

JK LAKSHMIPAT UNIVERSITY, JAIPUR

INSTITUTE OF ENGINEERING AND TECHNOLOGY

End Term Examination (Regular/ Backlog), Nov.- Dec. 2017
B. Tech in CE+CHE+ME+CSE(IS+MC+CC) Engineering, Semester Ist

Roll No.....

COURSE CODE: CE-102

Time: 4 hours

Max. Marks: 100

COURSE TITLE: Engineering Drawing

Instructions to students:

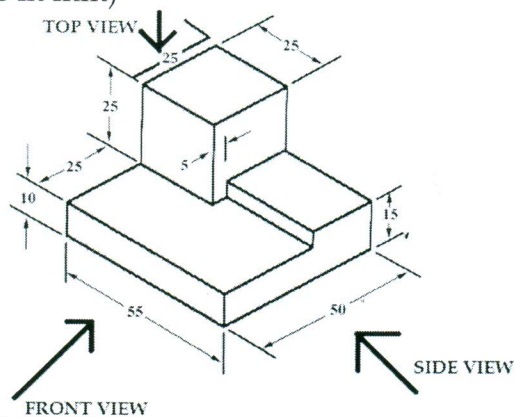
1. Do not write anything other than your roll number on question paper.
 2. Assume suitable data wherever required and mention it clearly.
 3. Writing appropriate units, nomenclature, and drawing neat sketches/schematics/ flow chart wherever, required are an integral part of the answer.
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| Q.1A Objective type multiple choice questions (10 questions @ 1 mark) | 10 |
| i. Which of the following present reducing scale?
(a)1:1 (b)1:2 (c)2:1 (d)10:1 | |
| ii. In first angle projection method, object is assumed to be placed in:
(a)first quadrant (b)second quadrant
(c)third quadrant (d) fourth quadrant | |
| iii. The Length: Width in case of an arrow head is:
(a)1:1 (b)2:1 (c)3:1 (d)4:1 | |
| iv. 'Representative fraction' (RF) is defined as:
(a)Length of an object in the drawing / Actual length of the object
(b)Length of an object in the drawing / Isometric length of the object
(c)Actual length of the object / Length of an object in the drawing
(d)Isometric length of the object / Length of an object in the drawing | |
| v. A point 'P' is above Horizontal Plane (HP) and in front of Vertical Plane (VP).
The point is in:
(a)First quadrant (b)Second quadrant
(c)Third quadrant (d)Fourth quadrant | |
| vi. When the line is parallel to both Horizontal Plane (HP) and Vertical Plane (VP),
we can get its true length in:
(a)Front view (b)Top view
(c)Both 'a' and 'b' (d)Side view | |
| viii. The top view of a right cylinder resting on HP on its base rim is:
(a)Ellipse (b)Circle
(c)Rectangle (d)Square | |
| ix. The isometric projection of a circle is a:
(a)Circle (b)Ellipse
(c)Hyperbola (d)Parabola | |
| x. The profile plane is the plane upon which the side view is projected:
(i)True
(ii)False | |

Q.2	Short answer type questions (4 questions @ 2.5 marks)	10
i.	Give the name of drawing instruments. (any 5)	
ii.	Write the particulars of Title block.	
iii.	What is Orthographic Projection. Explain first angle projection method. With neat and clean diagram.	
iv.	Draw:	
	(i) A line perpendicular to HP and parallel to VP.	
	(ii) A line parallel to HP and parallel to VP.	
Q.3A	Explain with neat and clean diagram:	10
	(i) Aligned system	
	(ii) Unidirectional system	
Q.4A	Explain Scale. Give the name of different types of scale.	05
Q.4B	Draw a plain scale of 1:2 to show centimeters and long enough to measure up to 4 decimeters.	05
Q.5A	Draw an isosceles triangle of 100 mm long base and 110 mm long altitude. Inscribe a parabola in it by method of tangents . (no need to write Steps of construction)	10
Q.6A	Draw ellipse by Rectangle method. Take major axis 100 mm and minor axis 70 mm long. (no need to write Steps of construction)	05
Q.6B	Construct a diagonal scale of 3:200 showing meters, decimeters and centimeters and to measure up to 6 meters.	05
	OR	
Q.6B	Construct a diagonal scale of R.F. = 1/4000 to show meters and long enough to measure up to 500 meters.	05
Q.7A	Line AB is 75 mm long and it is 30° & 40° Inclined to HP & VP respectively. End A is 12mm above Hp and 10 mm in front of VP. Draw projections. Line is in 1 st quadrant. (no need to write Steps of construction)	05
Q.7B	A regular pentagon of 30 mm sides is resting on HP on one of its sides while it's opposite vertex (corner) is 30 mm above HP. Draw projections when side in HP is 30° inclined to VP.	05
	OR	
Q.7B	A circle of 50 mm diameter is resting on Hp on end A of its diameter AC which is 30° inclined to Hp while it's TV is 45° inclined to VP. Draw its projections	05
Q.8A	A square prism 30 mm base side and 70mm axis is completely penetrated by another square prism of 25 mm sides and 70 mm axis, horizontally. Both axes Intersects & bisect each other. All faces of prisms are equally inclined to VP. Draw projections showing curves of intersections.	10

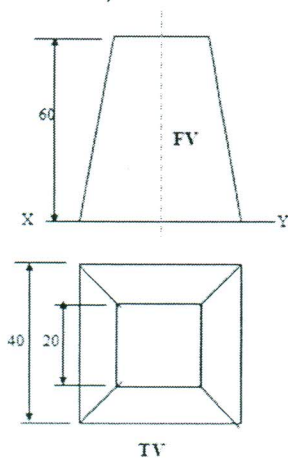
Q.9A Draw: (i)Top View (ii)Front View (iii)Side View
(All dimensions are in mm)

10



Q.9B Draw Isometric view of Given object. Here TV=Top View
(All dimensions are in mm) FV=Front view

10



OR

Q.9B Draw Isometric view of Given object. Here TV=Top View
(All dimensions are in mm) FV=Front view

10

