

COLLEGE OF ENGINEERING, PUNE

(An autonomous institute of Govt. of Maharashtra)

End Semester Exam (DEC 2009)

ENGINEERING GRAPHICS I (ME 101)

Programme: F.Y.B.TECH

(Morning)

Time: 3 hours

Marks 50

Instructions:

- 1) All questions are compulsory.
- 2) Figures to the right indicate full marks.
- 3) Assume suitable data whenever necessary.
- 4) Retain all the construction lines and external constructions.
- 5) Dimensioning, line work and symbols carry due credits.

Q No 1: The end A of a line AB is 15mm above the H.P. and the end B is 10mm in front of V.P. The length of line is 100mm and is situated in the first quadrant. Draw its projections if the line is inclined at 30 degrees with both the reference planes. Also locate the traces.

Marks 12

Q No 2: A 30-60 degrees triangle PQR has its largest side PR is 50 mm long and is contained in V.P. Points P and R are 20 mm and 45mm respectively from H.P., while point Q is 10mm away from V.P. Draw the projections of plane PQR.

Marks 12

Q No 3 : A Pentagonal pyramid side of base 40 mm, height 50 mm is held with the corner of the base on vertical plane and the slant edge through that corner perpendicular to V.P. Draw the projections of the pyramid if the axis of the pyramid is inclined to H.P. at 40 degrees.

Marks 13

Or

Q No 3: A tetrahedron has its corner on H.P. with the edge through that corner inclined to H.P. at 30 degrees and 45 degrees to F.R.P. The opposite edge is parallel to H.R.P. Draw its projections.

Marks 13

Q No 4: A cone diameter of base 80mm is cut in such a way that true shape is an isosceles triangle of 50mm base and 70 mm altitude. Draw the projections of cone when it is placed on its base on H.P. Show sectional top view, front view and true shape of section.

Marks 13

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