

A 503

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2005.

Fifth Semester

Textile Technology

TT 335 — PROCESS CONTROL IN SPINNING

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the quality attributes of lap?
2. What is the relationship between fibre opening and cleaning?
3. What is the effect of grid bar gap on the waste elimination in Blow Room?
4. What are the causes for nep formation in Blow Room?
5. What is the mechanism of leading fibre hook removal in combing?
6. What is the effect of RH on ring spinning productivity?
7. What is cleaning efficiency?
8. What are productivity Index, Machine productivity Index?
9. What are the causes for slubs in p/c blended yarn?
10. What is spectrogram and diagram?

PART B — (5 × 16 = 80 marks)

11. (i) Explain the different levelling methods adopted in blow room machinery to achieve better uniformity of the product. (12)
(ii) How does blending efficiency affect yarn quality? (4)
12. (a) What are the types of hooks fined in carding? Explain the mechanism of hooks at carding and their removal at draw frame.

Or

- (b) How do various parameter in carding and in combing affect waste entraction?

13. (a) (i) What are the causes for periodic variations? (6)
(ii) Discuss on the analysis of spectrogram for identifying the source of fault with an example. (10)

Or

- (b) What are the causes and remedial measures for "with in bobbin" and "between bobbin" count variations?
14. (a) What are the causes for loss in efficiency in spinning? Discuss on avoidable losses and unavoidable losses and suggest the methods for improving productivity in ring spinning?

Or

- (b) What are the factors that affect ring spinning production limit? Explain the measures to increase production in ring spinning.
15. (a) Discuss the Generations influence and control of static electricity on spinning process?

Or

- (b) Discuss in detail on the process conditions required for producing polyester and its blends in the spinning machinery.
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