RAJIV GANDHI PROUDYOGIKI VISHVAVIDYALAYA (DIPLOMA WING)

BHOPAL T02 DIPLOMA IN TEXTILE TECHNOLOGY

PART A:- PROCESS OF CURRICULUM DEVELOPMENT

LIST OF IDENTIFIED PROFESSIONAL ROLES

1. To apply knowledge of mathematics, science, and engineering.

2. To design and conduct experiments, as well as to analyze and interpret data.

3. To design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.

4. To function on multidisciplinary teams.

5. To identify, formulate, and solve engineering problems.

6. To understand professional and ethical responsibility.

7. To communicate effectively.

8. To understand the impact of engineering solutions in a global, economic, environmental, and societal context.

9. To engage in lifelong learning.

10. To use the techniques, skills, and modern engineering tools necessary for engineering practice.

LOs FORMATION

COURSE NAME: SPINNING-1 (401)
(Total 100 Hrs. , Total 100 Marks)

List of COs and Los

CO1: To understand the drawframe machine and drafting process of spinning technology. (20Hrs, 20 marks)

LO1: To understand the concepts, principles and details of drwframe machine (10 Hrs., 10 Marks)

LO2: To understand the processing of material on draw frame (10 Hrs., 10 Marks)

CO2: To understand the processes and machines of comber preparatory and comber.(20Hrs, 20 marks)

LO1: To understand machine and processes of comber prepratory(10 Hrs., 10 Marks)

LO2: To understand the machine and processes of comber (10 Hrs., 10 Marks)

CO3: To understand the speed frame processes and speed frame machine details (20Hrs, 20 marks)

LO1: To understand the concepts and principles of speed frame machine.(10 Hrs., 10 Marks)

LO2: To understand the processing of material on speed frame. (10 Hrs., 10 Marks)

CO4: To understand the ring frame processes and ring frame machine details (20Hrs, 20 marks)

LO1: To understand the concepts, principles and details of ringframe machines (10 Hrs., 10 Marks)

LO2: To understand the processing of material on ring frame (10 Hrs., 10Marks)

CO5: To learn the calculations related to various spinning processes (20 Hrs, 20 marks)

LO1: To calculate the various parameters related to drawframe, comber and speed frame. (10 Hrs, 10 Marks)

LO2: To calculate the various parameters related to ring frame. (10Hrs,10 Marks)

PART B:- CURRICULUM OF TEXTILE TECHNOLOGY

RGPV (Diploma Wing) Bhopal		COURSE PLAN				Format -2		Sheet No. 1/1	
Course Name		**SPINNING-1**				Semester		FOURTH	
Branch	TEXTILE TECHNOLOGY		Course Code	301	No. of COs		05	No. of LOs	10
Total Hrs. of Teaching Learning	100	Total Marks	100	Total no. of Assessments	10	Types of Assessments		No. of External Assessments	NIL

		DESCRIPTION OF OUTCOMES	T-L Hrs.	Max. Marks
CO 01	T024011	**drawframe machine and drafting process of spinning technology.**	20	20
Los	T0240111	To understand the concepts, principles and details of drwframe machine	10	10
	T0240112	To understand the processing of material on draw frame	10	10
CO 02	T024012	**To understand the processes and machines of comber preparatory and comber.**	20	20
Los	T0240121	To understand machine and processes of comber preparatory	10	10
	T0240122	To understand the machine and processes of comber	10	10
CO 03	T024013	**To understand the speed frame processes and speed frame machine details**	20	20
Los	T0240131	To understand the concepts and principles of speed frame machine.	10	10
	T0240132	To understand the processing of material on speed frame.	10	10
CO 04	T024014	**To understand the ring frame processes and ring frame machine details**	20	20
Los	T0240141	To understand the concepts, principles and details of ringframe machines	10	10
	T0240142	To understand the processing of material on ring frame	10	10
CO 05	T024015	**To learn the calculations related to various spinning processes**	20	20
Los	T0240151	To calculate the various parameters related to drawframe, comber and speed frame.	10	10

