JAYA GROUP OF INSTITUTIONS –THIRUNINRAVUR
4TH SEM SEM-B.E/B.Tech
INTERNAL ASSESMENT-1(MODEL EXAMINATION –1)

Subject Name : Technology of yarn spinning Date : 31 /01/2015

Subject Code : TT6403 Branch: Textiles

Duration :**180minutes** Max.Marks:100

Part A (10X2=20) Answer all the Questions:

1. State the objectives of Ring spinning.
2. What is the importance of delta zone in Ring spinning?
3. State the different types of fluted rollers.
4. State the functions of a Traveler.
5. Name the different types of Top arm loading.
6. What do you mean by ABC Ring?
7. What is the principle of condensed yarn spinning?
8. State the methods of compaction of fibre strand.
9. State the limitations of condensed yarn spinning.
10. State the advantages of condensed yarn spinning.

Part – B **(5x16=80)**

11. A) Explain the principle and working of modern Ring spinning machine with relevant sketches. (16)

(OR)

B) Discuss the different types of Rings used in Ring frame with suitable sketches. (16)

12. A) Briefly discuss the types of Travelers used in Ring spinning machine. (16)

(OR)

B) With relevant sketches explain the types of Drives. (16)

13. A) In Ring spinning machine, how the ring rail got up and down motion and how the starting and ending point of chase length is changed? (16)

(OR)

B)i) State the causes and remedies for end breakages in Ring spinning. (8)

ii) In ring spinning machine having 3 bottom rollers (back, middle and front) having the diameters of 27mm, 25mm and 27mm. The speeds of the rollers are 6rpm, 9rpm and 200rpm. Calculate the all drafts. (Thickness of apron is 0.5mm) (8)

14. A) Explain the principle of Comforspin process with suitable sketches. (16)

(OR)

B) Explain the principle of EliTe spinning process with suitable sketches. (16)

15. A) Explain the principle of Rocos compact spinning process with suitable sketches. (16)

(OR)

B) Explain the principle of DREFF compact spinning process with suitable sketches.(16)