Register Number:……..

KUMARAGURU
college of technology
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## GENERAL INSTRUCTIONS TO THE CANDIDATES

1. Candidates are instructed to answer the questions as per Bloom's Taxonomy knowledge level ($K_1$ to $K_6$)
2. Candidates are strictly instructed not to write anything in the question paper other than their roll number.
3. Candidates should search their pockets, desks and benches and handover to the Hall Superintendent/ Invigilator if any paper, book or note which they may find therein as soon as they enter the examination hall.
4. Candidates are not permitted to bring electronic watches with memory, laptop computers, personal systems, walkie-talkie sets, paging devices, mobile phones, cameras, recording systems or any other gadget / device /object that would be of unfair assistance to him / her.
5. Corrective measures as per KCT examination policies will be imposed for malpractice in the hall like copying from any papers, books or notes and attempting to elicit the answer from neighbours.

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**B.E DEGREE EXAMINATIONS: JAN 2015**

(Regulation 2014)

First Semester

**U14ME*T*101: ENGINEERING GRAPHICS**

(Common to CSE/EIE/ECE)

**Time: Three Hours** **Maximum Marks: 100**

**Answer all the Questions:-**

**PART A (5 x 20 = 100 Marks)**

**Q.No. 1 is Compulsory**

1. Line PQ has 72mm length in front view and 66mm length in the top view. End P is 48mm below HP and 40mm behind VP, while the end Q is 12mm below HP. Draw the projections of the line determine the true length and inclinations of the line with the reference planes. [$K_2$]

2. a) A hexagonal lamina of 30 mm side stands with one of its edges parallel to and 16mm in front of VP, such that the surface is 40° inclined to VP. If the edge parallel to VP is inclined at 50° to HP, draw the projections of the lamina. [$K_2$]

**(OR)**

b) A regular pentagonal pyramid has an altitude of 60mm and base side 30mm. The pyramid rests with one of its sides of the base on HP such that the triangular face containing that side is perpendicular to both HP and VP. Draw its projections. [$K_2$]

3. a) A pentagonal pyramid of 40mm side and height 66mm rests on HP keeping one of its base edges perpendicular to VP. A cutting plane parallel to VP cuts the solid 10mm in front of the vertical axis. Draw sectional front view and top view of the pyramid. [$K_1$]

**(OR)**

b) A right circular cone 70mm base and 70mm height rests on its base on the ground plane. A section plane perpendicular to VP and inclined at 30° to HP cuts the cone, bisecting the axis. Draw the development of the lateral surface of the cone. [$K_3$]

4. a) A square pyramid edge of base 40mm and axis 60mm long is lying on one of its triangular faces upon HP and its axis is parallel to VP. Draw the isometric view of the given pyramid showing the base. [$K_2$]

**(OR)**

b) A rectangular prism of dimensions 80mm X 48mm X 32mm is lying on the ground in such a way that one of the largest faces is on the ground. A vertical edge is 10mm behind PP and longer face containing that edge makes 30° inclination with PP. The station point is 80mm in front of the PP and 60mm above the ground and lies in a central plane which passes through the centre of the prism. Draw the perspective view using vanishing point method. [$K_2$]

5. a) For the given orthographic views, draw the pictorial view using free hand. [$K_1$]

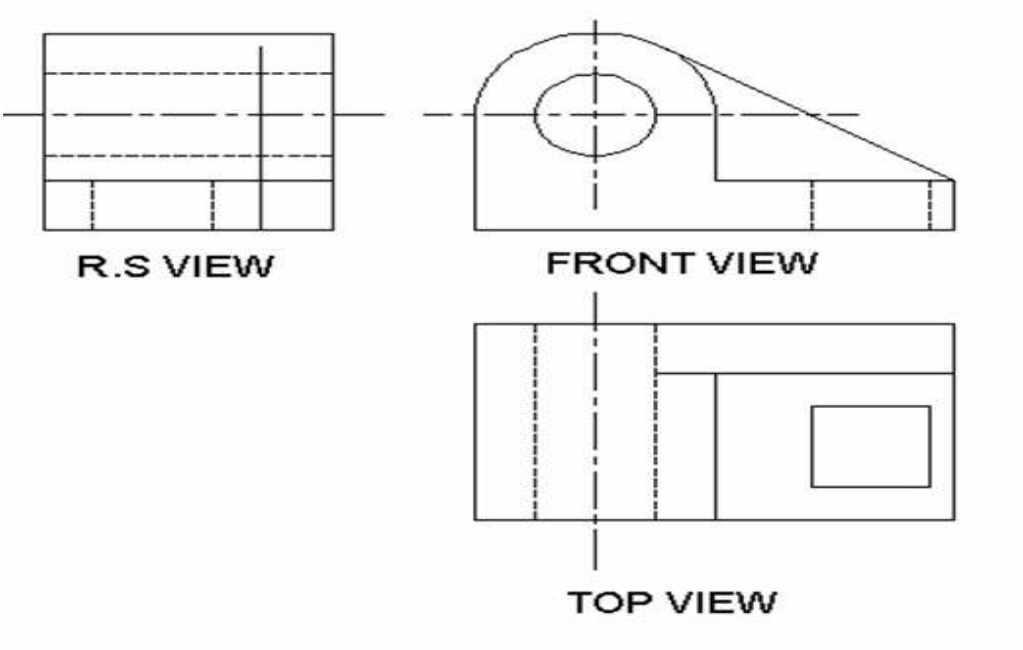


Fig. 1

**(OR)**

b) Draw the free hand ortho graphic views for the object shown. [$K_1$]

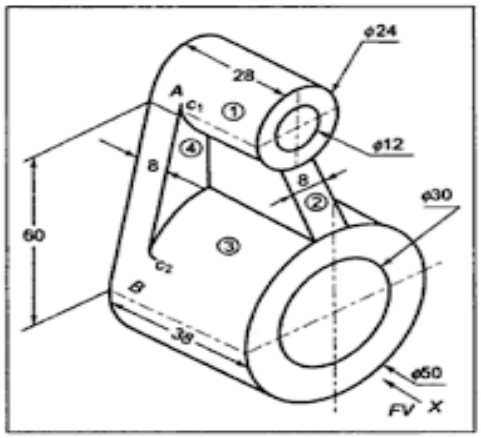


Fig. 2