

Roll No

ME-111

B.E. (All Branches) First Semester

Examination, December 2016

Choice Based Credit System (CBCS)

Engineering Graphics

Time : Three Hours

Maximum Marks : 60

- Note:* i) Attempt any five questions.
ii) All questions carry equal marks.

1. a) Draw the projections of the following points on the same reference line keeping their projectors 20mm apart.
i) Point A is 20mm above HP and 40mm in front of V.P.
ii) Point B is 25mm below HP and 30mm in front of V.P.
iii) Point C is in HP and 25mm behind V.P.
b) A line AB 80mm long is parallel to and 35mm above HP. Its ends are 30mm and 50mm in front of the V.P. Draw its projections and determine its inclination with V.P.
2. A rectangular plate ABCD measuring 50mm × 30mm has its diagonal AC inclined at 30° to the HP and the diagonal BD is inclined 45° to the V.P. Draw its projections.
3. A square pyramid having edge of base 25mm and axis 60mm long rests on one of its slant faces on the HP and the edge of the base containing the slant edge is inclined at 45° to the V.P. Draw its projections when vertex is drawn towards V.P.

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4. A cone with base diameter 40mm and axis 70mm long is lying on one of its generators on the HP with its axis parallel to the V.P. It is cut by a section plane parallel to V.P. and 10mm away from the axis. Draw its sectional front view and top view.
5. Develop the lateral surface of a right regular hexagonal prism having side of base 25mm and axis 60mm long when it is resting on its base on the H.P. with one rectangular face parallel to the V.P. and cut by a sectional plane perpendicular to the V.P. and inclined at 45° to the H.P. The section plane also passes through the right corner of the top face of the prism.
6. A spherical ball of 50mm diameter is resting centrally on top of the square prism of 70mm base side and 25mm thickness. Draw the isometric projections of the arrangement.
7. a) Name various methods of locating a point in CAD and explain any one of them.
b) Write the steps for drawing a cylinder of 25mm base and 50mm height.
8. Write short notes on:
i) Edit commands used in CAD software
ii) Advantages of CAD as compared to conventional drawing

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