

**Fifth Semester**  
**Textile Technology**  
**Scheme OCBC 2019**  
**SPINNING - II**

*Time : Three Hours*

*Maximum Marks : 70*

**Note :** i) All 7 Questions are **Compulsory**. Internal choices has been given in each LO (Learning Outcome)

Q.	LO	Questions	Marks
1.	LO1	What are the objects of Doubling? Sketch and explain the working principle of T.F.O. How does it differ from Ring Twister?	10
	LO2	OR	
	LO2	What single count of cotton yarn will be required to double with 50 <sup>s</sup> cotton yarn to give a doubled count of 20 <sup>s</sup> ?	10
2.	LO3	Mention the features of latest Rieter's Draw Frame. How does it differ from conventional? Draw frame with reference to its construction and working.	10
	LO4	OR	
	LO4	With a neat and labelled sketch explain the working of heavy part and material separator.	10
3.	LO5	What is R/F automation? Discuss the features of latest R/F with reference to its construction and working.	10
	LO6	OR	
	LO6	What are the stages of processing that contribute largely to the yarn unevenness? Explain.	10

Q.	LO	Questions	Marks
4.	LO7	With a neat sketch describe the passage of material through an O.E. (rotor) machine. OR	10
	LO8	Discuss the sliver preparation for O.E. yarn. Compare O.E and R/F yarn.	10
5.	LO9	Explain the principle of operation of air jet spinning. Where you will use air jet spun yarn? OR	10
	LO10	Sketch and explain the principle of friction spinning and also compare air jet and motor yarn.	10
6.	LO2	If a single 20 <sup>s</sup> single 24 <sup>s</sup> and 30 <sup>s</sup> are twisted than calculate the weight of each in 300 pound of trusted yarn and the resultant count. OR	10
	LO8	If the rotor speed is 44000 r.p.m. and a yarn of 24 <sup>Ne</sup> is produced with a twist factor of 4.5 than calculate the production/unit in gram/hour.	10
7.	LO2	In a Ring Twister if the spindle speed is 10,000 r.p.m. and yarn count's 2/40 <sup>s</sup> than calculate the production/spindle/8 hrs in gram having T.P.I. = 19.3 and efficiency 95%. OR	10
	LO5	What is an End Break Aspirator? Where it is used? Sketch and explain its working.	10

