

**Fourth Semester**  
**Textile Technology**  
**Scheme OCBC 2019**  
**SPINNING - I**

**Time : Three Hours**

**Maximum Marks : 70**

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

Q.	LO	Questions	Marks
1.	LO1	What is top roller loading on a Draw Frame? With sketches explain the various types of drafting system weightings as used on a Draw Frame.	10
	LO2	OR	
	LO2	Describe the working principle of autoleveller.	10
2.	LO3	What are the objects of sliver lap machine? Sketch and explain the working of sliver lap machine.	10
		OR	
	LO4	What are the objects of combing? With neat sketches explain the working of a Nasmith Comber.	10
3.	LO5	What are the objects of Speed Frame? Sketch and describe the passage of material through a Speed Frame.	10
		OR	
	LO6	What are roving defects and explain how there are eliminated?	10
4.	LO7	Sketch and explain PK-225 and PK-235 drafting systems as used on Ring Frame.	10
		OR	

Q.	LO	Questions	Marks
	<b>LO8</b>	Discuss the various types of yarn faults and give remedies.	10
5.	<b>LO9</b>	In a comber the linear density of lap fed is 70 kg.tex and waste is 20%. If the comber delivers 7 kg.tex sliver. Find the M.D. The comber has 6 heads.	10
	<b>LO10</b>	OR A Ring Frame runs at 12000 r.p.m. and produces 64s yarn with 3.75 T.M. If the efficiency of the machine is 90% and production / shift / spindle is 1.4 ounce, how much is the tape slippage.	10
6.	<b>LO9</b>	Find the production / spindle / 8 hrs. in kg of a speed frame with 85% efficiency spindle speed = 720 r.p.m., hank spun = 1.5 and TM = 1.4.	10
	<b>LO10</b>	OR 30s yarn is being produced on a certain Ring Frame with 1.5 hank moving. TM = 4.5, T.W. = 40T and C.P. = 50T. Calculate the draft constant and twist constant.	10
7.	<b>LO7</b>	Discuss the various types of rings and travellers used in a Ring Frame.	10
	<b>LO5</b>	OR What are the objects of building motion in a S/F? Explain with sketch how the building motion regulator and reverses the traverse of bobbin rail?	10

