

Seat No.: _____
No. _____

Enrolment

GUJARAT TECHNOLOGICAL UNIVERSITY
M. E. - SEMESTER – I • EXAMINATION – WINTER • 2014

Subject code: 712505N

Date: 05-12-2014

Subject Name: Texturizing Technology

Time: 10:30 am - 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.

- Q.1** (a) Elaborately discuss the feed material characteristics which are affects the textured yarn properties. **07**
(b) “The main behavior of air jet inside depends upon the nozzle geometrical configuration” explain and derive. **07**
- Q.2** (a) Write shortly on: textured stabilization, and sizing of textured yarn. **07**
(b) Which parameters should be considered to get uniform dyeing on polyester textured yarn? **07**
- OR**
- Q.3** (b) What is the role of water and coanda bar in air jet texturing process? **07**
(a) Define and discuss **07**
(i) Coercive torque
(ii) Residual twist
(iii) Air jet textured yarn characteristics
(b) Discuss heat setting and texture development with stress and strain energy Es. **07**
- OR**
- Q.3** (a) Which parameters of textured yarns should test to understand its behavior in fabric? Discuss the methods and tester use to test it. **07**
(b) Write shortly on textured stabilization and thermal transition. **07**
- Q.4** (a) How to measure the air jet textured yarn stability. Discuss Heberlein and Acar’s instability concept. **07**
(b) Write a note on bicomponent texturising process. **07**
- OR**
- Q.4** (a) Which modifications are adopted in texturing machine design to increase production speed? **07**
(b) With neat sketch explain working of any four air jet texturing nozzles. **07**
- Q.5** (a) Write a note on Dynafil M tester. **07**
(b) Define LOY, MOY, POY, and HOY. What are the effects of yarn heating on yarn crimp in primary texturing zone? **07**
- OR**
- Q.5** (a) Is increase in twist level affect yarn tension in false twist texturising process? Justify your answer. **07**
(b) Write a note on texturing process package build specifications. **07**
