Register Number:……..

KUMARAGURU
college of technology
character is life

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.

B.E DEGREE EXAMINATIONS: JAN 2015

(Regulation 2014)

First Semester

U14MET101: ENGINEERING GRAPHICS

(Common to AERO/AUE/MCE/MECH)

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

Answer all the Questions:-
PART A (5 x 20 = 100 Marks)

Q.No. 1 is Compulsory

1. A Triangular plate PQR has side PQ=50 mm, QR=70 mm and RP=40 mm. The side PQ rests on the HP and is inclined at 30° to the VP. The surface of the plate is inclined at 40° to HP. Apply the above data and draw the projections of the triangular plate. [K_3]

2. a) Draw an ellipse by applying the data, when the distance between the focus and directrix is 35 mm and the eccentricity is 3/4. [K_4]

(OR)

b) A line AB 75 mm long is inclined at an angle of 25° to HP and 40° to VP. The point A is 20 mm above HP and 30 mm is the front of the VP. Use the above data and sketch the projections of the straight line. [K_3]

3. a) A Cylinder of 50 mm diameter and 65 mm height stands on HP. A sectional plane perpendicular to VP and inclined 45° to HP cuts the cylinder and passes through a point on the axis at a height of 50 mm above the base. Apply the above data and sketch the sectional views of the truncated portion of the cylinder, when the cut surface clearly visible to the observer. [K_3]

(OR)

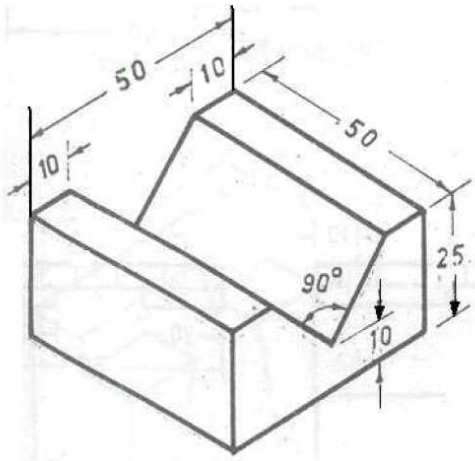
b) A Cone of base 50 mm diameter and height 65 mm rests with its base on HP. A section plane perpendicular to VP and inclined at 30° to HP bisects the axis of the cone. Apply the above data and show the development of the lateral surface of the truncated cone. [K_3]

4. a) Draw the isometric view of a frustum of a hexagonal pyramid using the following data, when it is resting on its base on the H.P with two sides of its base parallel to the VP. The side of the base is 20 mm and top 8 mm. The height of the frustum is 55 mm. [K_3]

(OR)

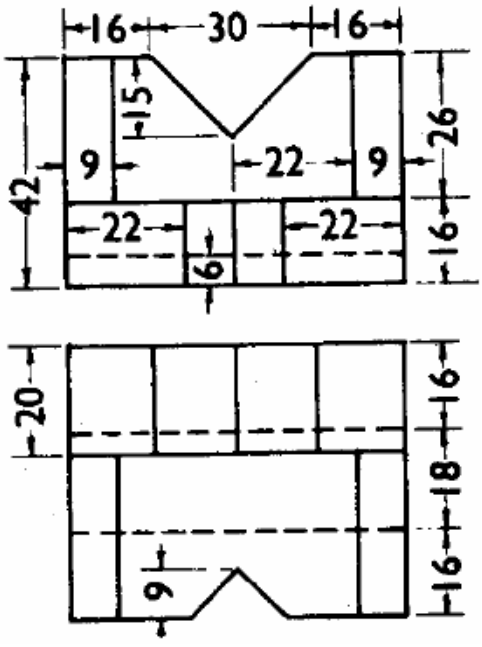
b) A cube side 25 mm rests on one of its faces on the ground, the nearest vertical edge being 20 mm behind the picture plane and 40 mm to the left of the station point. The face containing the nearest vertical edge is inclined at 60° to the PP. The station point is 40 mm above the ground and 60 mm in front of the PP. Use the above data and sketch the perspective view of the cube. [K_3]

5. a) Sketch the front view, top view and left side views of V- block using the following figure by free hand. (All dimensions are in mm) [K_3]



(OR)

b) Show the pictorial view using the given orthographic views. [K_3]



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