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T 3288

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2008.

Fourth Semester

Textile Technology (Fashion Technology)

FT 1252 — FABRIC MANUFACTURE

(Regulation 2004)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is the effect of increase in diameter of package on traverse ratio and angle of wind in drum winder and precision winder?
2. What properties of the size are measured while sizing process is taking place?
3. In which conditions, the handloom can be effectively used compared to power loom or shuttleless loom?
4. Compare the amount of twist given to the yarn meant for knitting and weaving. What is the reason for difference in the twist imparted?
5. What are the characteristics of 1 × 1 rib fabric?
6. How is tuck stitch formed?
7. Write short note on closed lap and open lap.
8. Name any four pattern devices used in circular knitting.
9. Classify the nonwovens based on bonding of fibres.
10. Mention any four industrial applications of nonwovens.

PART B — (5 × 16 = 80 marks)

11. (a) Describe the functioning of modern direct warping machine. Discuss on the salient features available in the machine to increase productivity and quality of beam produced.

Or

- (b) Discuss on the type of tension control mechanisms and yarn clearing mechanisms available in any one modern cone winding machine.

12. (a) Explain briefly on : (6)
(i) Swell motion in the shuttle loom (10)
(ii) Principle of weft insertion by any one rapier system.

Or

- (b) Explain on the : (10)
(i) Concept of weft insertion in projectile loom (6)
(ii) Heald reversing motion using springs

13. (a) (i) Explain the cam system used for producing interlock fabric. (12)
(ii) What are the functions of sinker? (4)

Or

- (b) (i) Explain the knitting action of a latch needle with sketch. (12)
(ii) What are the limitations of spring beard needle and latch needle? (4)

14. (a) Explain the function of important knitting elements of tricot machine.

Or

- (b) With neat sketch explain the knitting cycle of the latch needle Raschel machine.

15. (a) Discuss briefly on different methods of web formation for producing nonwovens.

Or

- (b) (i) What are the methods available for fibre bonding to produce nonwovens? (4)
(ii) Discuss on the method of fibre bonding using adhesives. (12)