

C 3422

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2007.

Fifth Semester

Textile Technology

TT 1305 — TEXTILE QUALITY EVALUATION

(Regulation 2004)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define Quality of Conformance.
2. What are the factors considered in selecting a fabric sample for tensile testing?
3. What is Response Surface Design?
4. Enumerate different sources of error.
5. What is the principle of fibre fineness measurement?
6. What is the practical significance of testing of moisture regain of fibres.
7. What is the effect of 'specimen length' on yarn tensile characteristics?
8. Classify yarn imperfections and faults.
9. How do you determine serviceability of fabrics?
10. What is the importance of testing of Bursting strength?

PART B — (5 × 16 = 80 marks)

11. (a) What are the factors influencing sampling? Explain zoning technique for the selection of fibres for testing.

Or

- (b) Elaborate on the Quality of design, Quality of Performance and Quality Assurance.

12. (a) Discuss on design of experiments with textile related examples.

Or

(b) Explain Taguchi's experimental design with example from textiles.

13. (a) Explain the principle of working of vibroscope with suitable diagrams.

Or

(b) Explain the principle of working of AFIS – Nep testing in detail.

14. (a) What is random and periodic irregularity? Discuss the analysis of spectrograms.

Or

(b) What are CRT, CRL and CRE principles? Explain the construction and working of USTER – Tensojet.

15. (a) What are the factors influencing pilling in fabrics? Explain the principle of working of Air Permeability tester.

Or

(b) What do you understand by subjective and objective evaluation with respect to fabric handle? Explain the same with respect to KES-F instruments.

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