

GUJARAT TECHNOLOGICAL UNIVERSITY
BE – SEMESTER – VI (NEW).EXAMINATION – WINTER 2016

Subject Code: 2162904**Date: 24/10/2016****Subject Name: Technical Textile-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.

- Q.1** (a) Compare spunbond with melt blown web formation method. With the help of neat diagram, explain the melt blown method of web formation in detail. **07**
- (b) With the help of neat sketches, explain how dry powder coating is done to obtain coated Fabrics. **07**
- Q.2** (a) Discuss the uses of Synthetic Fibres in Technical Textiles. **07**
- (b) Classify web. With the help of neat diagram, explain the method of formation of random laid web. **07**
- OR**
- (b) Write a brief note on “Industrial Textiles”. **07**
- Q.3** (a) With the help of neat diagram, explain the method of formation of needle punch fabric. Also, discuss some of the parameters controlling the properties of needle punch fabrics. **07**
- (b) Explain, in detail, the method of formation of stitch bonded fabrics with the help of neat diagrams. Also, discuss some of the parameters to be considered for enhancing the quality of stitch bonded fabrics. **07**
- OR**
- Q.3** (a) With the help of neat diagram, explain the process line used for the production of adhesive bonded nonwoven fabrics. Also, state the parameters controlling the properties of said fabrics. **07**
- (b) Compare wet-laid with dry-laid web. With the help of neat diagram, explain the method of formation of wet-laid web in detail. **07**
- Q.4** (a) Compare spray bonding with foam bonding technique and hence explain, in detail, spray bonding technique with the help of neat diagram. **07**
- (b) Discuss the use of nets as Technical Textiles. **07**
- OR**
- Q.4** (a) List out various applications of woven fabrics made from glass and Polypropylene fibres. **07**
- (b) Discuss the manufacturing and applications of Textile Reinforced Composite Materials. **07**
- Q.5** (a) Discuss briefly the techniques involved in finishing of Technical Textiles. **07**
- (b) Write a brief note on “MobilTech”. **07**
- OR**
- Q.5** (a) With the help of neat sketch, explain how cold and hot laminating is done to manufacture laminated textiles. **07**
- (b) Discuss the various heating & drying methods incorporated in manufacturing of coated textiles. **07**
