

# DELHI TECHNOLOGICAL UNIVERSITY

1<sup>st</sup> Semester Practical Examination - 2009

## Engineering Drawing

Time - 3 Hrs.

Maximum Marks - 70

Note -

Question No. 7 ( Viva - voce ) is compulsory  
- Out of rest attempt any four questions. All questions carry equal marks. Assume missing data, if any suitably.

Q.1 A line 50 mm long makes angle of 30

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with HP and lying in a plane, which makes an angle  
45

oooo

with VP and is perpendicular to HP. Its end A is 10 mm above the HP and 20mm in front of VP. Draw the projections of AB and determine its true inclination with the VP. (14)

**Q.2 Draw the projections of a pentagonal plane, side 25 mm, resting in the H.P. On one of its edges. The plane of pentagon is inclined at 45**

oooo

**to the HP. (14)**

**Q.3 Draw the projections of a cylinder 40 mm diameter and axis 55 mm long, is resting on a point of base circle on H.P. with its axis inclined at 45**

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**to H.P. and parallel to V.P.(14)**

**Q.4 A cube of 55 mm edge, is resting on one of its faces on horizontal plane with an edge of its base making an angle of 30**

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**to the V.P. A section plane inclined at 60**

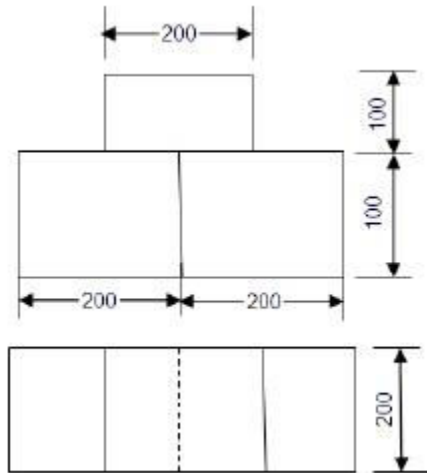
oooo

**to the HP. Cuts the cube and passing through a point 25 mm from the base along the axis.**

**Draw the apparent and the true section of the solid. (14)**

**Q.5 Develop the surface of a right circular cone of 50 mm base diameter and axis 60 mm long. (14)**

**Q.6 Draw the isometric projection of solid from its two views given below: (14)**



**Q.1 A line AB, 65 mm long makes angle of 45° with HP and Its end A is 10 mm above the HP and 15 mm in front of VP. Draw the top view and front view of the line AB. (14)**

**Q.2 Draw the projections of a rhombus having diagonals 100 mm and 80 mm. (14)**

mm and 40 mm long. The bigger diagonal is inclined at 30

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to the H.P. with one of the end point in H.P. and smaller diagonal parallel to both planes (14)

Q.3 Draw the projections of a regular hexagonal prism, side of the base 25 mm and axis 45mm long, is resting on one of the corners of its base in such a way that the axis make an angle of 45

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with H.P. (14)

Q.4 A hexagonal pyramid of height 50 mm and base side 25 mm, is resting on its base on the horizontal plane with an edge of the base inclined at 60

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to V.P. It is cut by a cutting plane inclined at 60

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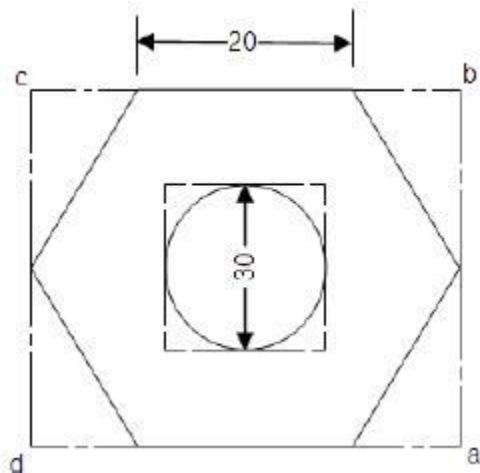
to H.P. and passes 30 mm above the base along the axis. Draw the front view, sectional top view and true shape of the cut surface of the pyramid. (14)

**Q.5 Develop the surface of a pentagonal pyramid of 25 mm side and axis 60 mm height(14)**

**Q.6 Draw**

**the isometric projection of solid from its top views given below ( Assume height as 50 mm ): (14)**

**Q.7 Viva - Voce (14)**



**.Q.1 A line 50 mm long makes angle of 30  
oooo**

**with HP and lying in a plane, which makes an angle  
45  
oooo**

**with VP and is perpendicular to HP. It's end A is 10  
mm above the HP and 20mm in front of VP. Draw**

the projections of AB and determine its true inclination with the VP. (14)

Q.2 Draw the projections of a pentagonal plane, side 25 mm, resting in the H.P. on one of its edges. The plane of pentagon is inclined at 45°  
to the HP. (14)

Q.3 Draw the projections of a regular pentagonal prism, side of the base 30 mm and 90 mm long, is resting on one of the base edges on horizontal plane and face inclined 45°  
to V.P. (14)

Q.4 A hexagonal pyramid of height 65 mm and base side 25 mm, is resting on its base on the horizontal plane with one of its base sides parallel to the V.P. It is cut by a cutting plane inclined at 60°  
to H.P. and passes 40 mm above the base along the axis. Draw the front view, sectional top view

and true shape of the cut surface of the pyramid.(14)

Q.5 Develop the surface of a hexagonal pyramid of 50 mm side and axis 60 mm height.(14)

Q.6 Draw the isometric projection of solid from its two views given below: (14)

Q.7 Viva - Voce (14)