

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VIII • EXAMINATION – SUMMER • 2015

Subject code: 182802**Date: 11/05/2015****Subject Name: Technological Advances in Textile Processing****Time: 10.30AM-01.00PM****Total Marks: 70****Instructions:**

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

Q.1 (a) Give the classification of enzymes based on mode of their action. **07**

(b) Name the sources of amylases. Discuss the applications of amylases in processing of cotton. **07**

Q.2 (a) Explain the applications of peroxidase enzymes in textile processing. **07**

(b) Discuss about suitability and the role of enzymes in processing of silk. **07**

OR

(b) What are Cellulases? Justify their position in processing of denims. **07**

Q.3 (a) Write a note on: Enzymatic processing of wool. **07**

(b) Discuss the general applications of plasma technology. **07**

OR

Q.3 Discuss the method and technological aspects of : **14**

(a) Modification of PET and PP by plasma treatment

(b) Corona treatment

Q.4 (a) Describe the method for production of nano fibers with their applications. **07**

(b) Explain in detail, Nano emulsions with principle, preparation and their applications. **07**

OR

Q.4 (a) Elaborately discuss various aspects of nano technology, general applications, its advantages and disadvantages. **07**

Q.4 (b) Discuss the distinguishing characteristics of super critical Carbon dioxide in context with properties of other fluids. Give the method for its generation with merits and demerits of using it. **07**

Q.5 (a) With neat sketch, explain the dyeing of polyester with supercritical carbon dioxide. **07**

(b) Write a note on micro encapsulation and its textile applications. **07**

OR

Q.5 Discuss the possibilities of using ultra sound technology and electrochemistry in textile coloration, with the equipmentation used, their advantages and limitations. **14**
