Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V • EXAMINATION - SUMMER 2013

Subj	ect C	ode: 152805 Date: 23-05-2013	3
_		ame: Production and Applications of Colorants and Auxiliaries 30 am - 01.00 pm Total Marks: 70	
Instru	ctions:	•	
	2. N	ttempt all questions. Iake suitable assumptions wherever necessary. igures to the right indicate full marks.	
Q.1	(a) (b)	Give the definition of colour. Discuss Wittos theory in detail. Explain Dow and Cumene process in detail with chemical reactions.	07 07
Q.2	(a) (b)	What is Oxidation? Explain in detail with suitable examples. Explain Bechamp Reduction in detail with necessary chemical reaction. OR	07 07
	(b)	Describe Coal-tar distillation process with neat diagram.	07
Q.3	(a) (b)	Discuss non-textile uses of the dye stuff in detail. Explain theory of surface active agent.	07 07
		OR	
Q.3	(a) (b)	Give detail classification of surface active agents in detail. Discuss about leveling agents & Dye fixing agents in detail.	07 07
Q.4	(a)	Define anionic surfactants. Discuss carboxylic acid base anionic surfactants in detail.	07
	(b)	Define cationic surfactants. Discuss in detail about fatty mines. OR	07
Q.4	(a)	Define non-ionic surfactants. Discuss in detail about ester linkage to soluilising group.	07
Q.4	(b)	Define cationic surfactants. Discuss anyone group of cationic surfactants in detail.	07
Q.5	(a) (b)	Discuss Sequestering agent & Anti foaming agents. Explain Wetting agents and dispersing agents. OR	07 07
Q.5	(a)	Discuss in detail about hygroscopic agents and Oxidizing & Reducing agents.	07
	(b)	Discuss about Carriers and discharging agents.	07