TO240152	To calculate the various parameters related to ring frame	10	10

RGPV (DIPLOMA WING) BHOPAL	OCB CURRICULUM FOR THE COURSE		FORMAT- 3	Sheet No. 1/3
Branch	TEXTILE TECHNOLOGY		Semester	FOURTH
Course Code	401	Course Name	**SPINNING-1**	

CourseOutcome 1	**Student will be able toexplain understand the drawframe machine and drafting process of spinning technology.**	Teach Hrs	Marks
Learning Outcome 1	**Student will be able toexplain** the concepts, principles and details of draw frame machine	10	10
CONTENT	Function, passage, parts and working of draw frame, various types of drafting systems weightings,		
Method of Assessment	Paper pen test		
Learning Outcome 2	**Student will be able toexplain** the processing of material on draw frame	10	10
CONTENT	Roller slip, settings, processing parameters, fibre controls, auto levelers, quality and productivity,faults in draw frame machine and material, maintenance schedule, web condensation and suction hood		
Method of Assessment	Paper pen test		
Learning Outcome3	**Student will be able to demonstrate** the passage of material and calculate the production, draft and efficiency of the draw frame machine		
CONTENT			
Method of Assessment	Laboratory Assessment		
CourseOutcome 2	**Student will be able to explain the processes and machines of comber preparatory and comber.**		
Learning Outcome 1	**Student will be able to explain** the machine and processes of comber preparatory	10	10
CONTENT	Introduction to comber preparatory, sliver lap, ribbon lap and super lap machines		

Method of Assessment	Paper pen test		
Learning Outcome 2	**Student will be able to explain** the machine and processes of comber	10	10
CONTENT	Study of comber, combing cycle, timings, comber waste and maintenance		
Method of Assessment	Paper pen test		
Learning Outcome 3	**Student will be able to demonstrate** the passage of material and calculate the production, draft and efficiency of the comber and comber preparatory machines		
CONTENT			
Method of Assessment	Laboratory Assessment		
CourseOutcome 3	**Student will be able to explain the speed frame processes and speed frame machine details**		
Learning Outcome 1	**Student will be able to explain** the concepts and principles of speed frame machine.	10	10
CONTENT	Function, passage,parts of speed frame, diffencial motion,building motion		
Method of Assessment	Paper pen test		
Learning Outcome 2	**Student will be able to explain the** processing of material on speed frame.	10	10
CONTENT	Processing parameters, quality and productivity, faults and maintenance schedule of speed frame		
Method of Assessment	Paper pen test		
Learning Outcome3	**Student will be able t**o compute the passage of material and production, draft and efficiency of the speed frame machine		
CONTENT			
Method of Assessment	Laboratory Assessment		
CourseOutcome 4	**Student will be able to explain theinterpret ring frame processes and ring frame machine details**		
Learning Outcome 1	**Student will be able to explain the** concepts, principles and details of ringframe machines	10	10
CONTENT	Function, passage,parts of ring frame, drafting system, aprons and cots, spindle, rings and travellers		

Method of Assessment	Paper pen test		
Learning Outcome 2	**Student will be able to show** the processing of material on ring frame	10	10
CONTENT	Causes of end breaks, processing parameters, yarn faults, quality controls and productivity		
Method of Assessment	Paper pen test		
Learning Outcome3	**Student will be able to compute** the passage of material and calculate the production, draft and efficiency of the ring frame machine		
CONTENT			
Method of Assessment	Laboratory Assessment		
CourseOutcome 5	**Student will be able to distinguish various spinning processes**		
Learning Outcome 1	**Student will be able to** calculate the various parameters related to draw frame, comber and speed frame.	10	10
CONTENT	Calculation related to speeds, drafts, production, waste and efficiency of draw frame, comber and speed frame		
Method of Assessment	Paper pen test		
Learning Outcome 2	**Student will be able to calculate the** various parameters related to ring frame	10	10
CONTENT	Calculation related to speeds, drafts, production, waste and efficiency of ring frame, preparation of spin plan and machines balancing		
Method of Assessment	Paper pen test		
Learning Outcome3	**Student will be able toCaculate the** production, draft and efficiency of the spinning machine available in lab.		
CONTENT			
Method of Assessment	Laboratory Assessment		