**ME 111 Engineering Drawing July- Nov 2017**

**Lab-8 Development of Surfaces Monday Batch 50 marks**

1. Draw the development of the lateral surface of the lower portion of a cylinder of diameter 60 mm and 80 mm long when sectioned by a plane inclined at 50° to HP and perpendicular to VP and bisecting the axis. [15 marks]
2. Draw the development of the complete surface of a rectangular pyramid of base 30 mm X 50 mm and height 70 mm. [10 marks]
3. Draw the development of the complete surface of a tetrahedron of side 30 mm. [10 marks]
4. A hexagonal pyramid of base 30 mm and height 70 mm stands on its base on HP with an edge of base perpendicular to VP. A square hole of 15 mm side is cut through it such that the axis of the hole is perpendicular to VP and intersects the axis of the pyramid 20 mm above the base. The side faces of the hole are equally inclined to HP. Develop the lateral surface of the pyramid. [15 marks]

**ME 111 Engineering Drawing July- Nov 2017**

**Lab-8 Development of Surfaces Tuesday Batch 50 marks**

1. Draw the development of the lateral surface of the lower portion of a cylinder of diameter 60 mm and 80 mm long when sectioned by a plane inclined at 50° to HP and perpendicular to VP and bisecting the axis. [15 marks]
2. Draw the development of the complete surface of a rectangular pyramid of base 30 mm X 50 mm and height 70 mm. [10 marks]
3. Draw the development of the complete surface of a hexahedron of side 50 mm. [10 marks]
4. A square pyramid, base edge 40 mm and height 70 mm stands on its base on HP such that two of its base edges are equally inclined to VP. A through circular hole of 16 mm diameter is drilled in the pyramid such that the axis of the hole is perpendicular to VP and bisects the axis of the pyramid. Develop lateral surface of the pyramid. [15 marks]

**ME 111 Engineering Drawing July- Nov 2017**

**Lab-8 Development of Surfaces Wednesday Batch 50 marks**

1. Draw the development of the lateral surface of the lower portion of a cylinder of diameter 60 mm and 80 mm long when sectioned by a plane inclined at 50° to HP and perpendicular to VP and bisecting the axis. [15 marks]
2. Draw the development of the complete surface of a rectangular pyramid of base 30 mm X 50 mm and height 70 mm. [10 marks]
3. Draw the development of the complete surface of a rectangular prism of base 25 mm X 40 mm and height 60 mm. [10 marks]
4. A pentagonal prism, base edge 40 mm and height 80 mm stands on its base on HP such that one of its base edges is parallel to HP and nearer to the vertical plane. Through the center of the rectangular face containing the base edge, a hole of 50 mm diameter is drilled through such that hole axis is horizontal. Develop lateral surface. [15 marks]

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**Lab-8 Development of Surfaces Thursday Batch 50 marks**

1. Draw the development of the lateral surface of the lower portion of a cylinder of diameter 60 mm and 80 mm long when sectioned by a plane inclined at 50° to HP and perpendicular to VP and bisecting the axis. [10 marks]
2. Draw the development of the complete surface of a rectangular pyramid of base 30 mm X 50 mm and height 70 mm. [10 marks]
3. Draw the development of the lateral surface of the lower portion of the hexagonal pyramid, base 30 mm and 70 mm height, which stands on its base on HP such that one of its base edges is parallel to HP and nearer to the vertical plane. It is sectioned by a plane inclined at 60° to HP and perpendicular to VP and passing through a point on the axis, 40 mm from the base. [15 marks]
4. A pentagonal pyramid, base 30 mm and height 70 mm, rests on its base on HP such that one of the base edges is perpendicular to HP. A section plane perpendicular to HP and inclined at 25° to VP cuts the pyramid at a distance of 15 mm from the axis such that it should not cut the perpendicular base edge and removed minimum volume. Draw the development of the lateral surface of the remaining portion of the pyramid. [15 marks]

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**Lab-8 Development of Surfaces Friday Batch 50 marks**

1. Draw the development of the lateral surface of the lower portion of a cylinder of diameter 60 mm and 80 mm long when sectioned by a plane inclined at 50° to HP and perpendicular to VP and bisecting the axis. [10 marks]
2. Draw the development of the complete surface of a rectangular pyramid of base 30 mm X 50 mm and height 70 mm. [10 marks]
3. A square pyramid of 40 mm base edge and altitude 70 mm lying on its base on HP with one of its sides is parallel to VP. It is sectioned by a plane normal to both HP and VP act a distance of 10 mm to the left of the axis of the pyramid. [15 marks]
4. Draw the development of the lateral surface of the lower portion of the cone of base 40 mm diameter and 60 mm height resting on its base on HP when sectioned by a plane inclined at 45° to HP and perpendicular to VP and bisecting the axis. [15 marks]