Q1. a. Match the followings:
   i. Polyester fibre
   ii. Viscose fibre
   iii. Polypropylene fibre
   iv. Nylon 66
   v. Polycrylonitrile fibre

   (a) n-heptane
   (b) Adipic acid
   (c) Terephthalic acid
   (d) Vinyl acetate
   (e) Carbon disulphide

   b. Define the followings:
      i. Crystallinity in fibre
      ii. Polymer
      iii. Texturizing
      iv. Microfilament yarns
      v. Blended yarns

Q2. a. Explain the advantages and disadvantages of manmade fibres.

Q3. a. Describe the production of polyester partially oriented yarn along with line diagram and

   b. Discuss the characteristics of polyester fibre.

Q4. a. Describe the wet spinning process for poly(acrylonitrile) fibre manufacturing.

   b. Explain the physical characteristics of poly(acrylonitrile) fibre.

Q5. a. Explain the manufacturing process of viscose filament yarns.

   b. State the difference between high wet modulus and low wet modulus viscose fibres.

   c. Explain the characteristics of polypropylene fibres

Q6. a. Describe the polymerization and spinning of nylon 6 filament yarn.

   b. Compare the characteristics of nylon 6 and nylon 66 fibres.

Q7. a. Explain the principle of false twist texturing.

   b. Explain the Air jet texturizing.

   c. Explain the testing procedure of crimp contraction for textured yarn.

Q8. a. What is blow room blending? Compare it with draw frame blending.

   b. Explain the manufacturing of polyester/cotton blended yarn with a neat flow chart.