Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER– 1st / 2nd EXAMINATION (NEW SYLLABUS) -

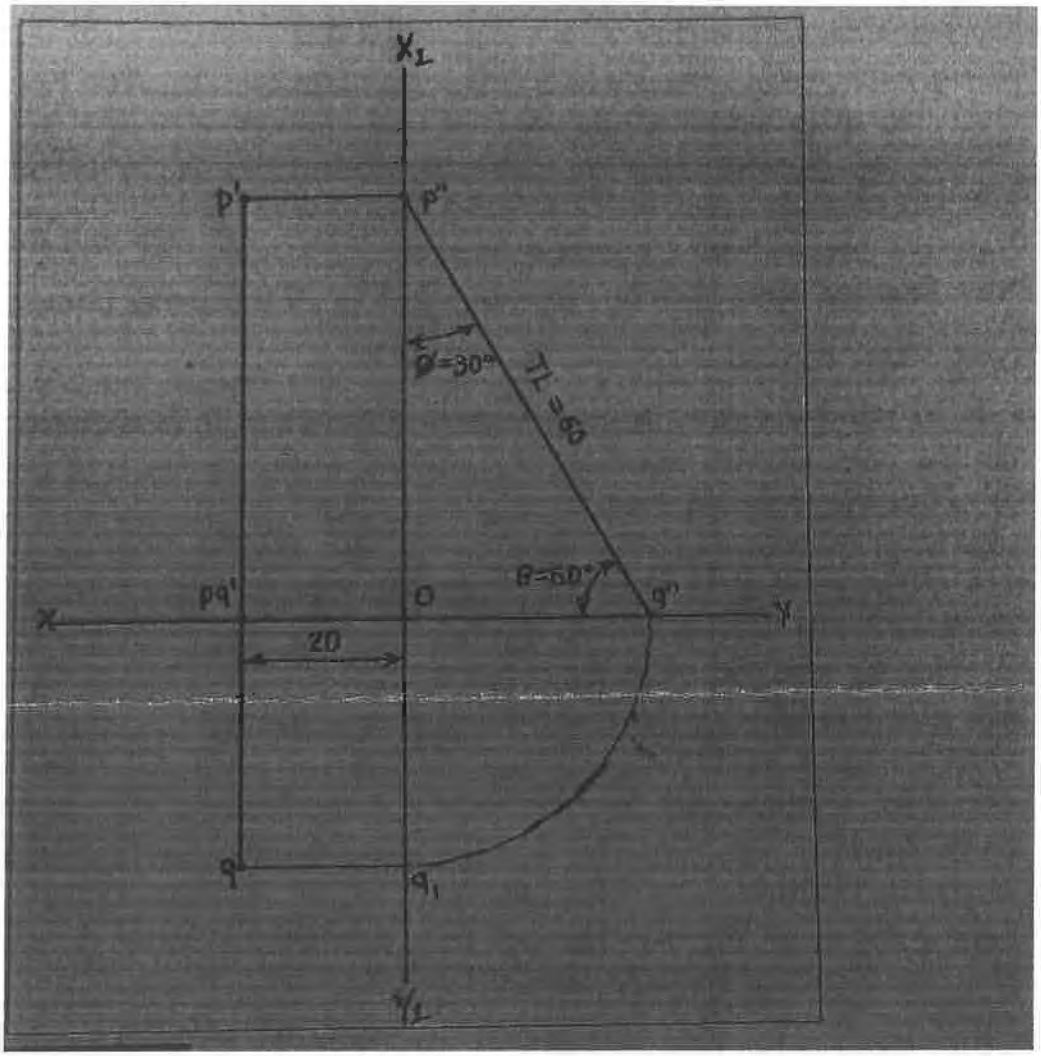
Subject Code: 2110013 **Date:** 01/02/2017

