

JAYA GROUP OF INSTITUTIONS -THIRUNINRAVUR

4<sup>TH</sup> SEM SEM-B.E/B.Tech

INTERNAL ASSESMENT (MODEL EXAMINATION -II)

Subject Name : Technology of yarn spinning

Date : 10/03/2015

Subject Code : TT6403

Branch: Textiles

Duration :180minutes

Max.Marks:100

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

1. Write the basic principle of Rotor spinning.
2. What do you mean by Peripheral Twist Extend (PTE) in Rotor spinning?
3. What do you mean by back doubling or Redoubling?
4. What are the end uses of rotor spun yarn?
5. Differentiate between self pumping and external pumping.
6. State the objectives of yarn plying.
7. What are the different preparatory processes involved in yarn doubling?
8. Define fancy yarns.
9. What do you mean by chenille yarn?
10. If, two yarns of  $10^s$  and one yarn of  $20^s$  are folded together, calculate the resultant count of the yarn.

**Part - B**

**(5x16=80)**

11. A) Explain the principle and working of Rotor spinning machine with relevant sketches. (16)  
Or  
B) Discuss about the Assembling of fibres on the rotor groove with suitable sketches (16)
12. A) With neat sketches explain the types of Rotor groove and types of navels (8+8)  
Or  
B) Write a short note on
  - i) Integration of fibres in Rotor spinning
  - ii) Twist insertion in Rotor spinning
13. A) Explain the structure, Properties and end uses of Rotor spun yarn. (4+6+6)  
Or  
B) Explain the fancy yarn production and its structure which are produced from Ring spinning machine (16)
14. A) Explain the principle and working of TFO with relevant sketches. (16)  
Or  
B) Explain the principle and working of Ring doubling machine with relevant sketches. (16)
15. A) Explain the fancy yarn production and its structure which are produced from different techniques other than Ring spinning machine. (16)  
Or  
B) i) Write a short note on type of twists on doubled yarn.  
ii) Explain the fancy yarns which are produced by knitting and weaving. (8+8)