Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V • EXAMINATION - WINTER 2013

Subject Code: 152805 Subject Name: Production and Application			de: 152805 Date: 09-12-2013 me: Production and Application of Colorants and Auxiliaries	Date: 09-12-2013	
Time	Time: 10.30 am - 01.00 pm Total Marks: 70				
Instru			amut all greations		
 Attempt all questions. Make suitable assumptions wherever necessary. 					
			gures to the right indicate full marks.		
Q.1		(a)	Give detail classification of dyes according to its application.	10	
		(b)	What are Intermediates? Give examples of different Intermediates.	04	
Q.2		(a)	Describe Dow and Cummene process in detail with chemical reactions.	07	
		(b)	What is reduction? Describe Bachamp reduction in detail. OR	07	
		(b)	Discuss coal tar distillation with neat sketch.	07	
Q.3		(a)	Describe Chlorination in detail with examples.	07	
		(b)	Describe Sulphonation in detail with examples.	07	
			OR		
Q.3		(a)	Discuss the concept of wetting, emulsification and detergency with examples of textile processes.	07	
		(b)	Explain nitration with suitable examples.	07	
Q.4			Discuss the chemistry, preparation, properties and applications of cationic surface active agents.	14	
			OR		
Q.4			Discuss the chemistry, preparation, properties and applications of nonionic surface active agents.	14	
Q.5			Write a short note on any TWO:	14	
		(a)	Sequestering Agents		
		(b)	Leveling Agents		
		(c)	Buffers		
		(d)	Discharging agents in printing		
