# MGM’S College of Engineering, NANDED.

**Department of Mechanical Engineering**

**QUESTION BANK FOR TEST-** **I**

ACADEMIC YEAR 2013-14, SEM – II

Class: S.E. (Mech.) Subject: MD-CAD Date:15/02/2014

Duration : 01 Hr. Max. Marks: 20

Q.1 A rectangular prism of base size 25 x40 and axis 55 mm long has one of its larger rectangular surface is inclined at 300 toV.P. and axis perpendicular to H.P. it is cut by a section plane perpendicular to V.P. and 450 inclined to H.P. bisecting the axis. Draw sectional T.V. and S.V. Project the true shape of the section. (10)

Q.2 A pentagonal pyramid of 30 mm side of base and 70 mm long its slant edge has one of it’s slant edge is vertical. It is cut by a section plane normal to both H.P. and V.P. bisecting the axis. Draw sectional S.V. (10)

Q.3 A right circular cylinder of 50 mm base diameter and 90 mm long axis is resting on H.P. on one of the point from base circumference making base 300 with H.P. It is cut by a section plane normal to H.P. and inclined to V.P. at 450 and passes through one point on axis which is 20 mm away from top end of cylinder. Draw sectional F.V., T.V. & TSS. (10)

Q.4 A cone of 50 mm base diameter and 70 mm long axis has base is inclined at 600 to H.P. it is cut by a section plane normal to V.P. and inclined to H.P. at 450 passes through the point on axis 40 mm away from apex. Draw sectional T.V. and show True shape of section. (10)

Q.5 A composite solid made up of half cylinder and pentagonal prism of 30 mm base side with maximum possible base diameter of cylindrical portion. It is resting on one of the rectangular surface on H.P. making plane containing two axes perpendicular to H.P. and inclined to V.P. at 300. It is cut by a section plane normal to H.P. bisecting the T.V. of any one axis and inclined to V.P. at 600. Draw T.V., sectional F.V. and True shape of section. (10)

Q.6 A tetrahedron of 50 mm side has one of its side parallel to H.P. and perpendicular to V.P. It is cut by a section plane normal to V.P. in such a way that the true shape of section is a perfect square. Set the cutting plane an Draw sectional T.V. and F.V.show the true shape (10)

Q.7 A right circular cone of 50 mm base diameter and 70 mm long axis is resting on one of its slant generator on H.P. with axis being parallel to V.P. It is cut by a section plane normal to V.P. in such a way that true shape of section is an isosceleaus triangle of 35 mm base. Set cutting plane and Draw the projection, Show T.S.S. (10)

Q.8 A right circular cylinder of 60 mm base diameter and 80 mm long axis has a square hole of 30 mm size co-axially rests on H.P. on its curved surface with combined axis being perpendicular to V.P. in such a way that the true shape of section is externally appearing as an ellipse of 85 mm its major axis. Draw the projection and show the true shape of the section in auxiliary Front View. (10)

 **Subject Incharge**

 Mr.D.S. Pimpalgaonkar