

RGPV (DIPLOMA WING) BHOPAL		OCB CURRICULUM FOR THE COURSE		FORMAT- 3	Sheet No. 1/3
Branch	TEXTILE TECHNOLOGY		Semester	FIFTH	
Course Code	501	Course Name	SPINNING-II		
CourseOutcome 1	<b>To understand the TFO and doubling machine and process of spinning technology</b>			Teach Hrs	Marks
Learning Outcome 1	To understand the concepts, principles and details of TFO machine			10	10
CONTENT	The principles of two for one twisting, passage of material through the machine, important details and the production calculation of TFO				
Method of Assessment	Paper pen test				
Learning Outcome 2	To understand the concepts, principles and details of doubling machine and novelty yarns			10	10
CONTENT	The principles of plied yarn and doubling, s and z twist, passage of material through the machine, important details and double yarn calculations				
Method of Assessment	Paper pen test				
CourseOutcome 2	<b>To understand the key features of latest ring spinning preparatory machines</b>				
Learning Outcome 1	To understand the key features of latest spinning preparatory machines			10	10
CONTENT	Study of the processes and machines of latest spinning machines like Rieter's, LMW etc spinning preparation machines (blow room, carding, draw frame, comber and speed frame etc.				
Method of Assessment	Paper pen test				
Learning Outcome 2	To understand the attachments in latest spinning preparatory machine			10	10
CONTENT	Key features of all the latest spinning preparatory machines like blowroom, carding, drawframe, comber and speed frame, Auto levellers, dedusting machines, heavy part and metal separator, two way distributors, linking blow room and cards				
Method of Assessment	Paper pen test				

<b>CourseOutcome 3</b>	<b>To understand the key features of latest ring spinning machines</b>		
Learning Outcome 1	To understand the key features and attachments in latest spinning machine	10	10
CONTENT	Details of Ring frame automation, details of latest ring frame and attachments like roving stop motion, end break aspirators, piecing devices, automatic doffing etc.		
Method of Assessment	Paper pen test		
Learning Outcome 2	To understand the processing parameters and spin plan preparation	10	10
CONTENT	The process control in spinning including the material characteristics like twist, hank, speeds and waste extracted at different stages like lap, sliver, roving and yarn. The spin plan preparation and the number of spindles or machines required at each process.		
Method of Assessment	Paper pen test		
<b>CourseOutcome 4</b>	<b>To understand the rotor spinning processes and machine details</b>		
Learning Outcome 1	To understand the concepts, principles and details of rotor spinning machines	10	10
CONTENT	Principle of rotor spinning, passage of material through OE spg machine, sliver preparation, fibre opening, fibre transfer, twist insertion,		
Method of Assessment	Paper pen test		
Learning Outcome 2	To understand the processing of material on rotor spinning machine	10	10
CONTENT	Sliver preparation for OE yarn, yarn characteristics, calculations of twist and production of rotor spinning machine. Comparison of OE and RF yarn		
Method of Assessment	Paper pen test		
<b>CourseOutcome 5</b>	<b>To understand the air jet spinning and friction spinning machines and processes</b>		
Learning Outcome 1	To understand the principles and key features of air jet spinning machine	10	10
CONTENT	Principle of operation, concept of high draft, passage of material, properties and uses of air jet spun yarn.		
Method of Assessment	Paper pen test		
Learning Outcome 2	To understand the principles and features of friction spinning machine	10	10

CONTENT	Principle of operation, concept , passage of material, properties and uses of friction yarn. Comparison of airjet, rotor and friction yarn
Method of Assessment	Paper pen test

CO 1

LO 3 To sketch the passage of material and calculate the production and efficiency of the TFO machine

CO 2

LO 3 To sketch the passage of material and calculate the production, draft and efficiency of the ring spinning machines

CO 3

LO 3 To calculate the spin plan for thr given quantity and parameters of yarn like number of spindles/machine required at each stage, waste extracted, quantity of material required.

CO 4

LO 3 To sketch the passage of material and calculate the production, draft and efficiency of the rotor spinning machine

CO 5

LO 3 To sketch and discuss the processes and characteristic of rotor, airjet and friction spun yarn.