

G 247

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

Fourth Semester

Textile Technology

TT 231 — COMPUTER APPLICATIONS IN TEXTILE TECHNOLOGY

Time : Three hours

Maximum : 100 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is Computer Aided Textile Designing?
2. What are the functions of a memory?
3. What are the functions of a scanner?
4. What are the functions of a computer controlled monitoring systems in a ring frame department?
5. List down the functions that can be controlled and monitored by a computer monitoring system in a loomshed.
6. What is PERT and CPM?
7. How will you optimize mixing of fibres using computers?
8. What are the elements of a design?
9. List down the different categories of motifs.
10. What is meant by lay out of a design?

PART B — (5 × 16 = 80 marks)

11. What are the functions and characteristics of input and output devices? Explain.
12. (a) Distinguish between on-line and off-line quality control. Explain with example, the role of computers in online quality control of blow room.

Or

- (b) Explain how the fabric defects are identified using computer/machine vision systems.
13. (a) Write an algorithm for computer colour matching.

Or

- (b) How will you simultaneously optimise cost and quality of mixing of cotton? Develop an objective function and constraints equations.
14. (a) Design and develop a computerised management information system for the loomshed.

Or

- (b) Design a production data collection system for the spinning mill using computers.
15. (a) Explain with flow chart the design and development of a Jacquard fabric using computerised systems.

Or

- (b) Explain with steps, the creation and Manipulation of an artwork for development of woven and printed designs.