

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI • EXAMINATION – SUMMER 2013****Subject Code: 162904****Date: 03-06-2013****Subject Name: Technical Textiles-I****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) With the help of neat diagram, explain the manufacturing of wet laid web in detail. **07**

(b) Draw the flow chart for manufacturing Nylon tyre cord. Hence explain important stages of manufacturing of nylon tyre cord. **07**

Q.2 (a) Discuss the Production and applications of Glass Fibres in the manufacturing of Technical Textiles. **07**

(b) State and explain the features of CA 10 card. **07**

OR

(b) What is non-woven fabric ? Classify web. State only, different fabric forming techniques used for bonding webs. **07**

Q.3 (a) Compare parallel laid web with cross laid web. With the help of neat diagram, explain manufacturing of cross laid web. **07**

(b) State the methods used for formation of web from continuous filament yarn. With the help of neat diagram, explain any one method for formation of the said web. **07**

OR

Q.3 (a) Give classification of adhesive bonding techniques. With the help of neat diagram, explain foam bonding technique in detail. **07**

(b) With the help of neat diagram, explain needle punching method of web bonding. Also, discuss the parameters controlling the quality of needle punched fabrics. **07**

Q.4 (a) Agro tech is significant for our country. Explain the statement. Hence highlight the various advantages of using agro tech products. **07**

(b) Discuss various factors to be considered while designing a filter fabric. **07**

OR

Q.4 (a) Write a short note on automotive textiles. **07**

Q.4 (b) Write a short note on medical textiles. **07**

Q.5 (a) Describe the production of Carbon fibres. Also discuss the properties and applications of the same. **07**

(b) With the help of neat sketches, describe gravure coating in detail. **07**

OR

Q.5 (a) Discuss the application of PVC as a coating material. **07**

(b) With the help of neat sketch, explain the hot melt coating in detail. **07**
