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Reg. No.:....................   Name:..................................

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FIRST/SECOND SEMESTER B.TECH DEGREE SPECIAL EXAMINATION, SEPT 2016
Course Code: BE110
Course Name: ENGINEERING GRAPHICS

Max. Marks: 50   Duration: 2 Hours

PART A

Answer ANY ONE question (11 Marks)

1. The front and top views of an 80 mm long line PQ measures 70 mm and 60 mm, respectively. The end P is on the HP and the end Q is in the VP. Draw the projections of line PQ and determine its inclinations with the HP and the VP. Also, locate the traces.

2. A room is 4.8 m x 4.2 m x 3.6 m high. Determine graphically, the distance between a top corner and the bottom corner diagonally opposite to it.

PART B

Answer ANY THREE Questions (13 marks each)

3. A square pyramid of base side 30 mm and axis length 60 mm is resting on HP on one of its triangular faces with its axis parallel to VP. Draw its projections.

4. A frustum of a cone of base diameter 50 mm. top diameter 30 mm and height 45 mm is resting upon its base on HP. Draw the isometric projection of the frustum.

5. A pentagonal prism, having a base with a 30 mm side and a 70 mm long axis, is resting on its base on H.P. such that one of the rectangular faces is parallel to the V.P. it is cut by an auxiliary inclined plane making an angle 45^0 with the H.P. and passes through the midpoint of the axis. Draw the sectional top view, true shape of the sectionand the development of the lateral surface of the truncated prism.

6. A horizontal cylinder of 50 mm diameter and 100mm long penetrates a vertical cylinder of 80mm diameter and 120mm long resting on HP. The axis of the horizontal cylinder is parallel to VP and 60 mm above the HP. Draw the projection showing the curve of the intersection.