

17650

11920

2 Hours / 50 Marks

Seat No.

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- 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) Use of Non-programmable Electronic Pocket Calculator is permissible.

Marks

1. Attempt any SEVEN :

7 × 2 = 14

- (a) How technical textiles are different from apparel textiles ?
- (b) What are defence textiles ?
- (c) What are the different types of coating polymer ?
- (d) What is the principle of filtration ?
- (e) Give the property of textile material required for surgical textiles.
- (f) Describe the scope of technical textiles.
- (g) What is laminating ?
- (h) Which fibre property are consider while choosing a fibre for ballistic protection ?
- (i) Give the name of the various high performance fibres used in military textiles.
- (j) List the different segments of technical textile products based on their application areas.

2. Answer any FOUR :**4 × 3 = 12**

- (a) Explain the use of technical textile in the area of Agriculture.
- (b) Describe history of technical textile.
- (c) Give the various applications of coated and laminated textiles.
- (d) What are the advantages of woven fabric in filtration ?
- (e) Classify the medical textiles based on their applications.
- (f) Describe the application of defence textiles in biological and chemical warfare protection.

3. Attempt any FOUR :**4 × 3 = 12**

- (a) What is the role of technical textiles in Civil construction area ?
- (b) Explain any one methods of coating to produce technical textiles.
- (c) Why coating process required ? Give its advantages.
- (d) What are the different Yarns used to design filter fabric ? Why ?
- (e) Give the various application of technical Textiles as Health and hygiene medical textiles.
- (f) What is flame retardant textiles ? Give any two importance of it.

4. Answer any FOUR :**4 × 3 = 12**

- (a) Describe the application of technical textiles in sport and leisure.
 - (b) Compare coating and laminated technical textiles.
 - (c) Explain finishing treatments required for filter fabric.
 - (d) What is Non-implantable medical textiles ? Explain different fibres, type of fabrics used for such applications.
 - (e) Write down the physical requirements of textile materials for defence textiles.
 - (f) What are the requirements of military textiles with respect to heat and flame ?
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