

**B.TECH. DEGREE EXAMINATIONS: NOV/DEC 2010**  
Third Semester  
**TEXTILE TECHNOLOGY (FASHION TECHNOLOGY)**  
FTY103: Yarn Technology

**Time: Three Hours**

**Maximum Marks: 100**

**Answer ALL Questions:-**

**PART A (10 x 1 = 10 Marks)**

1. The ginning machine which consists of two leather rollers is  
a. Saw gin      b. Knife roller gin      c. Single Macarthy gin      d. Double Macarthy gin
2. The process which removes short fibres from cotton is  
a. Carding      b. Drawing      c. Combing      d. Spinning
3. The process of removal of impurities from raw wool is  
a. Bleaching      b. Shearing      c. Gilling      d. Scouring
4. The compact spun yarn has  
1. Higher strength  
2. More elongation  
3. Lower strength  
4. less hairiness  
a. 1 & 2 is correct      b. 2 & 3 is correct      c. 3 & 4 is correct      d. 1 & 4 is correct
5. The rotor speed in open end spinning system ranges between  
a. 150rpm to 300rpm      b. 1000rpm to 2000 rpm  
c. 50000 rpm to 100000 rpm      d. 50 rpm to 100 rpm
6. The spinning system which produces yarn with higher strength is  
a. Ring      b. Rotor      c. Air jet      d. Dref
7. The following one is correct statement  
a. One revolution of the spindle produces two twists in Two For One twister.  
b. The main objective of cone winding is not to eliminate yarn faults.  
c. Assembly winder inserts twist in the resultant yarn.  
d. Reeling is the process of converting the ring cops to cone form.
8. One English Hank is equal to  
a. 840 yards      b. 840 inches      c. 120 yards      d. 1840 yards
9. The fibre dyed yarn is known as  
a. Dope      b. Tyre cord      c. Cable      d. Melange
10. The process which introduces loops and folds on synthetic filaments is  
a. Reeling      c. Texturisation      c. Scouring      d. Gilling

**PART B (10 x 2 = 20 Marks)**

11. Why ginning is important in cotton spinning system?
12. State the objectives of carding.
13. Distinguish between ring spun yarn and compact spun yarn.
14. Write the objectives of Gilling process.
15. What are the objectionable yarn faults?
16. State the properties of air jet spun yarn.
17. State the objectives of cone winding.
18. Why do we need the assembly winder in TFO doubling process?
19. State the essential quality requirements of sewing threads.
20. Name any four fancy yarns.

**PART C (5 x 14 = 70 Marks)**

21. a) Explain in detail the principle of working of saw gin with neat sketch.  
(OR)  
b) Discuss in detail the principle and working of modern carding machine with suitable diagram.
22. a) Write short note on  
(i) Solo spinning system (7)  
(ii) Compact spinning system (7)  
(OR)  
b) With a suitable flow chart explain in detail the sequence of process involved in the manufacturing of worsted yarn.
23. a) Explain in detail the working principle of rotor spinning system.  
(OR)  
b) Distinguish between the properties of yarn produced from various spinning systems.
24. a) Explain the passage of material through Two for one twister with neat sketch.  
(OR)  
b) Discuss in detail the causes and remedies of any five package faults occurring in cone winding machine.
25. a) Explain the Core spun yarn production technique in ring spinning frame.  
(OR)  
b) Elaborate on cotton sewing thread manufacturing process.

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