Subject Name: Engineering Graphics

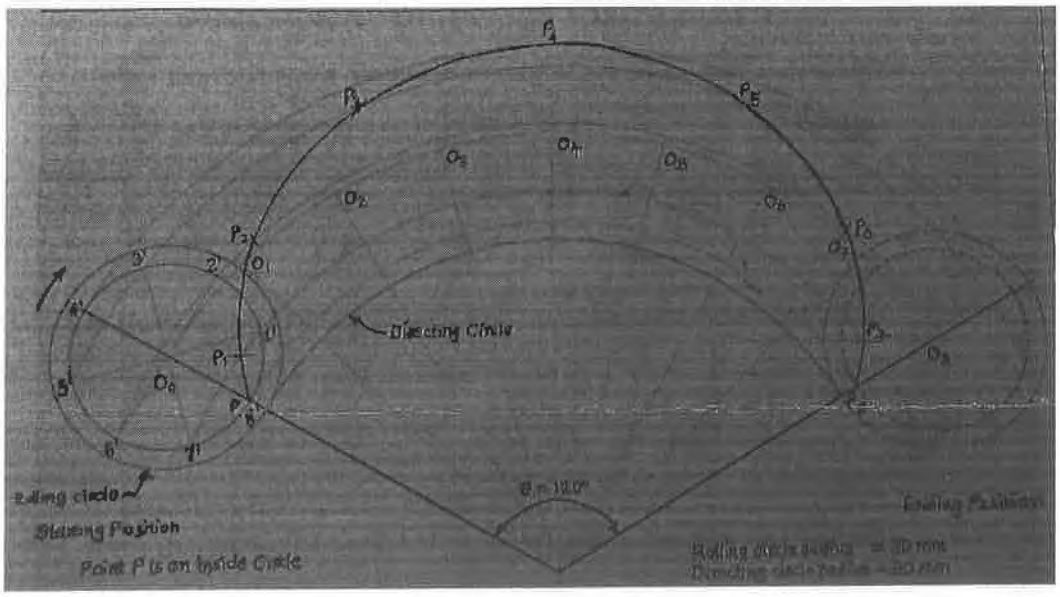
Time: 3 HRS **Total Marks: 70**

PAPER SOLUTION

			Mark
Q.1		**Objective Question**	
	(a)	**Select the correct options for the following**	**07**
	1.	d) Smooth freeform curve	**01**
	2.	b) Reduced Scale	**01**
	3.	c) Archimedean spiral	**01**
	4.	c) In front of V.P. and below H.P.	**01**
	5.	b) 8.15 mm	**01**
	6.	d) Circle	
	7.	b) 90 °	
	(b)	Answer the following	**07**
	1.	**Ellipse**	**01**
	2.	Because top view/plan and front view/elevation orthographic projections overlaps each other.	**01**
	3.	It is the ratio of length of drawing to actual length of object.	**01**
	4.	0.815R	**01**
	5.	Circle	**01**
	6.	The Isometric drawing is drawn with without isometric scale and Isometric projection is drawn with isometric scale.	**01**
	7.	Top view/plan	**01**
Q.2	**(a)**		**03**

