University Institute of Engineering & Technology

(Recognised Under Section 2(f) and 12B of UGC)

Kurukshetra University, Kurukshetra

Roll No. -

THEORY EXAMINATION – MAY 2019	
B.TECH - ME	SEMESTER - II

TIME – 3 Hrs.

M.M. - 75

PAPER- ME-105

SUBJECT – Engineering Drawing and Graphics (Reappear)

Note: All questions in Part-A and Part-B are compulsory. Attempt any four questions from Part-C selecting at least one from each unit.

PART-A (15 Marks)

Q. No. – 1 Answer the following questions carrying one mark each. 15x1=15

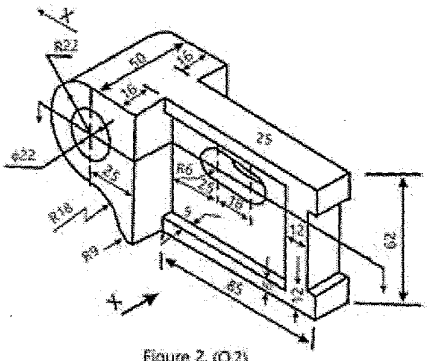
(i)	What is true length of line?
(ii)	Define traces of a line.
(iii)	List the three equipment used for engineering drawing.
(iv)	Define change of position method.
(v)	Explain plane.
(vi)	What is importance of sectional view?
(vii)	How elevation differs from plan?
(viii)	Define edge of a solid.
(ix)	The base of a pyramid is resting on HP and its axis perpendicular to----------.
(x)	What do you understand by axis?
(xi)	Discuss the reasons to draw orthographic views.
(xii)	Draw the symbol of third angle projection
(xiii)	How trim is different from chamfer?
(xiv)	What is fillet command?
(xv)	Write any three shape of a solid.

PART-B (20 Marks)

	UNIT-I	
2	Explain Why second and fourth angle projection is not used in industries.	5
	UNIT-II	
3	Differentiate between the polyhedral and the solids of revolution.	5

	UNIT-III	
4	Explain the need and application of development of surfaces.	5
	UNIT-IV	
5	Draw the any two view of hexagonal nut.	5

PART-C (40 Marks)

	UNIT-I	
6	Draw the projections of following Points on a common reference line, taking a gap of 30 mm between two consecutive vertical projectors: i) Point A 45 mm above H.P. and 42 mm in front of V.P. ii) Point B 30 mm above H.P. and 25 mm behind V.P. iii) Point C 35 mm HP and in V.P. iv) Point D 50 mm below HP and 30 mm behind V.P.	10
7	The midpoint of a straight-line AB 90 mm long is 60 mm above HP and 50 mm in front of VP. It is inclined at 30° to HP and 45°to VP. Draw its projections.	10
	UNIT-II	
8	Draw the projection of a circular lamina which has 50 mm as diameter and its plane vertical and inclined at 45° to the VP. Its centre is 40 mm above HP and 60 mm in front of VP. Also show its traces.	10
9	A cone of base diameter 50 mm and axis length 60 mm is resting on VP on a point on the circumference of the base with its axis inclined at 40° to VP and parallel to HP. Draw its projections.	10
	UNIT-III	
10	A pentagonal pyramid of base side 30 mm and axis length 50 mm lies on one of its triangular faces on HP and with its axis parallel to VP. It is cut by a horizontal section plane whose VT passes through the centre of the base on the pyramid. Draw the sectional plan.	10
11	A hexagonal prism of base side 30 mm and axis length 65 mm is resting on HP on its base with two of its vertical faces perpendicular to VP. It is cut by a plane inclined at 50° to HP and perpendicular to VP and meets the axis of prism at a distance 10 mm from the top end. Draw the development of lateral surface of the prism.	10
	UNIT-IV	
12	Draw the front view, top view and right side view of the following object:  Figure 2. (Q.2)	10
13	Describe the use of following commands in AUTOCAD using suitable examples: a) Circle b) Ellipse c) Extend d) Offset e) Arc	10