B. Tech.

(SEM. VIII) EXAMINATION, 2006-07
FIBRE TECHNOLOGY

Time : 3 Hours] [Total Marks : 100

Note : (1) Attempt all questions
(2) All questions carry equal marks.

1 Attempt any two of the following: 2×10
   (a) Give the manufacturing process of acrylic fibres? How it is suitable for apparel industry?
   (b) Differentiate between dry-set-wet spinning and gel spinning process.
   (c) Discuss the applications of fibre in geotextile with suitable examples.

2 Attempt any two of the following: 2×10
   (a) Discuss the manufacturing process of glass fibres. Give problems occur during production.
   (b) Give the flow chart for the production of viscose rayon. What are the main applications of these fibres?
   (c) Discuss the method of dope preparation for gel spinning process of acrylic fibres.

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3 Attempt any two of the following: 2×10
   (a) How do you manufacture Nylon-6 fibres? Give their properties and applications.
   (b) What are industrial fibres? How are they classified?
   (c) Discuss the properties and applications of cellulose acetate fibres.

4 Attempt any two of the following: 2×10
   (a) Discuss the phenomenon of birefringence in case of fibres.
   (b) How do you manufacture terylene fibre? Give their properties and applications.
   (c) How crystallinity affect the properties of polymeric fibres? Discuss with suitable examples.

5 Attempt any four of the following. 4×5
   (a) Aramid fibres
   (b) Carbon fibres
   (c) Role of spin finishes
   (d) Classification of glass fibres
   (e) Tenacity and Denier
   (f) Texturing of fibres.