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Third Semester B.Tech. Degree Examination, Dec.2019/Jan.2020 Textile Fibres

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Write the history and origin of textile fibres. (05 Marks)
- b. State the essential requirements of textile fibres. (05 Marks)
- c. Describe the method of cultivation of cotton in India as an agricultural crop. (10 Marks)

OR

- 2 a. State the properties of cotton fibre. (05 Marks)
- b. What are organic and coloured cotton? List the end uses of these cottons. (05 Marks)
- c. How do you classify textile fibres? Outline the classification of textile fibres with examples. (10 Marks)

Module-2

- 3 a. Give the properties of wool fibres. (05 Marks)
- b. State the special features of silk fibre. (05 Marks)
- c. Explain briefly the origin and types of wool fibre. (10 Marks)

OR

- 4 a. Compare the properties of woolen and worsted yarns. (05 Marks)
- b. Give the systems of grading wool. (05 Marks)
- c. Describe the methods of extraction of silk fibre. (10 Marks)

Module-3

- 5 a. State the methods of extraction of Bast fibres. (05 Marks)
- b. What are coir and hemp fibres? State the properties of these fibres. (05 Marks)
- c. With a neat flow chart, explain the method of conversion of wool fibres into woolen yarn. (10 Marks)

OR

- 6 a. Give the properties of Jute fibres. List the end uses of Jute fibres. (05 Marks)
- b. What are Ramie and flax fibres? Give their end uses. (05 Marks)
- c. Explain the various methods of extraction of bast fibres. (10 Marks)

Module-4

- 7 a. Compare the properties of manufactured fibres with natural fibres. (05 Marks)
- b. Give the various process variables in melt spinning process. (05 Marks)
- c. Explain the methods of application of spin finish. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.

OR

- 8 a. Distinguish between melt and dry spinning with examples. (05 Marks)
b. State the importance of : (i) Spinnability (ii) Spin finish (05 Marks)
c. With a neat sketch, explain the wet spinning process with examples. (10 Marks)

Module-5

- 9 a. Give the chemistry and production of regular Viscose rayon. (05 Marks)
b. State the properties and enduses of Bamboo fibres. (05 Marks)
c. What is modified viscose rayon? Give their properties and enduses. (10 Marks)

OR

- 10 a. What are regenerated fibres? Give the properties of eco-friendly rayon fibres. (05 Marks)
b. Compare the properties of regular viscose rayon with modified viscose rayon. (05 Marks)
c. Give the India's position in natural and manufactured fibres in global scenario. (10 Marks)
