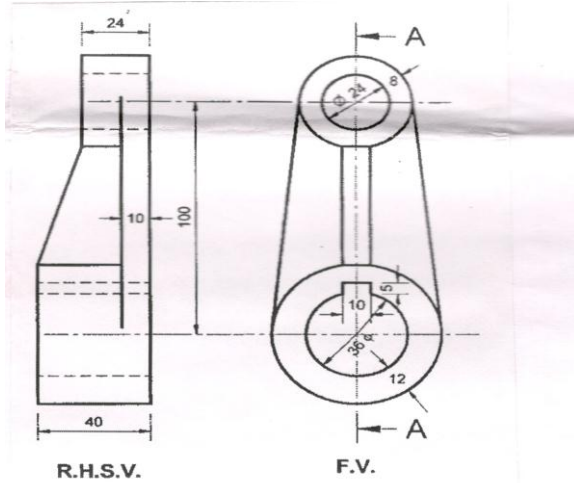


Fig. 2

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

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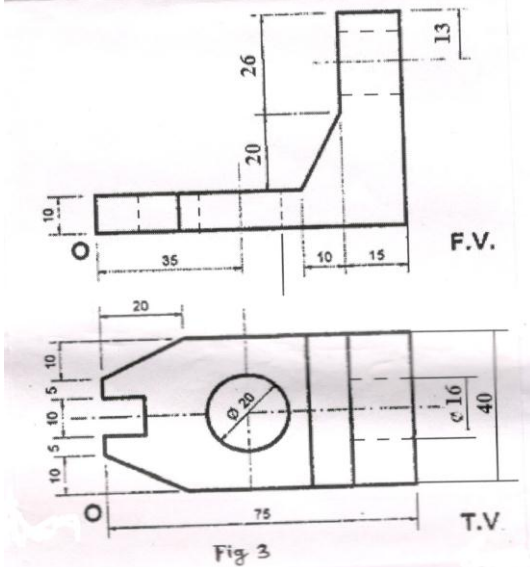


Fig 3

- Q.10 Draw freehand sketched of the following (any three)
- Capstan Nut
 - Seller's thread
 - Lewis foundation Bolt
 - Taper sunk key
 - Square headed bolt

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