

GUJARAT TECHNOLOGICAL UNIVERSITY
M. E. - SEMESTER – III • EXAMINATION – WINTER 2012

Subject code: 732502**Date: 26/12/2012****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) With the help of a chart write on product and processes for making technical textiles. **07**
 (b) Write briefly on various application areas of medical and geotextiles. **07**
- Q.2** (a) Explain with a neat sketch various types of needles used for needle punching manufacturing. **07**
 (b) Write on distinctive features of the cards used for producing nonwoven batt. **07**
- OR**
- (b) Which are the distinct features of needle punching process? **07**
- Q.3** (a) Write in short on spun laid, spunbond and melt blown type nonwovens. **07**
 (b) How membrane coated 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 liquid-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 agrotexiles for various types of nets. **14**
- Q.5** (a) Write a short note on face masks and antimicrobial dressing. **08**
 (b) Compare and contrast between air, parallel and cross laying. **06**
- OR**
- Q.5** (a) Write a short note on various applications of protective textiles in defense. **07**
 (b) Write in short on use of geotextiles for drainage purposes. **07**
