



B.TECH. DEGREE EXAMINATIONS: APRIL / MAY 2023

(Regulation 2017)

Third Semester

FASHION TECHNOLOGY

U17FTT2001: Yarn Technology

COURSE OUTCOMES

- CO1:** Describe the process flow in short staple spinning and also explain the different techniques in yarn manufacturing.
- CO2:** Outline sequentially the processes involved in spinning long staple worsted yarns, and describe the working of various machines used
- CO3:** Acquire knowledge on post spinning operations and machine used for the process
- CO4:** Compare the quality characteristics of different yarns
- CO5:** Describe the various post spinning processes for spun yarns
- CO6:** Acquire knowledge on sewing threads and various specialty yarn manufacturing techniques.

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 2 = 20 Marks)

(Answer not more than 40 words)

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|---|-----|-------------------|
| 1. List the objectives of ginning. | CO1 | [K ₂] |
| 2. Compare carded sliver and combed sliver. | CO1 | [K ₄] |
| 3. Explain the importance of shearing. | CO2 | [K ₂] |
| 4. Analyze the importance of scouring in woolen spinning. | CO2 | [K ₃] |
| 5. Explain the principle of rotor spinning. | CO3 | [K ₂] |
| 6. List the properties of Friction spun yarn. | CO3 | [K ₄] |
| 7. List the advantages of TFO. | CO4 | [K ₄] |
| 8. Explain how yarn faults are identified with an example. | CO4 | [K ₂] |
| 9. Analyze the importance of waxing in sewing thread manufacture. | CO5 | [K ₄] |
| 10. Develop a flow chart for the manufacture of cotton sewing thread. | CO6 | [K ₆] |

Answer any FIVE Questions:-

PART B (5 x 16 = 80 Marks)

(Answer not more than 400 words)

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| 11. Develop a flow chart for a cotton spinning and highlight the objectives of each process. | 16 | CO1 | [K ₆] |
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12.	Develop a flow chart for a worsted spinning and highlight the objectives of each process.	16	CO2	[K ₆]
13.	a) Explain in detail the working of rotor spinning system with neat sketch.	8	CO3	[K ₂]
	b) Compare characteristics of yarns made from different spinning systems.	8	CO3	[K ₄]
14.	a) Explain the principle of working of two for one twister with neat sketch.	8	CO4	[K ₂]
	b) Discuss in detail the package faults (cone) in winding and their identification.	8	CO4	[K ₂]
15.	a) Classify sewing thread and also develop a process sequence for the manufacture of cotton/polyester sewing thread.	8	CO5	[K ₄]
	b) Discuss in detail the essential quality requirements of sewing thread.	8	CO5	[K ₂]
16.	a) Classify mélange yarn and explain about its types and application.	8	CO6	[K ₆]
	b) Classify fancy yarn and explain the properties of any four types of fancy yarn.	8	CO6	[K ₄]
