Daffodil Polytechnic Institute, Institute Code: 50238

Subject Teacher : **Md. Obydullah Al Masum**
Subject Name : **Advanced Fabric Manufacturing-I**
Subject Code : **21261**
Technology : **Textile Technology**
Semester : **6th Textile (FM)**
Reference Book : **Textile Printing (Publisher: Prime Publication)**

Marks	Grade Point	Letter Grade	*Marks*	Grade Point	Letter Grade
80>	4.00	A+	55-59	2.75	B-
75-79	3.75	A	50-54	2.50	C+
70-74	3.50	A-	45-49	2.25	C
65-69	3.25	B+	40-44	2.00	D
60-64	3.00	B	0-39	0.00	F

Time Distribution (90min)	
Particular	Time
Greeting with students	5 Min
Previous class review	10 Min
Present class lecture	60 Min
Feedback	10 Min
Attendance	5 Min

THEORY LESSON PLAN

Chapter	Learning Area	Learning Outcome	Supporting Equipments
1.	**Warp Stop & Weft Stop Motion** 1.1 Define tertiary motion 1.2 Mention different types of tertiary motion 1.3 State the features of automatic loom 1.4 Define Warp stop motion 1.5 Describe the electrical warp stop motion 1.6 Define weft stop motion 1.7 Classify weft stop motion 1.8 Describe different types of wefts stop motion 1.9 Define weft mixing and weft patterning	1. To know about tertiary motion 2. To know the electrical warp stop motion 3. To know different types of wefts stop motion	Text Book, marker

	1.10 Differentiate between weft mixing and weft patterning		
2	**Dobby Shedding** 2.1 Define dobby shedding 2.2 Classify dobby shedding 2.3 Describe positive dobby shedding mechanism 2.4 Describe negative dobby shedding mechanism 2.5 Distinguish between negative and positive dobby shedding	1. To know the dobby shedding 2. To know the positive dobby shedding mechanism 3. To know the Distinguish between negative and positive dobby shedding	Text book, marker
3	**Jacquard Shedding** 3.1 Define jacquard shedding 3.2 Classify jacquard shedding 3.3 Comparison among various types of jacquard shedding 3.4 Discuss the building of jacquard harness system 3.5 Describe the various types of harness tie-up 3.6 Analyze the lifting loss of jacquard loom 3.7 Calculate the production of dobby and jacquard loom	1. To know about jacquard shedding 2. To know the various types of harness tie-up 3. To Calculate the production of dobby and jacquard loom	Text Book, Marker
Quiz Test - 1 Date:		**Evaluation of Chapter- 1 2 & 3**	**Questions & answers script**
4	**Modern/Shuttle less Loom** 4.1 Define modern loom 4.2 State the features of modern loom 4.3 List the types of modern loom 4.4 Differentiate between shuttle loom and	1. To know about modern loom 2. To knowDifferentiate between	Text Book, Marker

	modern loom 4.5 Describe the weft accumulator/ weft feeder of modern loom	shuttle loom and modern loom	
5	**Projectile Loom** 5.1 Define projectile weaving 5.2 State the features of projectile loom 5.3 Describe the main parts of projectile loom 5.4 Illustrate the working principle of projectile loom 5.5 Discuss the advantages and disadvantages of projectile loom	1. To know about projectile weaving 2. To know the the working principle of projectile loom 3. To know the advantages and disadvantages of projectile loom	Text Book, Marker & Link:
6	**Rapier Loom** 6.1 Define rapier weaving 6.2 State the features of rapier loom 6.3 Explain the classification of rapier loom 6.4 Mention the advantages and disadvantages of various types of rapier loom 6.5 Describe the working principle of dewas system for flexible rapier	1. To know the rapier weaving 2. To know the classification of rapier loom	Text book,, Marker
Class Test - 1 Date:		**Evaluation of Chapter- 4 5 & 6**	**Questions & answers script**
7	**Jet Loom** 7.1 Define jet loom 7.2 Classify jet loom 7.3 Define air jet weaving 7.4 State the advantages and disadvantages of air jet weaving	1. To know about jet loom 2. To know advantages and disadvantages of air jet weaving	Text book, Marker

	7.5 Discuss the working principle of weft insertion configuration of air jet weaving machine 7.6 State the air quality of air jet weaving 7.7 Define water jet weaving 7.8 State the quality of water used in water jet weaving 7.9 Mention the advantages and disadvantages of water jet weaving	3. To know the the working principle of weft insertion configuration of air jet weaving machine	
MID TERM EXAM - (Exam starts)		**Syllabus: Chapter 1-7**	
8	**Characteristics of modern Loom** 8.1 Discuss the characteristics of the fabrics produced in projectile loom 8.2 Discuss the characteristics of the fabrics produced in rapier loom 8.3 Discuss the characteristics of the fabrics produced in jet loom 8.4 Calculate the production of different modern loom	1. To know the characteristics of the fabrics produced in projectile loom 2. To Calculate the production of different modern loom	Text book, Marker
9	**Denim** 9.1 Define denim fabric 9.2 State the main features of denim fabric 9.3 Describe the raw materials used in denim fabric 9.4 Explain the types of denim fabric 9.5 Discuss the warp preparation of slasher denim manufacturing process 9.6 Discuss the warp preparation of rope dyeing denim manufacturing process 9.7 Describe the finishing process of denim	1. To know the raw materials used in denim fabric 2. To know the warp preparation of slasher denim manufacturig process	Text book, Marker

