Q.1.a “Technical Textiles are known for the function they perform”, in light of this statement, Define Technical Textiles. Classify the technical textiles based on their functionality.

b Classify the following into various segments of technical textile. Justify your answer
   a. Bandages
   b. Filter fabric
   c. Face mask
   d. Parachute fabric

Q.2. a Define nonwoven fabrics.

b How are nonwoven fabrics different from woven fabrics?

b With a neat and labeled diagram, explain the needle-punched nonwoven fabric manufacturing technique.

Q.3.a Compare and contrast the process of coating and laminating

b What are composites? What is the role of textiles in making of composites?

b Explain the different types of textile structures that can be used in making Composites

Q.4 a Define geotextiles. List the different fibres used for geotextile applications.

b Discuss the suitability for use of the following fibres as geotextiles:
   a) Jute
   b) Polypropylene

b Geotextiles help to improve the service life of roads. Justify with examples.

Q.5 Write a short note on Any Two


Q.6 a Define medical textiles. Classify them based on their application

b Explain the different fibres that are used in the area of medical textiles.

Q.7 a Explain the various types of Protective textiles based on their functional requirements

b What are flame retardant textiles? Explain the importance of flame retardant materials.

b Briefly describe the different techniques of making flame retardant textiles.

Q.8 a Explain in detail the properties of textile materials used in Home textiles

b What is chaffer fabric? How is it used in the tyre cord industry?