



USN registration box

First Semester B.E. Degree Examination, January 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.

- 1. a. A point 20 mm below the reference XY line is the top view of three points 'P', 'Q' and 'R', 'P' is 20 mm below HP, 'Q' is 35 mm above HP and 'R' is on HP. Draw the projections of the three points and state their positions and quadrants in which they are situated. 10 Marks
b. A line has its end A 15 mm from HP and 10 mm from VP. The end B is 55 mm from HP and the line is inclined at 30 degrees to HP. The distance between the end projectors is 50 mm. Draw the projections of the line. Determine the true length and true inclination with VP. 15 Marks

OR

- 1. A circular lamina inclined to the VP appears in the front view as an ellipse of major axis 30 mm and minor axis 15 mm. the major axis is parallel to both HP and VP. One end of the minor axis is in both HP and VP. Draw the projections of the lamina and determine the inclination of the lamina with the VP. 25 Marks
2. A tetrahedron of 55 mm sides rests on one of its corners such that an edge containing that corner is inclined to HP at 50 degrees and VP at 30 degrees. Draw its projections. 30 Marks
3. A square prism of base side 35 mm & height 55 mm rests with its base on HP and two faces equally inclined to VP. Draw the development of the lateral surfaces of the retained portions of the cut prism shown by dark lines in the figure. 25 Marks



OR

- 3. A square prism of side 40 mm and height 70 mm has a full depth coaxial square holes side 20 mm, such that edges of both the squares are parallel. Draw the isometric projection of the combination. 25 Marks

\*\*\*\*\*

