Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE-III SEMESTER- V EXAMINATION - SUMMER-2015

Subject Code: 153608 Subject Name: Chemistry of Intermediates and Colorants III Time: 2.30PM-5.00PM Instructions: Total Marks:			
Q.1	(a) (b)	Explain Jablonksi Diagram Give the synthesis of Disperse Yellow 16 and Disperse Orange 13 with mechanism.	07 07
Q.2	(a) (b)	Give the synthesis of carbo styryls based FWA with explanation. Define the term FWA? Give the characteristic and classification of FWA. OR	07 07
	(b)	Give the synthesis of FWA based on diaryl imidazole and naphthalimide derivatives.	07
Q.3	(a)	Give the synthesis of multifunctional reactive dyes Reactive Red 194 and Reactive Black 5 with explanation.	07
	(b)	Give the synthesis of Safranine T basis reactive dyes. OR	07
Q.3	(a) (b)	Write a note on development in color and chemical constitutions. Give the synthesis of any two reactive dyes based on pyrimidine derivative.	07 07
Q.4	(a)	Define the term reactive dye. How do reactive dyes differ from other classes of dyes such as acid, direct dyes etc? Describe the different kinds of reactive systems with structure	07
	(b)	Explain various high-tech applications of dye other than textile application. OR	07
Q.4	(a) (b)	Write a note on dyes in electro photography and dyes for inkjet printing. Write down the examples and uses of LASER dyes.	07 07
Q.5	(a) (b)	Write a note on non-linear optical properties of dyes. Define the term: 1) Dyes, 2) Pigments, 3) Dyeing, 4) Chromophores, 5) Auxochrome, 6) Fastness properties, 7) Colour OR	07 07
Q.5	(a) (b)	Write down short note on environmental aspects of disperse dyes. Write down the advantages & disadvantages of reactive dyes.	07 07
