Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE SEMESTER– 1st / 2nd (SPFU) EXAMINATION – WINTER 2016

Subject Code: BSC001 **Date:21/01/2017**

Subject Name: CHEMISTRY

Time:10:30 AM TO 1:30 PM **Total Marks: 70**

Instructions:

1. **Attempt any five questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Write a note on physical properties of metal.	**07**
	(b)	What do you understand by corrosion? Differentiate between dry and wet corrosion.	**07**
Q.2	**(a)**	What is hardness? Write the difference between: (i) Temporary and permanent hardness (ii) Hard and soft water	**07**
	(b)	Write a note on disadvantages of using hard water for domestic and industrial purpose.	**07**
Q.3	**(a)**	Giving suitable example explain, different type of polymerization processes.	**07**
	(b)	Give a detailed classification of fuel and mention of characteristics of good fuel.	**07**
Q.4	**(a)**	Write a short note on optical microscopy.	**07**
	(b)	What is fermentation? Explain industrial applications of fermentation.	**07**
Q.5	**(a)**	What is natural rubber? How it differs from synthetic rubber?	**07**
	(b)	Explain refining of petroleum giving a neat and well labeled diagram.	**07**
Q.6	**(a)**	State principles of “green Chemistry”.	**07**
	(b)	What are the characteristics of drinking water? How water is purified for drinking purpose?	**07**
Q.7	**(a)**	What are alloys? Give example of ferrous and non ferrous alloys and state the importance of alloys.	**07**
	(b)	Explain cold lime soda process of softening water.	**07**

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