

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**ME Semester –III Examination Dec. - 2011**

**Subject code: 732502**

**Date: 08/12/2011**

**Subject Name: Technical Textile**

**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) Which processes are to be carried out and the technical textile products available from monofilament and tape/film? **07**  
(b) Write briefly on various application areas of technical textiles. **07**
- Q.2** (a) Explain with a neat sketch needles used for needle felting process. **07**  
(b) Write on distinctive features of the cards used for making batt. **07**
- OR**
- (b) Which are the complicating features of needle punching process? **07**
- Q.3** (a) Write in short on dry, wet and polymer laid non woven. **07**  
(b) How densely woven fabrics can be used as water proof breathable fabrics? **07**
- OR**
- Q.3** (a) With reference to surgical apparel write on: **07**  
(i) Factors affecting permeability  
(ii) Factors affecting capillary absorption.  
(b) With neat sketch explain spun laying process for forming non woven fabrics. **07**
- Q.4** (a) Which are the considerations for selecting particular fabric design for solid-liquid filter fabrics? **07**  
(b) Explain cleaning mechanism with reference to reverse air and pulse jet cleaning. **07**
- OR**
- Q.4** Write in detail on use of geotextiles for separation purposes. **14**
- Q.5** (a) Write a short note on face masks and antimicrobial dressing. **08**  
(b) Compare and contrast between parallel and cross laying. **06**
- OR**
- Q.5** (a) Write a short note on protective textiles. **07**  
(b) Write in short on use of geotextiles for drainage purposes. **07**

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