P 468

B.Sc. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2003.

First Semester

Apparel and Fashion Technology

BFT 113 — TEXTILE SCIENCE — FIBRES AND YARNS

(Regulations 2003)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the advantages of blending polyester with cotton?

2. What are the end uses of Acrylic fibres?

3. Draw the microscopical appearance — longitudinal and cross–section view of viscose fibre.

4. What is Wool Quality Number?

5. List down the importance of Mixing.

6. What is the advantage of blending?

7. What are the requirements of Drafting system?

8. What are the functional requirements of a spindle?

9. Distinguish between Roving bobbin and Ring cop in terms of building and winding.

10. What is a navel in Rotor Spinning?

PART B — (5 × 16 = 80 marks)

11. Classify the fibres based on its origin and material type. Give one example for each. What are the merits and demerits of Man–made fibres.

12. (a) Explain the process of manufacture of polyester staple fibres. What are its physical and chemical properties? List down the end uses of polyester.

Or

(b) List down the tests available for the identification of Textile fibres? Draw the microscopical properties of cotton, wool, flax, and polyester fibres.

13. (a) Explain the principle of working any one of the mixing machines?

Or

(b) Explain the principle of working of saw gin with suitable sketch. What are ginning defects.

14. (a) What are the objectives of carding? Explain the principle of working of a carding machine.

Or

(b) What are the objectives of speed frame? Explain the drafting system of a speed frame with a suitable sketch.

15. (a) Explain the builder mechanism of a Ring frame with suitable sketches.

Or

(b) What are the requirements of winding in Rotor spinning? Explain the winding process of Rotor spinning.

———————