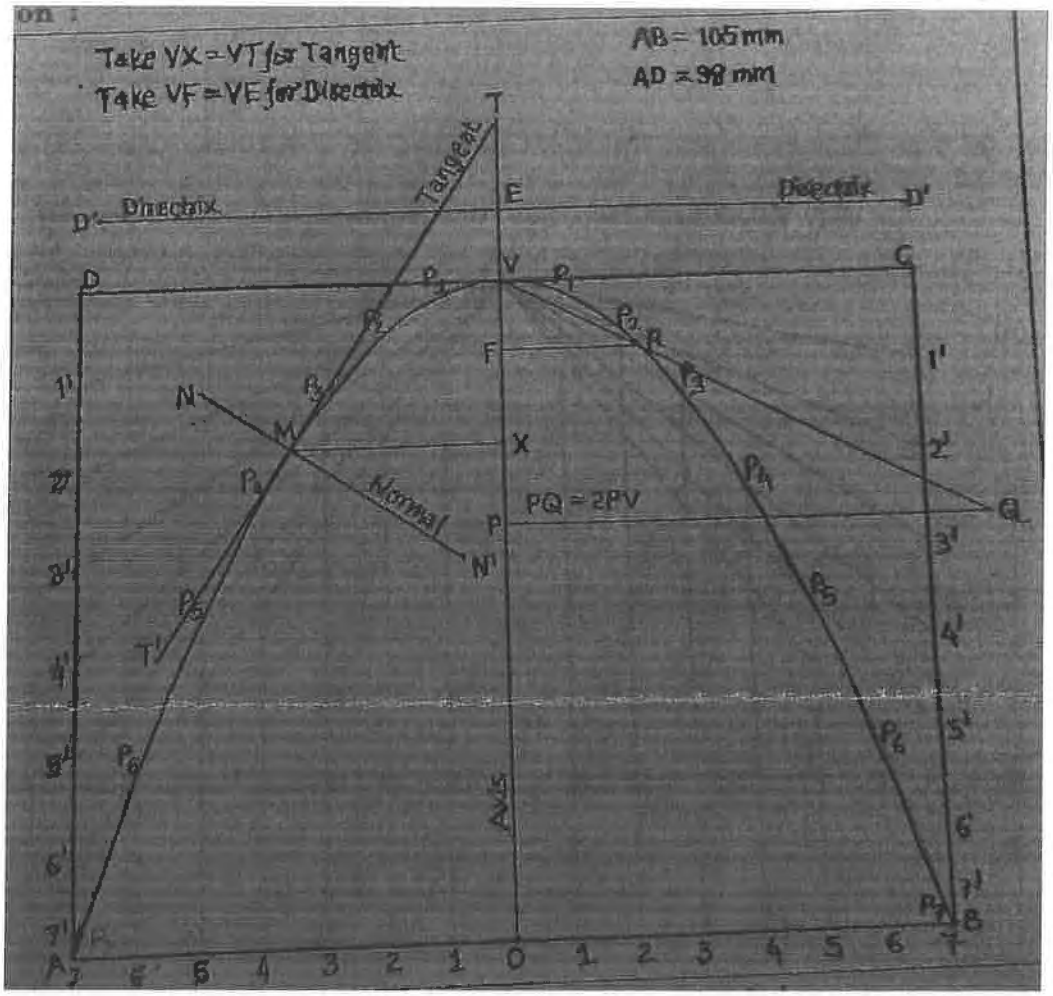


(c) 07

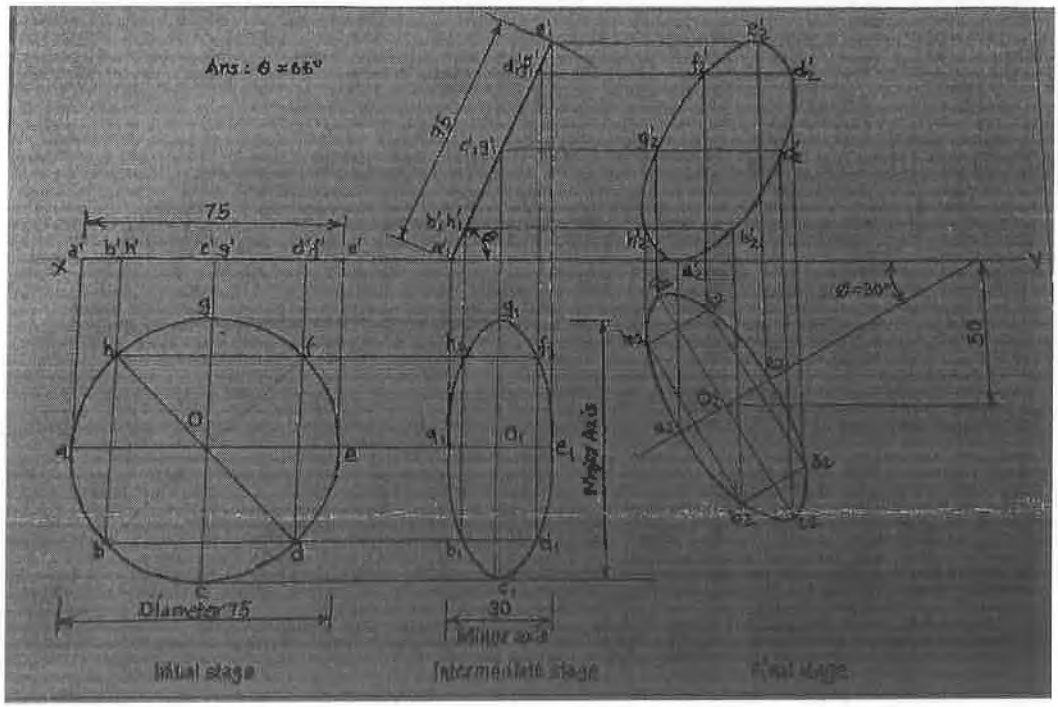


Q.3 (a) SELF EXPLANATORY 03

(b) 04


Take VX = VT for Tangent
Take VF = VE for Directrix
AB = 105 mm
AD = 98 mm
Tangent
Directrix
Directrix
Normal
PQ = 2PV
Axis

