

Reg. No. :

**S 4817**

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2007.

Annual Pattern — First Year

Textile Technology (Fashion Technology)

FT 1X02 — YARN MANUFACTURE

(Regulation 2004)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Why do lycra fibres offer enormous amount of stretch?
2. Give the relationship of conversion from Tex to English count.
3. What do you mean by blending delay time?
4. What is chute feed system? Give its advantages.
5. What is traverse blending in carding machine?
6. In drawframe machine 5 cotton and 3 polyester fibres are blended in the proportion of 60 : 40. The count of delivered fibre is 0.156 and total draft is 7.4. Find out the count of the cotton and PET fibre fed in the draw frame.
7. Why is even number of passages required b/w draw frame and comb?
8. Differentiate between forward and backward feed in comb.
9. Compare the winding process of speed frame and ring frame.
10. What are the limitations, in ring frame machine?

PART B — (5 × 16 = 80 marks)

11. (a) Bring out an elaborate note on production, characteristics and end uses of nanofibres.

Or

- (b) Discuss in detail the macroscopic and microscopic properties of  
(i) Cotton  
(ii) Wool fibre (8 + 8)

12. (a) Describe the working principle of step cleaner.

Or

- (b) What is blending evenness? How it is obtain in multimixer.

13. (a) (i) Draw a neat sketch of carding machine. (4)  
(ii) Explain the parameters that affect the waste removal efficiency at licker-in-zone. (12)

Or

- (b) Explain how the carding m/c helps to obtain a good quality yarn.

14. (a) (i) Give the objectives of drawframe  
(ii) Explain the reason for invention of polar drafting system.

Or

- (b) (i) Give the objectives of simplex builder motion?  
(ii) Draw the shape of ring cop and explain how ring builder mechanism obtains it.

15. (a) Write short notes on :  
(i) Functions of apron and spacer. (8)  
(ii) Drafting wave. (8)

Or

- (b) Write short notes on :  
(i) Saw Ginning – working principle (8)  
(ii) Asymmetric web condensation. (8)