



GENERAL INSTRUCTIONS TO THE CANDIDATES

1. Candidates are instructed to answer the questions as per Bloom's Taxonomy knowledge level (K₁ to K₆)
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.

B.E DEGREE EXAMINATIONS: JAN 2015

(Regulation 2014)

First Semester

U14MET101: ENGINEERING GRAPHICS

(Common to EEE/ECE)

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (5 x 20 = 100 Marks)

Q.No. 1 is Compulsory

1. Draw the front view top view and right side view of the given isometric view Fig: 1 with free hand sketching. [K₂]

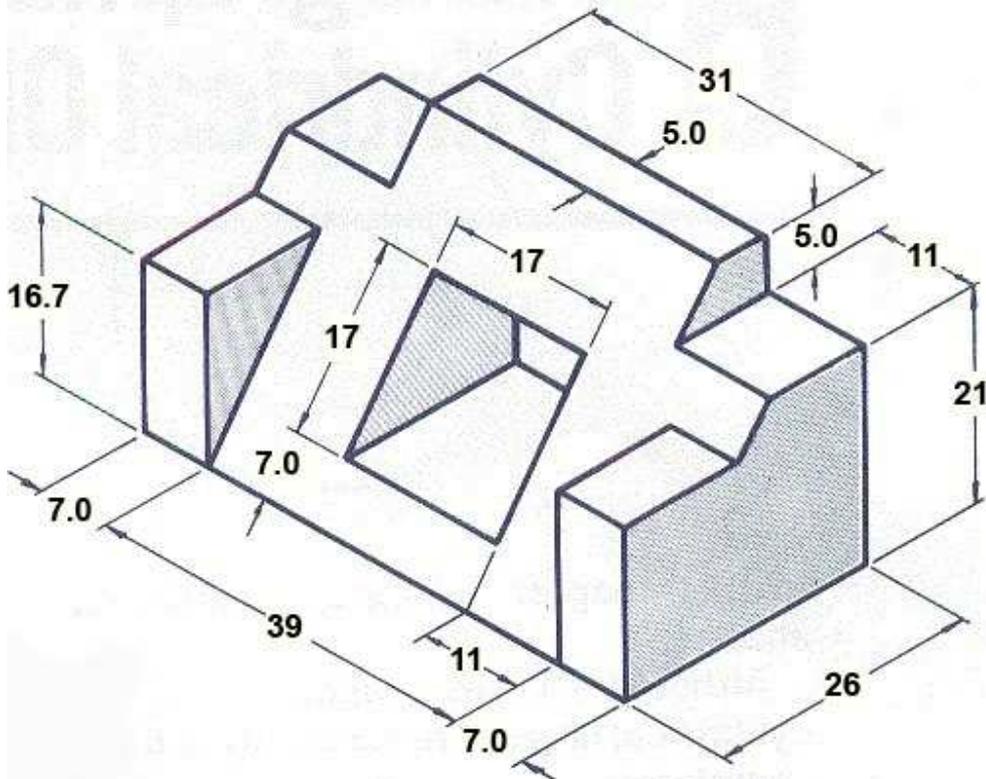


Fig: 1

2.	a)	A Pentagonal Lamina of side 30mm is placed with one side on HP and the surface inclined at 50° to HP and perpendicular to VP. Draw its projections.	[K ₂]
(OR)			
	b)	A Square Pyramid of base side 30mm and height 60mm lies on HP on one of its triangular faces with its axis parallel to VP. Draw its projections.	[K ₂]
3.	a)	A Pentagonal Pyramid of base side 40mm and axis length 75mm is resting on HP on its base with one of its base sides parallel to VP. It is cut by a plane inclined at 35° to HP and perpendicular to VP and is bisecting the axis. Draw its front view, sectional top view and true shape of the section.	[K ₂]
(OR)			
	b)	A Pentagonal Prism of base side 30mm and axis length 60mm is resting on HP on its base with one of its base sides parallel to VP. It is cut by a plane inclined at 35° to HP and perpendicular to VP and meets the axis at a distance of 35mm from the base. Draw the development of the lower portion of the solid.	[K ₂]

4.	a)	The midpoint of the line RS 90mm long is 60mm above HP and 50mm in front of VP. It is inclined at 30° to HP and 45° to VP. Draw its projections.		K ₂
(OR)				
	b)	Draw the locus of a point P which moves in a plane in such a way that the ratio of its distances from a fixed point F and a fixed straight line AB is always 2/3. The distance between the fixed point F and fixed straight line is 50 mm. Also draw a tangent and normal on a point on the locus at a horizontal distance of 55 mm from the fixed straight line.		[K ₃]
5.	a)	A Cone of base diameter 50mm and axis height 70 mm rests on HP on its base. It is cut by a plane inclined at 30° to HP and perpendicular to VP and meets the axis at a distance of 40 mm from the base. Draw the isometric view of the truncated cone.		[K ₂]
(OR)				
	b)	A Square Prism of base side 30mm and height 60mm rests on its base with the nearest edge of the base is parallel to and 5 mm behind PP. The station point is 60mm in front of PP, 50 mm above GP and lying on a central plane 25mm to the left of the mid of the solid. Draw the perspective projection.		[K ₂]
