Register Number: ……..

B.TECH DEGREE EXAMINATIONS: NOV / DEC 2010

Fourth Semester

TEXTILE TECHNOLOGY

U07TT401: Yarn Manufacturing Technology II

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

Answer ALL Questions:-

PARTA (10 x 1 = 10 Marks)

1. The lift of the package (bobbin) is ---------- in modern speed frame

   (a) 8” (b) 10” (c) 14” (d) 16”

2. The ratio (ring diameter) / (tube height) is ---------

   (a) 0.2-0.225 (b) 0.4-0.5 (c) 0.6-0.8 (d) 0.9-0.95

3. Ring-spun yarn Tensile strength is ---------- than Rotor spun yarn

   (a) less (b) Higher (c) same (d) very low

4. Ring spun yarn is ------- tendency to snarl

   (a) high (b) low (c) very low (d) very high

5. Wide grooves rotor give a ---------- yarn

   (a) hard (b) soft, voluminous (c)soft (d) bulk

6. winding angle of cylindrical packages is ---------- in rotor spinning

   (a) 33-36^0 (b) 40^0 (c) 42-45^0 (d) above 50^0

7. COM 4 yarn hairiness is --------- lower than ring spun yarn

   (a) 20% (b) 50% (c) 30% (d) 40%

8. The yarn tension is maximum in ----------

   (a) rotor spinning (b) ring spinning (c) friction spinning (d) air jet spinning

9. The Rotor spun yarn fibre orientation is ---------- than in Ring yarn

   (a) good (b) superior (c) inferior (d) same

10. The optimum feed ratio of air jet spinning is ---------

    (a) 0.98 (b) 0.78 (c) 0.68 (d) 0.50

PART B (10 x 2 = 20 marks)

11. What is the feed ratio in air jet spinning?

12. State the advantage of COM 4

13. State applications of MJS and MVS yarns

14. What is PL yarn?
15. State specialty of compact ring spinning system.
16. What do you mean by loop yarns?
17. What is caterpillar yarn?
18. What are the difference types of navel?
19. What are important parameters of rotor?
20. How do you produce a higher package density?

PART C (5 x 14 = 70 Marks)

21. (a) Discuss the Technological design changes in modern speed frames.

(OR)

(b) Discuss the on-line process control system in speed frame.

22. (a) Explain the various drives systems in modern ring frames

(OR)

(b) Discuss the mechanism of end breakage in ring spinning

23. (a) Explain advantages of New spinning process

(OR)

(b) Describe the working principle of Dref 3 friction spinning

24. (a) Explain with neat sketch of air jet spinning working principle and their raw material requirements

(OR)

(b) Explain with neat sketch of Bobtex spinning working principle

25. (a) Describe working principle of TFO

(OR)

(b) Discuss the various types of fancy yarn and their production techniques

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