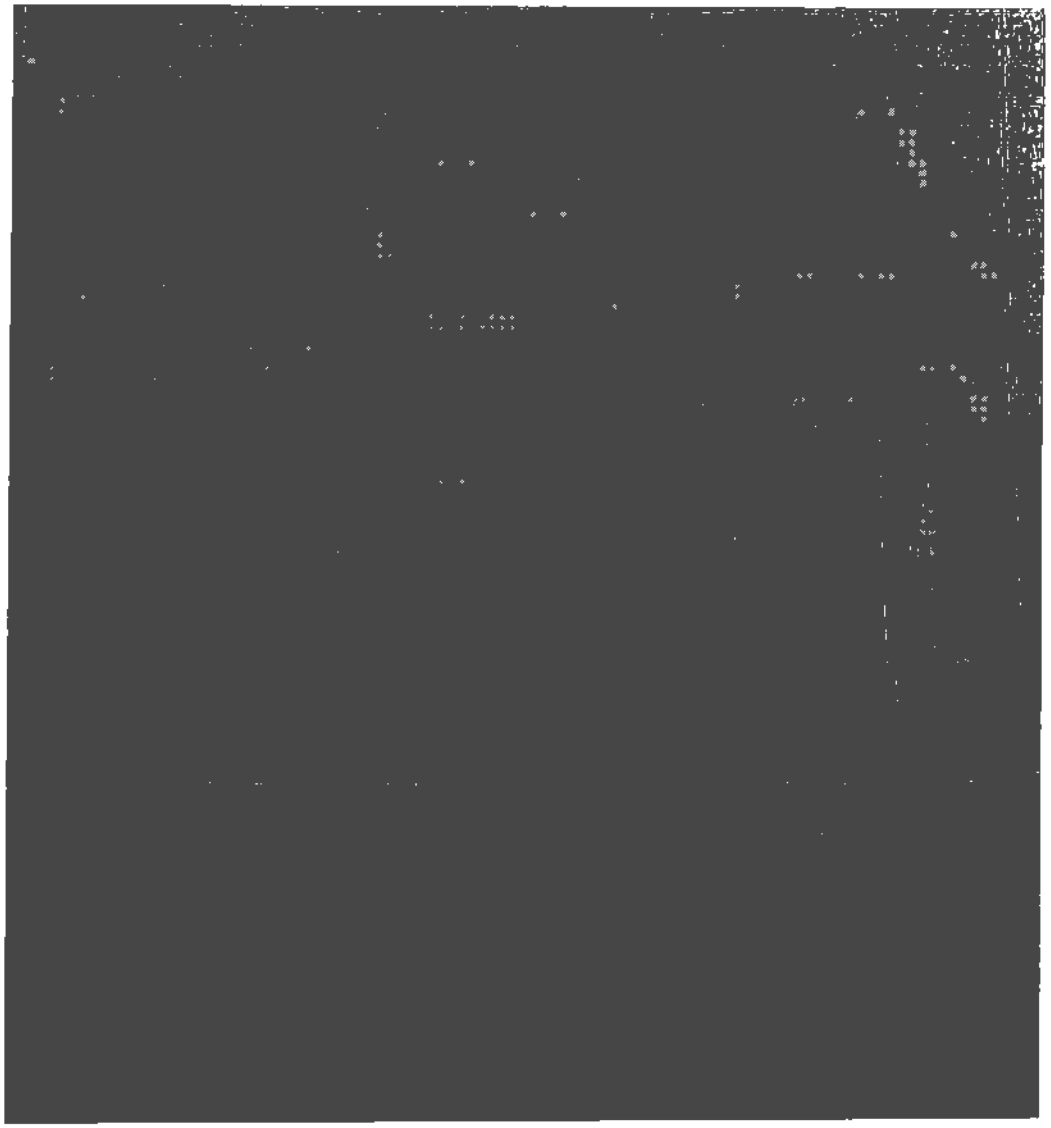
(c) 07


Ans : θ = 66°
75
Diameter 75
30
Minor axis
Major Axis
Initial stage
Intermediate stage
Final stage

