

Scheme - I

Sample Question Paper

Program Name : Diploma in Textile Manufactures
Program Code : TX
Semester : Fifth
Course Title : Non-Wovens and Technical Textiles
Max. Marks : 70

22583

Time: 3 Hrs.

Instructions:

- (1) All questions are compulsory.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.
- (5) Preferably, write the answers in sequential order.

Q.1 Attempt any FIVE of the following.

10 Marks

- a. State various methods of fabric formation.
- b. State various types of bonding techniques used for production of Non-wovens.
- c. State various types of textile raw materials used for production of technical textiles and it's any two applications..
- d. Define Geotextiles.
- e. State various Health care and hygiene medical textiles.
- f. State any four applications of agro textiles.
- g. State properties of fibres used in flame proof fabrics.

Q.2 Attempt any Three of the following.

12 Marks

- a. Draw and explain process flow chart for any one method of manufacturing of non-woven fabrics.
- b. Explain the web formation process for staple fibers for production of non-woven. .
- c. State detailed classification of technical textiles.
- d. State various functions of geotextiles and explain any one of them with help of diagram.

Q.3) Attempt any Three of the following.

12 Marks

- a. Classify non-woven fabrics into different categories.

- b. Explain needle punched non-woven fabric production with the help of a neat diagram.
- c. Explain separation function of geotextile with the help of a neat diagram.
- d. Describe various characteristics required for fibres, yarns and fabrics to be used for medical textiles.

Q.4) Attempt any Three of the following.

12 Marks

- a. State various thermal bonding methods of non-woven production. Explain any one with the help of a neat diagram.
- b. State the characteristics and properties of different fibres used for technical textile applications.
- c. State detailed classification of medical textiles.
- d. Explain filtration function of geotextile with the help of a neat diagram.
- e. Describe the use of agro textile in horticulture and floriculture. State its advantages.

Q.5) Attempt any Two of the following.

12 Marks

- a. State various non-implantable materials used in medical textiles. Describe various characteristics and properties the fibres, yarns should possess to be suitable for these applications.
- b. Describe in detail manufacturing and applications of Geo-grid and Geo-composites.
- c. State various applications of agro textiles in crop production. Describe briefly how the agro textiles are produced

Q.6) Attempt any Two of the following.

12 Marks

- a. Explain briefly production of following agro textiles and the properties required by the fibres and yarns used for their production (i) Ground cover (ii) shade nets.
- b. Explain production of non-woven by spun bond technology. State the characteristics of this fabric.
- c. Describe applications of different types of non-woven fabrics and state properties required for each type of non-woven.

Scheme - I

Sample Test Paper - I

Program Name : Diploma in Textile Manufactures
Program Code : TX
Semester : Fifth
Course Title : Non-Wovens and Technical Textiles
Max. Marks : 20

22583

Time: 1 Hour

Instructions:

- (1) All questions are compulsory.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.
- (5) Preferably, write the answers in sequential order.

Q.1 Attempt any FOUR.

08 Marks

- a. Define non-wovens.
- b. State basic flow chart for manufacturing of non-woven.
- c. State various methods of bonding used for non-woven production.
- d. State properties of chemical bonded non-woven.
- e. Define technical textiles.
- f. State various textile raw material used for production of technical textiles.

Q.2 Attempt any THREE.

12 Marks

- a. With the help of schematic diagram explain various methods of fabric production.
- b. With the help of a diagram explain web formation process. Explain the reason of using cross lapper.
- c. Explain working of needle punching machine with the help of a neat diagram.
- d. State detailed classification of technical textiles.
- e. State various technical textiles used in automobiles. State characteristics and propertied fibres and yarns should possess to be suitable for these applications.

Scheme - I
Sample Test Paper - II

Program Name : Diploma in Textile Manufactures
Program Code : TX
Semester : Fifth
Course Title : Non-Wovens and Technical Textiles
Max. Marks : 20

22583

Time: 1 Hour

Instructions:

- (1) All questions are compulsory.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.
- (5) Preferably, write the answers in sequential order.

Q.1 Attempt any FOUR.

08 Marks

- a. Define Geotextiles.
- b. State applications of Geo-grids.
- c. State various extracorporeal devices used in medical textiles.
- d. State various non-implantable material used in medical textiles.
- e. Define agro textiles.
- f. State advantages of using shade nets.

Q.2 Attempt any THREE.

12 Marks

- a. State various functions of geotextiles and explain any one with the help of a neat diagram.
- b. Describe applications of Geo-composites and Geo-membrane.
- c. Describe characteristics and properties required for fibers and yarns to be suitable for medical textile applications.
- d. State various health care and hygiene products used in medical textiles. State required properties of raw material for their production.
- e. Describe briefly manufacturing of ground cover and shade nets. State advantages of using them.