Seat No.:		.: Enrolment No	Enrolment No	
		GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-V (OLD) - EXAMINATION - SUMMER 2017		
Su	ıbjec	t Code: 153403 Date: 01/05/20	Date: 01/05/2017	
Su	bjec	t Name: Foundry and Welding Technology		
Time: 02:30 PM to 05:00 PM Total			70	
Ins	tructi	ions:		
	1.	r · · · · · · · · · · · · · · · · · · ·		
		Make suitable assumptions wherever necessary.		
	3.	Figures to the right indicate full marks.		
Q.1	(a)	Name various materials used in making pattern. Discuss their merits and demerits.	07	
	(b)	Explain various types of patterns with neat sketch.	07	
		OR		
Q.2	(a)	Describe the process of sand preparation.	07	
	(b)	What is core? Explain the types of core and its purpose.	07	
		OR	0=	
	(b)	Explain the properties of Moulding sand.	07	
0.2	(-)	OR	07	
Q.3	(a) (b)	Explain in details: Centrifugal casting. Explain in details: Continuous casting.	07 07	
	(D)	OR	U/	
Q.3	(a)	Explain in details: Investment casting.	07	
	(b)	Explain in details: CO ₂ Moulding.	07	
	(,-)	OR		
Q.4	(a)	Explain in details Diffusion bonding.	07	
	(b)	Write short note: TIG and MIG	07	
		OR		
Q.4	(a)	Explain in details Thermit welding and Brazing welding.	07	
	(b)	Write short note: EBW, LBW	07	
		OR		
Q.5	(a)	Explain in details shielded gas arc welding [Both GMAW & GTAW] with neat sketch. Also, define merits, demerits & applications.	07	
	(b)	Explain with neat sketch different types of joints in welding.	07	

(a) Give detail classification of weld defects.

(b) Explain in details causes & remedies for casting defects.

Q.5

OR

07

07