Q.4 (a)

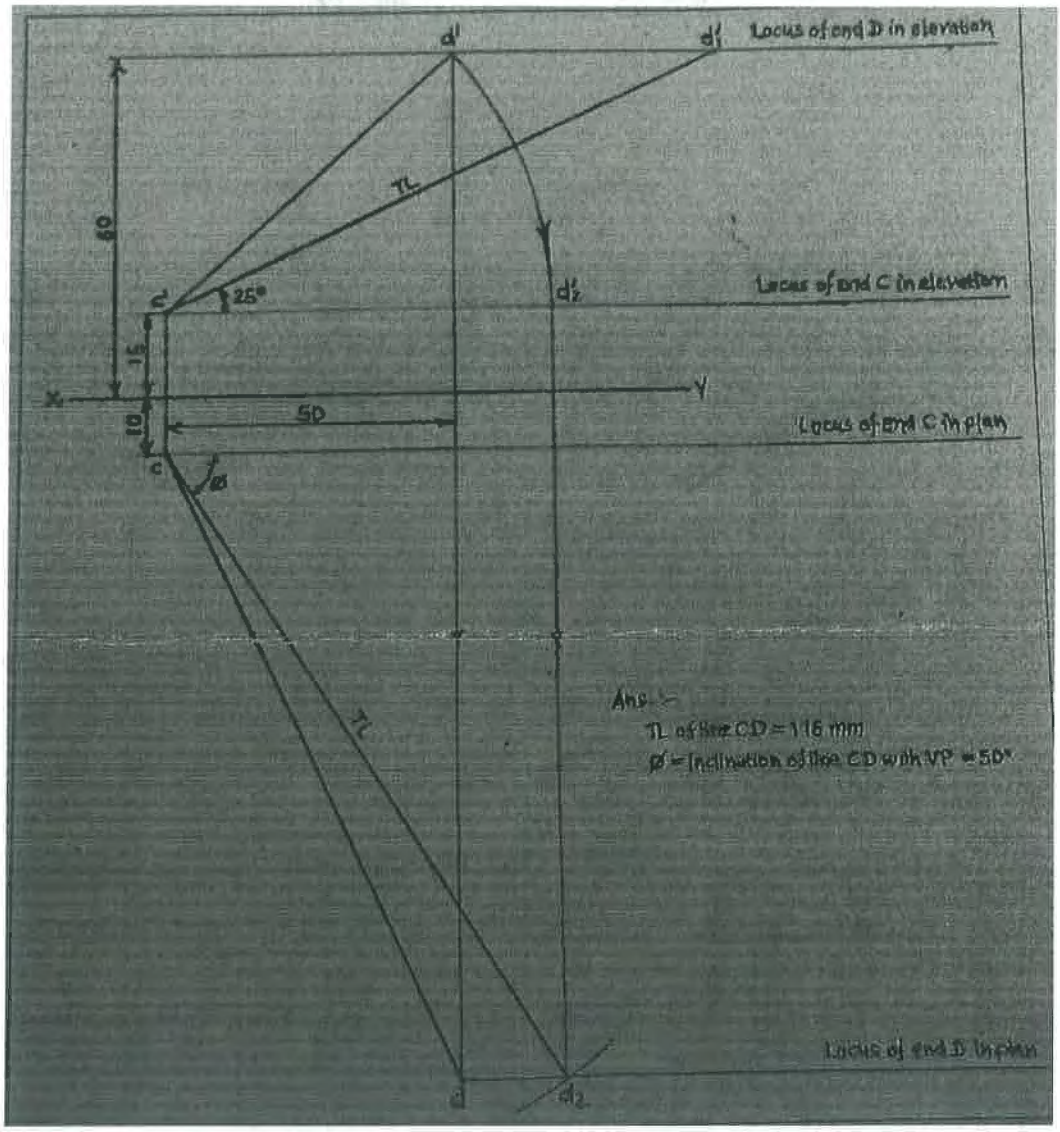
07

(B)

