USN | | | | | | | | | | | 15CED14/24

First/Second Semester B.E. Degree Examination, December 2016

COMPUTER AIDED ENGINEERING DRAWING

Time: 3 Hours   **(COMMON TO ALL BRANCHES)**   Max. Marks: 80

Note: 1. Answer three full questions. 2. Use A4 sheets supplied.

3. Draw to actual scale.   4. Missing data, if any, may be assumed suitably.

Q.No.1 a. Two points 'P' and 'Q' on HP. The point 'P' is 30 mm behind VP, while **10 Marks** 'Q' is 50 mm in front of VP. The line joining their top views makes an angle of 40° with XY line. Find the horizontal distance between their projectors.

b. A line AB 80 mm long has its end A 20 mm above the HP and 30 mm in **15 Marks** front of VP. It is inclined to 30° to HP and 45° to VP. Draw the projections of the line and find apparent lengths and apparent inclinations.

OR

Q.No.1 A regular pentagonal lamina of 25 mm side is resting on one of its sides **25 Marks** on HP while the corner opposite to this side touches VP. If the lamina makes and angle of 60° with HP and 30° with VP, draw the projections of the lamina.

Q.No.2 A hexagonal prism 25 mm sides of base and 50 mm axis length **30 Marks** suspended freely from one of its corner. Draw the projections of the prism when the axis appears to be inclined to VP at 45°.

Q.No.3 Develop the lateral surface of the cylinder of 40 mm diameter and height **25 Marks** 60 mm which is cut in the following way.
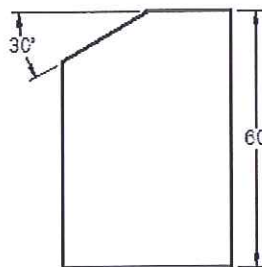
OR

Q.No.3 Three cubes of sides 60 mm, 40 mm, 20 mm are placed centrally one **25 Marks** above the other in ascending order of their side. Draw the isometric projection of the combination.

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