	fabric 9.8 Describe the end uses of denim fabric		
10	**Pile Fabric** 10.1 Define Pile fabric 10.2 Classify pile fabric 10.3 Describe the structure of different pile fabrics 10.4 Mention the construction methods of different types of pile fabric	1. To know about pile fabric 2. To know the structure of different pile fabrics	Text book, Marker
Quiz Test - 2 Date:		**Evaluation of Chapter- 8 ,9 & 10**	**Questions & answers script**
11	**Terry towel** 11.1 Define terry towel 11.2 Classify terry towel 11.3 Describe the fiber used in terry towel 11.4 Describe the yarn used in terry towel 11.5 Discuss yarn properties of terry towel 11.6 Discuss the mechanism of pile formation 11.7 Design the structure of terry towel 11.8 Draw and point out different elements of terry towel 11.9 State the end uses of terry towel	1. To know about terry towel 2. To know the raw materials, properties of terry towel 3. To know the structure of terry towel	Text book, Marker
12	**Carpet** 12.1 Define carpet 12.2 State the properties of carpet 12.3 Describe the raw materials used in carpet 12.3 Explain the classification of carpet 12.4 Mention the methods of carpet manufacturing process 12.5 Illustrate uses of carpet 12.6 Describe the manufacturing process of tufted carpet.	1. To know about carpet 2. To know the classification, raw materials,manufacturing process of carpet	Text book, Marker

	12.7 State the end uses of tufted carpet.		
13	**Narrow Fabric** 13.1 Define narrow fabric 13.2 State the features of lace, braid, elastic, tape and ribbon 13.3 State the types of lace, braid, elastic, tape and ribbon 13.4 Explain the manufacturing process of braid 13.5 Mention the end uses of lace, braid, elastic, tape and ribbon	1. To know about narrow fabric 2. To know about lace, braid , elastic,tape and ribbon 3. To know the end use of lace, braid,elastic, tape and ribbon	Text book, Marker
Class Test - 2 Date:		**Evaluation of Chapter- 11 12,& 13**	**Questions & answers script**
14	**Weaving Management** 14.1 Define weaving management 14.2 State the time studies in weaving 14.3 Calculate the weaver's load distribution 14.4 State the causes of warp and weft yarn breakage in weaving 14.5 Explain the factors controlling loom efficiencies 14.6 Describe basic production planning in weaving	1. To know the weaving management 2. To calculate the weaver's load distribution 3. To know the basic production planning in weaving	Text book, Marker
15	**Woven Fabric Inspection** 15.1 Describe inspection machine of woven fabric 15.2 Calculate the penalty points (4 points, 10 points) of grey and finished woven fabric 15.3 Discuss the faults and remedies of grey woven fabric	1. To know about inspection machine of woven fabric 2. To calculate the penalty points 3. To know the faults and	Text book, Marker

	15.4 Discuss the faults and remedies of finished woven fabric 15.5 Discuss the faults and remedies of denim fabric	remedies of finished woven fabric and denim fabric.	
Total Class & Quiz Tests: 4		**Total Class:**	

PRACTICAL LESSON PLAN

Chapter	Learning Area	Learning Outcome
1	**Observe Weft Stop Motion**	1.1 Observe the mechanism of side weft fork motion 1.2 Draw the diagram of side weft fork motion 1.3 Identify different parts of side weft fork motion 1.4 Maintain the record of performed experiment
2	**Observe Positive Dobby**	3.1 Observe the construction of positive dobby shedding mechanism 2.2 Observe the working principle of dobby shedding mechanism 2.3 Draw the shedding mechanism of positive dobby 2.4 Identify the different parts of positive dobby 2.5 Maintain the record of performed experiment
3	**Observe Jacquard**	3.1 Observe the construction of Jacquard mechanism 3.2 Observe the working principle of Jacquard mechanism 3.3 Draw the diagram of Jacquard shedding mechanism 3.4 Identify the different parts of Jacquard mechanism 3.5 Maintain the record of performed experiment

4	**Operate the Rapier Loom**	4.1 Observe the construction of picking system of rapier loom 4.2 Observe the working principle of picking system of rapier loom 4.3 Draw the diagram of picking system of rapier loom 4.4 Identify the different parts of picking system of rapier loom 4.5 Operate the Rapier Loom
5	**Operate the Fabric Inspection Machine**	5.1 Operate the fabric inspection machine 5.2 Inspect the supplied fabric roll and calculate of penalty points