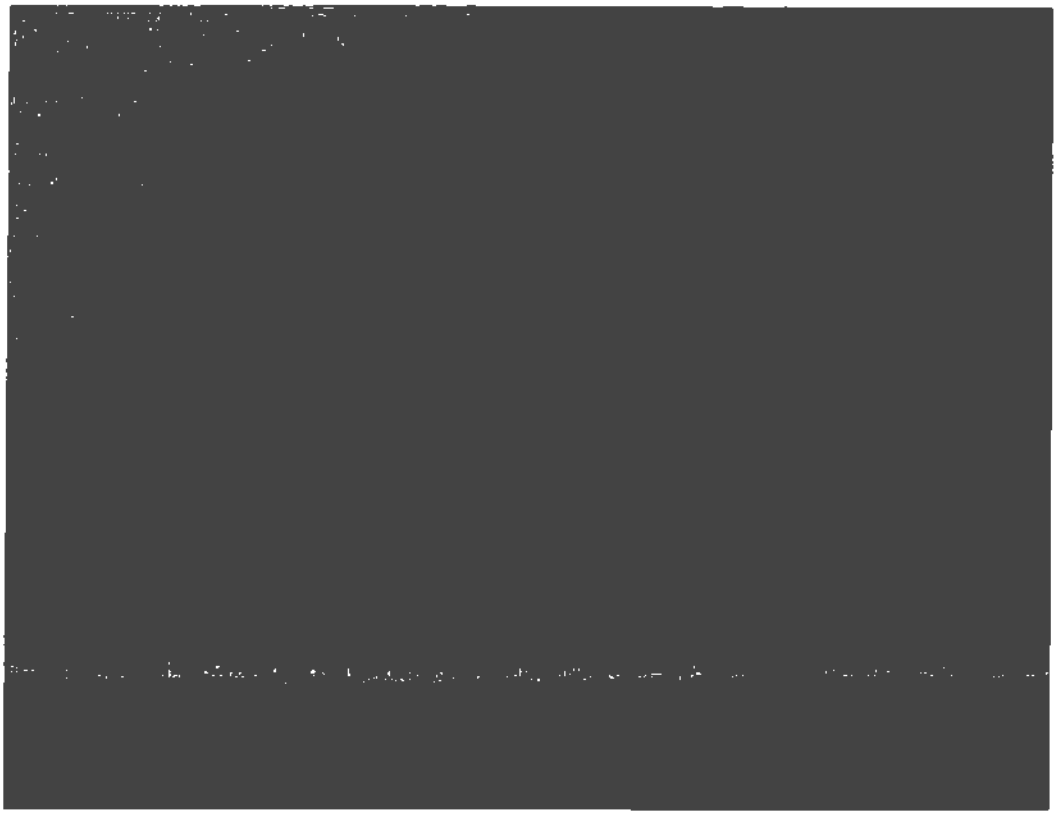


07

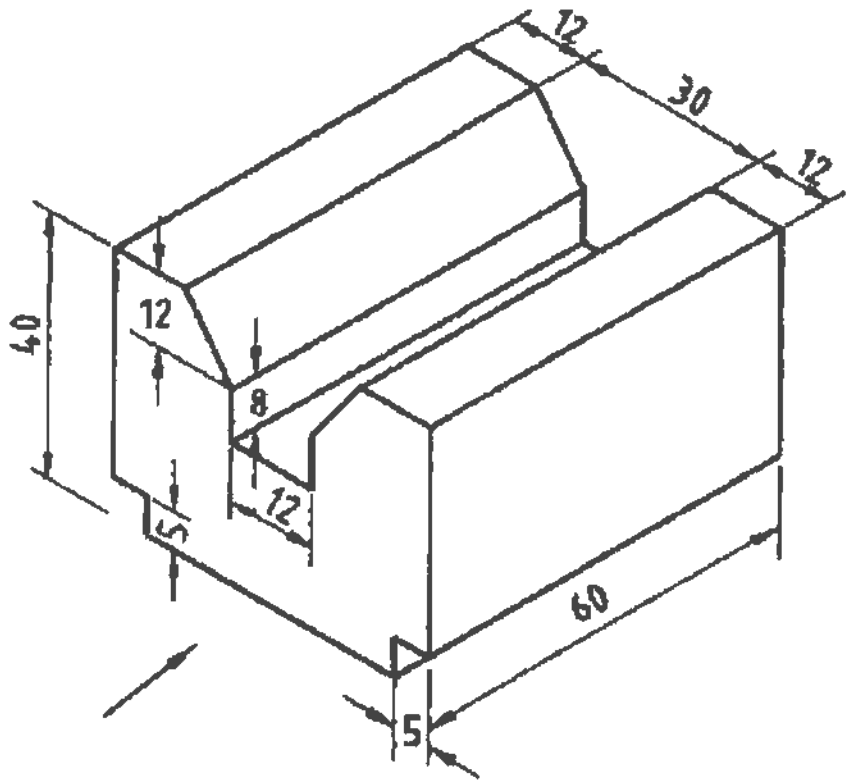
Q.5 (a) **07**


d'
d'1
Locus of end D in elevation
TL
60
c'
25°
d'2
Locus of end C in elevation
15
X
Y
10
50
Locus of end C in plan
c
ø
TL
Ans :-
