

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-III (New) EXAMINATION – WINTER 2018****Subject Code: 2132904****Date: 12/12/2018****Subject Name: Textile Processing - I****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) Enlist various methods for singeing of fabrics.	03	
	(b) Give classification of Desizing methods.	04	
	(c) Describe Jigger dyeing machine with a neat sketch.	07	
Q.2	(a) State the principle of dyeing.	03	
	(b) Explain the objectives of a dyeing department.	04	
	(c) Describe construction and working of a vertical kier.	07	
<b>OR</b>			
Q.3	(c) Write short note on dyeing of polyester/cotton blend.	07	
	(a) Discuss the advantages and disadvantages of gas singeing.	03	
	(b) Compare hypochlorite and peroxide bleaching.	04	
Q.3	(c) Explain the working of chain mercerizing machine with a neat sketch.	07	
	<b>OR</b>		
	Q.3	(a) State the difference between dyes and pigments.	03
(b) Describe the process of dyeing polyester fabrics in jet dyeing machines.		04	
(c) Explain reactive dyes with its dyeing methods.		07	
Q.4	(a) What are the objectives of desizing? Explain briefly.	03	
	(b) Explain rot steeping desizing.	04	
	(c) Enumerate on shearing and cropping process with its significance.	07	
<b>OR</b>			
Q.4	(a) Give general sequence of wet processing.	03	
	(b) What are enzymes? Give their principle of working.	04	
	(c) Explain scouring process with type and process parameters.	07	
Q.5	(a) Give advantages of dyeing loose cotton.	03	
	(b) Explain about the properties of disperse dyes.	04	
	(c) Describe the process of dyeing cotton fabric with direct dyes.	07	
<b>OR</b>			
Q.5	(a) Classify dyes according to their applications.	03	
	(b) Give properties of vat dyes.	04	
	(c) Describe the working of yarn dyeing machine with neat sketch.	07	

\*\*\*\*\*