

MAY 2013

P/ID 77573/PMBA1

Time : Three hours

Maximum : 100 marks

PART A — (5 × 6 = 30 marks)

Answer any FIVE questions.

1. List out the types of polymerization.
2. Explain the morphology of fibre.
3. State the chemical composition of silk.
4. List out the characteristics of semi synthetic fibre.
5. Highlight the salient features of aramid fibre.
6. State the characteristics of textured filament.
7. Narrate the objectives of yarn production.
8. Briefly explain the prevalent system of yarn numbering.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

9. Describe the various classification of textile fibre.
10. Discuss the various end uses of cotton.
11. What is meant by silk? Explain its chemical properties.

12. Distinguish between regenerated and modified cellulose.
13. Explain the uses of carbon and micro fibres.
14. Evaluate the various methods of filament spinning.
15. Compare and contrast the carded and combed yarn.
16. Critically evaluate the factors influencing export quality hosiery yarns.

PART C — (1 × 20 = 20 marks)

Compulsory

17. (a) If the 60% span length of a cotton fibre is 14.75mm and the uniformity ratio is 45%, then what is the 2.75% span length of this fibre?

Or

- (b) Wrap and weft yarns with diameters of 0.3mm and 0.5mm, respectively, are used to produce plain woven fabric with end spacing of 0.7 mm and pick spacing of 1.1 mm. Assuming the degree of flattening to be 0.7 in both wrap and weft yarns, what is the approximate fabric cover?