Register Number……

B.TECH. DEGREE EXAMINATIONS: NOVEMBER 2009

Fourth Semester

TEXTILE TECHNOLOGY

U07TT401: Yarn Manufacturing Technology II

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

Answer ALL the Questions:-

PART A (10 x 1 = 10 Marks)

1. Wrapping CV% of roving ---------- for cotton

   (a) 1.8–2.5 (b) 2.6–3.0 (c) 3.1–4.2 (d) 4.3–4.8

2. An increase in speed frame spindle speed increases ----------

   (a) decreases the number of roving breaks (b) increases the number of roving breaks

   (c) increases the thick places (d) increases the thin places

3. Increasing spinning tension from 2 to 4 cN /tex for 60^s Ne cotton yarn, the hairiness (2mm) decreases by ----------

   (a) 50% (b) 40% (c) 30% (d) 45%

4. If traveler mass is too small, the balloon will be ----------

   (a) too big (b) too small (c) medium (d) double time

5. Duospun is a ---------- process

   (a) false twist (b) twist spinning (c) wrapping (d) rubbing

6. Friction spun yarn tenacity is ---------- than rotor spun yarn

   (a) higher (b) better (c) lower (d) good

7. Air jet false- twist yarn have ----------

   (a) High tendency to snarl (b) low tendency to snarl

   (c) Low shrinkage (d) High shrinkage

8. Wrap parafil twisting unit is ----------

   (a) rotor (b) spindle (c) drum (d) rubbing roller

9. Adhesive twill feedstock type is ----------

   (a) sliver (b) roving (c) lab (d) double roving

10. In a set of two (or) three coloured threads, each yarn is feed faster than the others by turn to produce as ----------

    (a) Slub yarn (b) knob yarn (c) boucle yarn (d) spiral yarn

PART B (10 x 2 = 20 Marks)

11. What are the advantages of aerodynamically balanced flyers?
12. What is RATCHING?
13. What are the main requirements of a ring?
14. What are the different types of spindle drives used in ring frame?
15. What are the disadvantages of friction spinning?
16. What are two types of feed in rotor?
17. How do you select the rotor grooves for producing stronger fabric with a smooth appearance?
18. What are the yarn characteristics of Repco spinning yarn?
19. What is the principle of open end spinning?
20. State the disadvantages of condensed yarn spinning.

PART C (5 x 14 = 70 Marks)

21. (a) Discuss the roving quality parameter.

(OR)

(b) Describe the mechanism of winding and bobbin building technique.

22. (a) Discuss the yarn tension in ring spinning.

(OR)

(b) Explain with a neat sketch of a spindle, and their important parts.

23. (a) Discuss the friction spinning performance and yarn quality in relation to various influencing parameter.

(OR)

(b) Discuss the merits of friction spinning.

24. (a) Describe the working principle of Air jet spinning and their yarn quality.

(OR)

(b) What are air jets spinning process parameters that influence on yarn properties?

25. (a) Explain the various types and characteristics of fancy yarn.

(OR)

(b) Explain with sketch of Two-for-one twisting working principle and its yarn properties.

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