

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(Textile Engg.) (2011 Onwards) (Sem.-6)

NON WOVEN TECHNOLOGY

Subject Code : BTTE-605

M.Code : 71739

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

1. Answer briefly :

- a) Define Nonwoven fabrics.
- b) What do you understand by punch density?
- c) What are various types of binders used in chemical bonding of webs?
- d) Differentiate between partial bonding and gradual bonding.
- e) Nonwoven fabrics can be produced at a very cheap rate, but we do not find any applications in apparels. Why?
- f) Compare the rates of production for different methods of fabric production.
- g) How do you produce structured fabrics using needle punching technology?
- h) Differentiate between a regular barb and close barb needle.
- i) Give two applications each of needle punched and wet laid fabrics.
- j) What are the bonding techniques available for bonding a spunlaid web?

SECTION-B

2. Classify nonwoven fabrics on the basis of their bonding methods and application areas.
3. Compare the stress strain behavior of needlepunched fabric with the woven fabric.
4. Discuss various types of fibres used in nonwoven technology. What properties of these fibres make them suitable for nonwoven fabrics?
5. Explain the working of Archana Stitch bonding machine with the help of a neat diagram.
6. What is thermal bonding? Discuss the effect of fibre structure on the properties of thermal bonded fabrics.

SECTION-C

7.
 - a) Explain the working of needle punching machine with the help of a neat diagram.
 - b) Discuss various developments in the needle punching technology.
8. Describe the Melt blowing technique with the help of neat diagram. Analyze the effect of different parameters on the properties of melt blown fabrics.
9. Describe various methods of dry laying and wet laying of the webs. How does the laying of web affect properties of the needled fabric?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.