TL of line CD = 116 mm
ø = Inclination of line CD with VP = 50°
Locus of end D in plan
d
d2

(b) 07

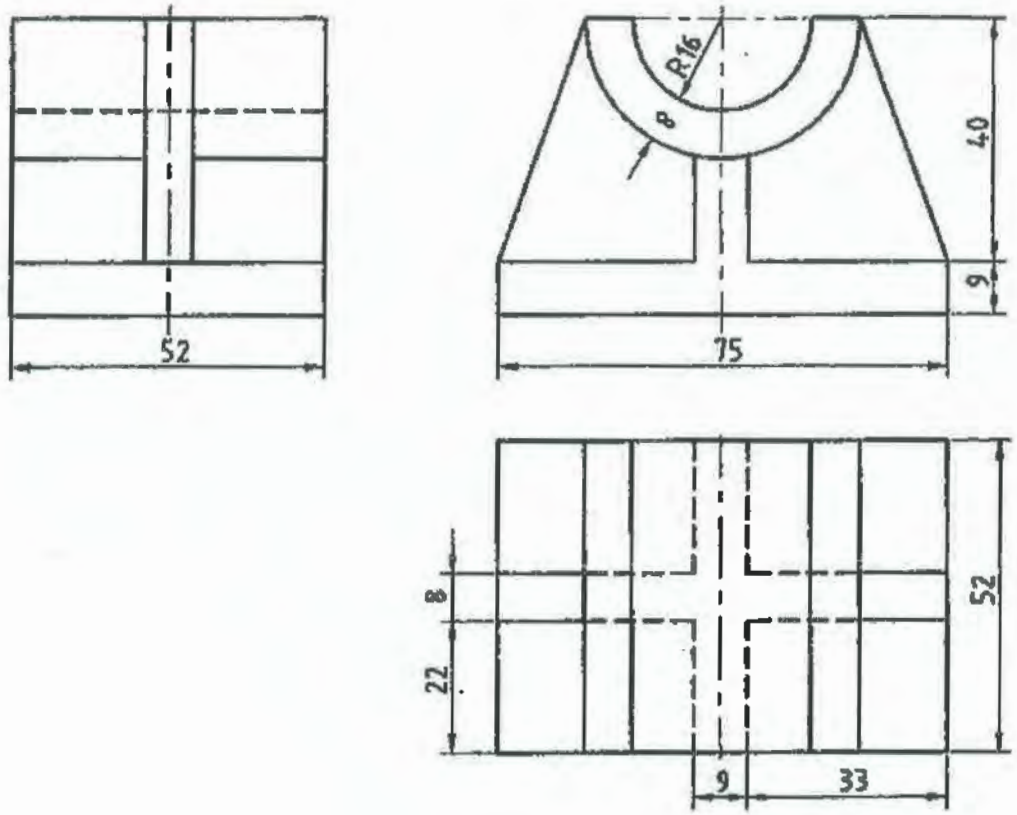


Q.6 (a) 07



(b) SELF EXPLANATORY **04**
03

Q.7 **(a)** **07**



(b) SELF EXPLANATORY **04**
03