



Daffodil Polytechnic Institute, Institute Code: 50238

**Subject Teacher** : Md. Obydullah Al Masum  
**Subject Name** : Advanced Short Staple Spinning  
**Subject Code** : 1972  
**Technology** : Textile Technology  
**Semester** : 7th Textile  
**Reference Book** : Advanced Short Staple Spinning (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.	<b>Understand the Concept of modern spinning machinery from Blow room to Ring frame.</b> 1.1 State the name and function of machineries used in modern Blow room. 1.2 Describe the modern development of Carding machine. 1.3 Discuss the development of drawing frame. 1.4 Describe the point to development in computerize Simplex and Ring frame.	1) To know about modern Spinning machineries from blow room 2) To know the modern development of carding machine, development of drawing machine, development in computerised simplex ring frame	Text Book, marker & Link:
2	<b>Understand the polyester and cotton blended yarn processing.</b>	1) To know about blended yarn	Text book, marker &

	2.1 State the importance of blended yarn 2.2 State the properties of fibres considered for p/c blended yarn. 2.3 Mention the blending ratio of polyester & cotton for different count of p/c blended yarn 2.4 Show the flow chart of p/c blended yarn production. 2.5 Learn the blended test. 2.6 Mention the necessary changes/works to be done for p/c blended yarn production from blow room section to ring frame 2.7 Solve the relevant problems of p/c blended yarn production.	2) To know blending ratio of polyester and cotton for PC blended yarn 3) To learn the blended taste 4) To know the necessary changes to be done for PC blended yarn production	Link:
<b>Quiz Test - 1 Date:</b>		<b>Evaluation of Chapter- 1 &amp; 2</b>	<b>Questions &amp; answers script</b>
3	<b>Understand viscose cotton blended yarn.</b> 3.1 Mention the flow chart of viscose cotton blended yarn production. 3.2 Discuss the different of p/c & v/c blending process. 3.3 List the properties of viscose- cotton blended yarn. 3.4 Describe merits and demerits, uses of viscose-cotton blended yarn.	1) To Know the flowChart of Viscose cotton blended yarn production 2) To know the properties of viscous-cotton blended earn 3) To know the merits and demerits,uses of viscous-cotton blended	Text Book, Marker & Link:
4	<b>Understand Core yarn spinning.</b> 4.1 Define core spun yarn. 4.2 Discuss the method of manufacturing core-spun yarn by Ring frame. 4.3 Mention the raw material requirements for core-spun yarn. 4.4 Describe the application of core-spun yarn. 4.5 State the properties of core yarn.	1) To know about core spun yarn 2) To know the method of manufacturing core spun yarn by ring frame 3) To know the application of core spun yarn and properties of core yarn	Text Book, Marker & Link:
<b>Class Test - 1 Date:</b>		<b>Evaluation of Chapter- 3 &amp; 4</b>	<b>Questions &amp; answers script</b>
5	<b>Understand open end spinning.</b> 5.1 Define the open end spinning.	1) To know the open end spinning,Flowchart of	Text Book, Marker & Link:

	5.2 Mention the flow chart of open end spinning. 5.3 Discuss briefly the following modern spinning system. a). Air Jet spinning. b). Vortex spinning c). Electrostatic spinning. d). Friction spinning.	open end spinning  2) To know about Air jet spinning, vortex spinning, electrostatic spinning and friction spinning	
<b>MID TERM EXAM - (Exam starts from March 01)</b>		<b>Syllabus: Chapter 1-5</b>	
6	<b>Understand Rotor spinning.</b> 6.1 State Rotor spinning. 6.2 Discuss working principle of Rotor spinning. 6.3 Mention the merit & demerits of Rotor spinning. 6.4 Define Rotor deposit. 6.5 Describe the minimize of Rotor deposit. 6.6 Solve the relevant problems of rotor spinning. 6.7 Mention compare the Rotor yarn with Ring yarn.	1) To know about rotor spinning and working Principle of rotor spinning. 2) To know the merits and demerits of rotor spinning 3) To compare the rotor yarn with ring yarn	Text book,, Marker & Link:
7	<b>Understand about modern yarn product.</b> 7.1 Discuss the fancy yarn Manufacturing process. 7.2 Discuss the mélange yarn Manufacturing process. 7.3 Discuss the slub yarn production process. 7.4 Discuss the compact yarn production process.	1) To know the Fancy yarn manufacturing process, slub yarn production process compact yarn production process mélange yarn production process	Text book, Marker & Link:
<b>Quiz Test - 2 Date:</b>		<b>Evaluation of Chapter- 6 &amp; 7</b>	<b>Questions &amp; answers script</b>
8	<b>Understand spin plan</b> 8.1 State the importance of spin plan 8.2 Mention the factors to be considered for calculation spin plan. 8.3 State parameters, types of parameters and value of different parameters for different count and systems (conventional, modern) 8.4 Prepare spin plan for different count 2 system (conventional, modern)	1) To know about importance of spin plan, parameters, types of parameters and value of different parameters for different count and system	Text book, Marker & Link:

9	<b>Understand process control.</b> 9.1 State the waste control of short spinning process. 9.2 State types of wastage produce in cotton spinning process. 9.3 Recycling wastage produce in cotton spinning process.	1) To know about waste control of short spinning process 2) To know recycling wastage process in Spinning Mill	Text book, Marker & Link:
<b>Class Test - 2 Date:</b>		<b>Evaluation of Chapter- 8 &amp; 9</b>	<b>Questions &amp; answers script</b>
10	<b>Understand the yarn production cost.</b> 10.1 Define costing. 10.2 Classify the different types of cost involve in spinning mill. 10.3 Analysis the fixed cost, variable cost, of spinning mill. 10.4 Calculate the break-even point of spinning mill.	1) To know about yarn production cost, fixed cost, variable cost of a spinning mill 2) To calculate the break even point of spinning mill	Marker, Text Book & Link:
<b>Submission of Assignment or Presentation (All Chapters)</b>		<b>Date:</b>	
<b>Total Class &amp; Quiz Tests: 4</b>		<b>Total Class: 30</b>	

### PRACTICAL LESSON PLAN

1. Draw the Rotor spinning m/c. and indicate the different part.
2. Draw the Air Jet spinning m/c. and indicate the different part.
3. List the change places from blow room to Ring frame.
4. Sketch and show core yarn cross-section.
5. Sketch and show the slub yarn parameter.