Q.1.i) Define the term technical textile. Broadly classify the technical textile products. (12)

ii) Justify the following as technical textile:
   a. Surgeon’s gown
   b. Tarpaulin fabric
   c. Conveyor belt
   d. Parachute fabric

Q.2. (16)
   i) Define nonwoven fabrics. State the advantages of nonwoven fabrics.
   ii) With a neat and labeled diagram, explain the needle-punched nonwoven fabric manufacturing technique

Q.3. (15)
   i) Compare and contrast the process of coating and laminating.
   ii) Explain the application of two coated textiles as technical textiles

Q.4. (16)
   i) What are Geotextiles? Enumerate the various fibres used for the area of Geotextiles.
   ii) Geotextiles help to improve the service life of roads. Justify with examples.
Q. 5 Write a short note on Any Two:
   i) Filtration textile
   ii) Defense textiles
   iii) Textiles used in conveyor belts.

Q. 6
   i) Define medical textiles. Classify them based on their application.
   ii) Explain the different fibres that are used in the area of medical textiles.

Q. 7
   i) Explain the various types of Protective textiles based on their functional requirements
   ii) What are flame retardant textiles? Explain the importance of flame retardant materials. Briefly describe the different techniques of making flame retardant textiles

Q. 8
   i) Explain in detail the properties of textile materials used in Home textiles
   ii) What is chaffer fabric? How is it used in the tyre cord industry?

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