Seat No.:	Enrolment No
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		GUJARAT TECHNOLOGICAL UNIVERSITY	
~		BE - SEMESTER-VIII (NEW) - EXAMINATION - SUMMER 2017	
	•	t Code: 2182112 Date: 06/05/20	17
	-	t Name: Industrial Corrosion, Testing, Prevention &	
		ol(Department Elective -III)	
		10:30 AM to 01:00 PM Total Marks:	70
ins	2	ons: . Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks.	
Q.1	(a) (b)	Discuss the importance of corrosion study based on economic aspects. List forms of corrosion. Discuss causes, mechanism and way of prevention of selective leaching.	07 07
Q.2	(a)	Enlist different methods of corrosion prevention. Explain cathodic protection method to combat corrosion.	07
	(b)	Riveted vessel having which type of corrosion? Discuss. Explain protection technique against it.	07
	(L .)	OR	07
	(b)	Comment on failures due to embitterment in boiler tubes. Describe the remedial measures.	07
Q.3	(a) (b)	Discuss corrosive environment in Power industries. Identify one corrosion related failures in petrochemical industries and suggest remedies.	07 07
		OR	
Q.3	(a) (b)	Describe the corrosion resistance materials, can be used in Power industries. Explain how material selection is helpful to combat corrosion in petrochemical industries.	07 07
Q.4	(a)	Identify one corrosion related failures in ship building industries and suggest remedies.	07
	(b)	Discuss corrosion failures in passenger vehicle driveshaft. Suggest remedies. OR	07
Q.4	(a) (b)	Describe corrosive environment in marine industries. Explain how material selection is helpful to combat corrosion in ship building industries.	07 07
Q.5	(a) (b)	Discuss corrosive environment in fertilizer industries. With the help of suitable examples explain how the water quality affects corrosion in industries.	07 07
		OR	
Q.5	(a)	Explain how material selection is helpful to combat corrosion in fertilizer industries.	07

(b) Identify corrosion related failures in a gas engine and suggest remedies.

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