Register Number: ……..

B.TECH DEGREE EXAMINATIONS: MAY/JUNE 2014

(Regulation 2013)

Second Semester

FASHION TECHNOLOGY

U13FTT201**:** Fiber Science and Yarn Technology

Time: Three Hours **Maximum Marks: 100**

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. Which fibre has poor wet strength?
   a) Cotton b) Viscose
   c) Polyester d) Acrylic
2. Density of polyester fibre is_____
3. Acrylic is manufactured by _____ spinning method
   a) Melt spinning b) Dry spinning
   c) Wet spinning d) Dry wet spinning
4. The diameter range of nano fibres is around_____
5. The production of modern carding machine is around
   a) 1000 -1500 kgs b) 500 -1000 kgs
   c) 100 -150 kgs d) 2500 -5000 kgs
6. Spindle speed of ring spinning is around _____
7. The purpose of oiling in long staple spinning is
   a) Increase weight b) Identification
   c) Reduce the static charges d) Facilitate scouring
8. The hank of roving is around _____
9. How many turns of twist inserted in one revolution in TFO machine?
   a) 1 b) 3
   c) 2 d) 4
10. The main features of precision winder is _____

PART B (10 x 2 = 20 Marks)

(Not more than 40 words)

11. Define staple fibres.
12. List the essential properties of fibres
13. Mention the purpose of spin finish.

14. List the applications of super absorbent polymer.
15. Classify ginning.
16. What are the objectives of combing?
17. Differentiate siro and solo spinning.
18. How is wool scoured?
19. Compare ring doubler and TFO.
20. Summarize the characteristics of sewing threads.

PART C (5 x 14 = 70 Marks)

(Not more than 400 words)

Q.No. 21 is Compulsory

21. Describe the concepts of the compact spinning systems and summarize the characteristics of the compact yarn.

22. a) Describe the production cycle of silk fibres with neat sketches.

(OR)

b) Explain the process of manufacturing the viscose rayon fibre with neat diagrams

23. a) How are nano fibres manufactured? Explain the process.

(OR)

b) Mention the benefits of poly lactic acid fibre and elucidate the process of manufacturing poly lactic acid fibres.

24. a) Describe the process of yarn formation in rotor spinning machine.

(OR)

b) Analyse the principle of DREF spinning and explain the working of the DREF spinning.

25. a) State the principle of TFO and explain the working of TFO with neat sketches.

(OR)

b) Analyze the characteristics of single and ply yarns and summarize their applications

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