

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VIII(NEW) EXAMINATION – SUMMER 2019****Subject Code:2183609****Date:09/05/2019****Subject Name:Analysis, Applications, Health And Safety Aspects Of Dyes & Pigments****Time:10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

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

		MARKS	
Q.1	(a) What is bulking value of pigments	03	
	(b) What do you mean by Refractive Index of pigments?	04	
	(c) Discuss oil absorption value of pigments and factors affecting on it.	07	
Q.2	(a) Write a short note on: Bleeding Tendency of pigments	03	
	(b) Write a short note on: a. Opacity b.Tinting strength	04	
	(c) Explain colour matching spectrophotometer with the help of working & its significance.	07	
OR			
Q.3	(c) Explain Thin Paper Chromatography with its applications.	07	
	(a) Write a short on: Emulsions	03	
	(b) Establish the difference between Emulsion & Latex.	04	
Q.3	(c) What is Paint? What are the functions of paint?	07	
	OR		
	(a) Write a short note on: perception fastness.	03	
Q.4	(b) Why post-treatment in textile dyeing is important?	04	
	(c) Give the classification of pigments with suitable example.	07	
	(a) Enlist the applications of pigments and explain one of them.	03	
Q.4	(b) Explain the process of continuous dyeing with its principle.	04	
	(c) Discuss about the textile dyeing on hydrophobic fibres.	07	
	OR		
Q.4	(a) Write a short note on: Light fastness	03	
	(b) Explain applications of Column Chromatography.	04	
	(c) Explain the concept of Mutagenicity briefly.	07	
Q.5	(a) What is metabolism of Dyes?	03	
	(b) Explain the following types of detectors used in Chromatography: destructive and non-destructive.	04	
	(c) Explain briefly about process of waste water treatment.	07	
OR			
Q.5	(a) What do you mean by sensitization?	03	
	(b) Discuss the concept of Mutagenicity.	04	
	(c) How will you define health and safety aspects of dyes & pigments?	07	
