G 249

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2003.

Fourth Semester

Textile Technology

TT 233 — TECHNOLOGY OF WEAVING PREPARATION

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the types of cone drums and wound packages?
2. State any four faults in the wound packages.
3. Why there is a need for bunch in the pirn?
4. What are the specific uses of sectional warping?
5. Why stop motions are must at the creel itself in the warping machine?
6. What are the reasons for sizing the warp yarn?
7. What do you mean by single end sizing?
8. What is gelatinisation and how to avoid this?
9. Why stretch control is critical in the sizing process?
10. What do you mean by leasing?

PART B — (5 × 16 = 80 marks)

11. With necessary illustrations explain the knotting operation with an automatic knotting machine at loom.

12. (a) With the support of yarn path diagram explain the purpose of each operation carried out in a state–of–the–art cone winding machine.

Or

(b) What are the various factors governs the winder and winding performance? Explain the role of data system in this regard.

13. (a) Why different creels are necessary in warping process and explain with illustrations the purpose of important elements present in a high speed warping machine?

Or

(b) What are the quality and package factors to be taken care in warping process? Relate these with machine and process parameters.

14. (a) State with purpose the types of sizing ingredients necessary to formulate size receipe and explain the size paste preparation along with the precautions to be taken.

Or

(b) What are the controls employed in a high speed sizing machine? State their importance and explain with necessary sketch the functioning of any one control system.

15. (a) Compare with reasons the filament yarn sizing with cotton yarn sizing in respect of machine configuration, size receipe and process parameters.

Or

(b) Explain with necessary illustrations the functioning of fully automatic pin winding machine from placing of empty bobbin to doffing of full bobbin.
