

MANGALORE INSTITUTE OF TECHNOLOGY & ENGINEERING

(A Unit of Rajalaxmi Education Trust®, Mangalore)

Autonomous Institute affiliated to VTU, Belagavi, Approved by AICTE, New Delhi

Accredited by NAAC with A+ Grade & ISO 9001:2015 Certified Institution



First/Second Semester B.E Degree Examination

Engineering Graphics

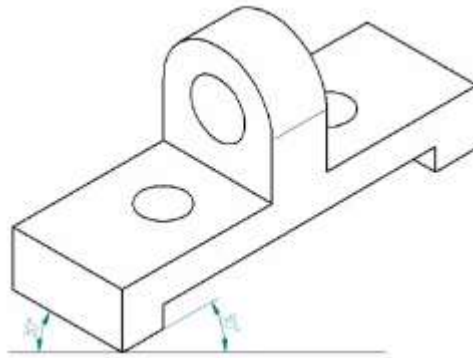
Time: 3 Hours (180 Minutes)

Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.

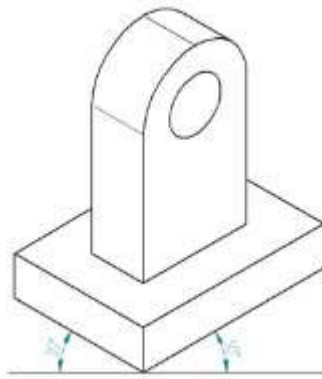
2. M: Marks, L: RBT (Revised Bloom's Taxonomy) level, C: Course outcomes.

Module -1			M	L	C
Q1		A pentagonal lamina of sides 25 mm is having a side both on HP and VP. The surface of the lamina inclined at an angle of 60° with HP. Draw the top and front views of the lamina	15	L3	CO1
OR					
Q2		A square plate of 30 mm sides rests on HP such that one of the diagonals is inclined at 30° to HP and 45° to VP. Draw its projections.	15	L3	CO1
Module- 2					
Q3		An equilateral triangular prism 20 mm side of base and 50 mm long rests with one of its shorter edges on HP such that the rectangular face containing the edge on which the prism rests is inclined at 30° to HP. The edge on which the prism rests is inclined at 60° to the VP. Draw its projections.	30	L3	CO1
OR					
Q4		A regular hexagonal pyramid with the sides of its base 30 mm and height 80 mm rests on an edge of the base on HP. The base is tilted until its apex is 50 mm above the XY line. Draw the projections of the pyramid when the edge, on which it rests, is parallel to V.P.	30	L3	CO1
Module - 3					
Q5		A square prism of base side 40 mm, height 50 mm is placed centrally on a rectangular slab of 100 mm X 60 mm and thickness 20 mm. Draw the isometric projection of the combination.	20	L3	CO2
OR					
Q6		The frustum of a cone of base diameter 40 mm, top end diameter 20 mm and height 40 mm rests centrally over a cube of side 50 mm. Draw the isometric projections of the combinations of solids.	20	L3	CO2
Module - 4					
Q7		Draw the orthographic views of the following machine component.	15	L3	CO3



OR

Draw the orthographic views of the following machine component.



15 L3 CO3

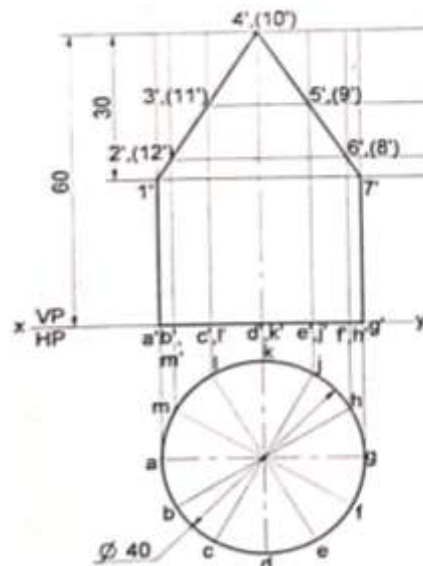
Module - 5

A triangular pyramid of base sides 30 mm and axis length 50 mm is resting on HP with its one of the base edge perpendicular to VP. Draw the development of the truncated pyramid when its upper portion is removed along a 30° plane which passes through mid of the axis of the pyramid.

20 L3 CO4

OR

Develop the lateral surface of the cylinder of 40 mm diameter and height 60 mm cut in the following way.



20 L3 CO4
