	Max Marks: 70
Time: 3 Hours	
(Common to AE, ME, CE)	
ENGINEERING DRAWING	
Regulation: R16	
Four Year B.Tech I Semester End Examinations, December -	- 2016
MODEL QUESTION PAPER – II	
(Autonomous)	
INSTITUTE OF AERONAUTICAL ENGINE	ERING
	-
Hall Ticket No Questi	on Paper Code: AME001

Answer any ONE question from each Unit All questions carry equal marks All parts of the question must be answered in one place only

$\mathbf{Unit} - \mathbf{I}$

- 1. (a) A room of $1728m^3$ volume is shown by a cube of 4 cm side. Find the RF and construct a scale to measure up to 50 m. Also indicate a distance of 37.6 m on the scale. [7M]
 - (b) Draw a parabola when span is 80 mm and rise is 30 mm using tangent method. [7M]
- 2. A Circle of 50 mm diameter rolls on a horizontal line for a half revolution and then on a vertical line for another half revolution. Draw the curve traced out by point P on the circumference of circle. [14M]

$\mathbf{Unit}-\mathbf{II}$

- 3. A 70 mm long line AB is inclined at 45^{0} to VP. Its end A lies on HP and 15 mm in front of VP. The top view of line measures 60 mm. Draw its projection and determine its inclination with HP. Also locate the traces. 14M
- 4. A circular lamina of 80 mm diameter rests above HP. on a point A on its circumference. If its plane is inclined at 45^0 to HP. and the top view of the diameter AC makes an angle of 40^0 with xy line, draw the projections of the lamina. [14M]

$\mathbf{Unit}-\mathbf{III}$

- 5. A hexagonal pyramid of 30 mm side of base and 45 mm length of axis is resting on one of its triangular faces on HP. Draw the projections of the pyramid when its edge inclined at 60⁰ to the VP. [14M]
- 6. A pentagonal pyramid, base 25 mm side and axis 50 mm long has one of its triangular faces in the VP and the edge of the base contained by that face makes an angle of 30^{0} with the HP. Draw its projection. [14M]

$\mathbf{Unit}-\mathbf{IV}$

7. A pentagonal prism, having a base with a 30 mm side and a 70 mm long axis, is resting on its base on HP. such that one of the rectangular faces is parallel to the VP. It is cut by a plane which is inclined at 45^{0} with the reference line and passes through the mid-point of the axis. Draw the development of the lateral surface of the truncated prism. [14M]

8. A hexagonal prism having base with a 30 mm side and a 70 mm long axis is resting on its base on the HP. with a side of base parallel to the VP. It is cut by by a plane making an angle of 45^{0} with the HP and bisecting the axis. Draw its isometric projection. [14M]

$\mathbf{Unit}-\mathbf{V}$

9. Draw the elevation, plan and view from the right for the casting shown in Figure 1. [14M]



Figure 1

10. Draw the front view, top view and left side view of the casting shown in Figure 2. [14M]



Figure 2