

Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER- III (New) EXAMINATION - WINTER 2019

Subject Code: 3132001	Date: 28/11/2019
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Subject Name: Industrial Drafting

Time: 02:30 PM TO 05:00 PM **Total Marks: 70**

Instructions:

1. Attempt all questions.

- 2. Make suitable assumptions wherever necessary.

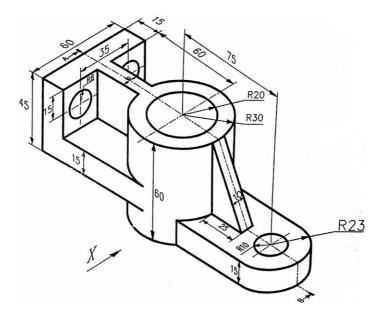
	3.	Figures to the right indicate full marks.		
			Marks	
Q.1	(a)	Draw a neat sketches of the convention of the following materials: (i) Wood (ii) glass (iii) concrete.	03	
	(b)	Distinguish clearly between aligned system and unidirectional system with the help of neat sketches.	04	
	(c)	Differentiate between Machine drawing and Production drawing.	07	
Q.2	(a)	Explain the need of sectional views. Explain any one of them with suitable example.	03	
	(b)	Differentiate between Permanent fasteners and Temporary fasteners.	04	
	(c)	A square prism 30 mm base sides 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.	07	
		OR		
	(c)	A vertical cone, base diameter 75 mm and axis 100 mm long, is completely penetrated by a cylinder of 45 mm diameter. The axis of the cylinder is parallel to HP and VP and intersects axis of the cone at a point 28 mm above the base. Draw projections showing curves of intersection.	07	
Q.3	(a)	Draw the conventional representation for the internal and external threads.	03	
Q.c	(b)	Draw any four types of Screw Threads.	04	
	(c)	Which are the types of Riveted joints? Explain all in detail.	07	
OR				
Q.3	(a)	What do you mean by fast and loose pulley?	03	
	(b)	What is woodruff key? Explain its application with diagram.	04	
	(c)	Enlist the various commands available in draw tool box of AUTO CAD.	07	
		Explain any two of them by giving suitable example.		
Q.4	(a)	What is a T-bolt and how is it used?	03	
	(b)	Differentiate between sunk key and saddle key with rough sketch.	04	
	(c)	Draw a neat sketch of knuckle joint.	07	
OR				
Q.4	(a)	Mention various forms of nuts.	03	
	(b)	Explain the use of rag foundation bolt with rough sketch,	04	
	(c)	Explain split-muff coupling with neat sketch.	07	
Q.5	(a)	Enlist various locking arrangements of nut.	03	
~	(b)	Explain the following terms: Tolerance, Limits, Deviation, Basic Size	04	
	(c)	Draw three views of a hexagonal headed bolt, 24 mm diameter and 100 mm	07	
	(-)	long, with a hexagonal nut and a washer.	÷ •	



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OR

Q.5	(a)	Define the following terms in context of screw threads: Flank, Lead and Pitch.	03
	(b)	What is surface roughness? How it is represented in engineering drawing.	04
	(c)	Figure shows the pictorial view of object. Draw the following views:	07
		(i) Sectional elevation take section along A-B (ii) RHSV (iii) Top plan	



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