Reg No.:_____   Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FIRST/SECOND SEMESTER B.TECH DEGREE EXAMINATION, MAY 2019
Course Code: BE110
Course Name: ENGINEERING GRAPHICS

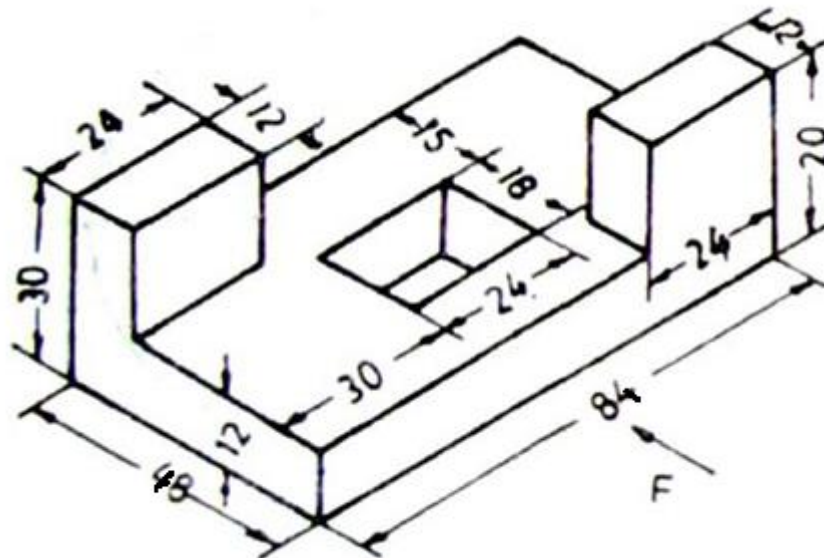Max. Marks: 50   Duration: 3 Hours

PART A
Answer any two questions, each carries 10 marks.

Marks

1   A line AB 70mm long is inclined at 30^0 to HP and 40^0 to VP. The end A is in HP   (10)
     and 40mm in front of VP. Draw its projections and locate the traces.

2   Front view of a line AB makes 50^0 with xy- line and measures 60 mm and its top
     view makes 30^0 with xy- line. End A is 15 mm above HP and its VT is 10 mm   (10)
     below HP. Draw projections of the line AB, determine inclinations with HP and
     VP, true length and locate its traces.

3   A triangular prism of base side 30mm and length 50mm has a base edge on HP,
     axis inclined at 35° to HP. The base edge on which it rests is inclined 45° to VP.   (10)
     Draw the projections of solid

PART B
Answer any three questions, each carries 10 marks.

4   Draw an isometric view of a frustum of a cone 25mm top diameter and 40mm
     bottom diameter and 50mm high placed centrally above a cylindrical block of   (10)
     50mm diameter and 25mm thick such that the solids have a common axis.

5   Draw front view, top view and any one side view of the following figure, F is the
     front view direction.

(10)

6   A square prism of 40 mm side length and 60 mm height rests on its base upon
     HP, such that the vertical faces are equally inclined to VP. A horizontal hole 40   (10)
     mm diameter is drilled through the geometrical centre of the prism with the axis
     perpendicular to VP. Develop the lateral surface of the prism.

7   A vertical cylinder of height 70mm and base circle diameter 60mm is resting on   (10)
     the ground on its base and a horizontal cylinder of base 40mm diameter and axis

length 80mm penetrates the vertical cylinder by bisecting the axes at right angles to each other. Draw the projection of the solids showing the curve of intersection.

8   A pentagonal pyramid axis length 50mm and base edge 25mm is resting on GP on its base. One of the base edges which is nearer to PP is parallel to it and 15mm behind it. The SP is 65mm above GP and 40mm in front of PP. Draw the perspective view of the pyramid if the axis is lying on the central plane and the pyramid is completely behind the PP.   (10)

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