Marks	Grade Point	Letter Grade	Marks	Grade Point	Letter Grade
80-100	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

Daffodil Polytechnic Institute, Institute Code: 50238

Lesson Plan – Academic session: November 21 to April 2022

Subject Teacher : Muhammad Zayedul Haque
Subject Name : Textile Testing & Quality Control- 1
Subject Code : 1944
Technology : Textile
Semester : 4th
Reference Book : Textile Testing & Quality Control- 1 (RS Prokashani)

Mark Distribution (for 150 Marks)			
Theory Marks		**Practical Marks**	
Midterm	10	PC	25
Class test	05	PF	25
Quiz test	05	-	-
Final	80	-	-
Total	**100**	**Total**	**50**

Subject Aims:
Basic aspects of textile testing, humidity, moisture in textiles, sampling, identification of textile fibers, fiber length & its measurement, fiber strength & its measurement, Trash, naps & their measurement, fiber fineness &its measurement, micromere value, fiber maturity

Subject Outcome:
Students will be understood with an opportunity to acquire knowledge & skill about Testing, Techniques & System of Testing. Operating system of different modern Testing instruments, Interpretation & Analysis of testing data uses & Maintenance of testing instruments.

REFERENCE BOOK

1. Textile Testing – J.E. booth.
2. Textile Testing-R. Gopalakrysnan.
3. Manual for Textile Testing- sitra.
4. ‡Uw÷s Ae †U·UvBj-Av. K. g dwi`yj AvRv`
   ‡U·UvBj †Uw÷s- BwÄwbqvi †gvt gwReyi ingvb

Lecture	Chapter	Learning Area	Learning Outcome	Supporting Equipment's
01	**Understand the Basic aspect of textile testing**	✔ What is a general testing? ✔ Then, define Textile Testing. ✔ Why do you do textile testing? ✔ You mention yourself the objects of textile testing. ✔ State the factors affecting test results. ✔ List the name of tests for fiber, yarn & fabric.	✔ Student will be able to gain basic things of textile testing, factors affecting test results, ✔ Name of tests for fiber, yarn & fabric. ✔ Student will understand the factors affecting test results and tests for fiber, yarn & fabric.	• White Board, Marker • Projector showing- • Slide Share • https://www.youtube.com/watch?v=1xG2QxQzki0

Lecture	Chapter	Learning Area	Learning Outcome	Supporting Equipment's
02	**Understand Humidity & its measurement.**	✔ Think about dew and air. ✔ Try to point out about humidity, relative humidity, absolute humidity. ✔ Standard atmosphere, testing atmosphere, conditioning. ✔ Discuss the effect of humidity on textile.	✔ Student will be able to gain basic things of humidity, relative humidity, absolute humidity. ✔ Name of tests for fiber, yarn & fabric. ✔ Student will understand the factors affecting test results and tests for fiber, yarn & fabric.	• White Board, Marker • Projector showing- • Slide Share • https://www.youtube.com/watch?v=cB3ZgeehLCE
03	**Understand Humidity & its measurement.**	✔ Describe the working principles of humidity measuring instrument, such as wet & dry bulb hygrometer. ✔ Discuss different machines used to measure the humidity of textile materials by drying oven, moisture meter	✔ Student will be able to gain basic things of textile testing, factors affecting test results, ✔ How to test for fiber, yarn & fabric. ✔ Student will understand the Standard atmosphere, testing atmosphere, conditioning	• White Board, Marker • Projector showing- • Slide Share • https://www.youtube.com/watch?v=cB3ZgeehLCE
04	**Quiz Test**	**Chapter 01 and 2 (Theoretically based)**	**Understand the chapter 1 & 2.**	Exam paper, Printed question paper etc.
05	PRACTICAL	Humidity measurement by wet & dry bulb hygrometer	✔ Student will be able to know how to Measure Humidity measurement by wet & dry bulb hygrometer. ✔ Student will be capable of mastering Humidity measurement	• White Board, Marker • Projector showing- • Slide Share • https://www.youtube.com/watch?v=90jKxRso27Y

Lecture	Chapter	Learning Area	Learning Outcome	Supporting Equipment's
06	**Understand moisture in textile.**	✔ Let's differentiate between Humidity and Moisture. ✔ Define moisture content, moisture regain, absorption, desorption, hysteresis effect. ✔ Mention the MC & MR of some important textile fibers (natural & man-made). ✔ Show the differences between them. ✔ Determine the factors affecting regain of textile materials.	✔ To know about basic things of moisture content, moisture regain, absorption, desorption, hysteresis effect, Mention the MC & MR and factors affecting regain of textile materials ✔ Student will be capable of knowing about MC & MR of some important textile fibers (natural & man-made). ✔ To be able to determine the factors affecting regain of textile materials.	• White Board, Marker • Projector showing- • Slide Share • https://www.youtube.com/watch?v=ot9LgqjuzXc • https://www.youtube.com/watch?v=90jKxRso27Y
07	Review class	Chapter:01,02&03 (Regarding students' problem)	Reviewing the Chapter according to student's problem.	• White Board, Marker • Projector showing- • Slide Share
08	**Class Test**	**Chapter 1, 2 & 3 (Theoretically based)**	**Understand the chapter 1, 2 & 3**	Exam paper, Printed question paper etc.
09	PRACTICAL	Measurement of humidity of textile material by drying oven	✔ Student will be able to know how to Measure humidity of textile material by drying oven. ✔ Student will be capable of mastering Measurement of humidity	• White Board, Marker • Projector showing- • Slide Share • https://www.youtube.com/watch?v=ot9LgqjuzXc

Lecture	Chapter	Learning Area	Learning Outcome	Supporting Equipment's
10	**Understand Sampling.**	✔ What is sample? ✔ What would be sampling? ✔ State the necessity of sampling. ✔ Describe the factors influencing sampling method. ✔ Discuss different fiber sampling method. ✔ define sampling scheme for HVI & AFIS testing	✔ To be able to define sample and sampling. ✔ Students can describe the factors influencing sampling method, sampling method. ✔ To know about basic things of sampling, sampling method and HVI & AFIS testing	• White Board, Marker • Projector showing- • Slide Share • https://www.youtube.com/watch?v=pTuj57uXWlk
11	**Understand Identification of textile fiber.**	✔ What is identification? ✔ What is fiber identification? ✔ Explain the necessity of fiber identification. ✔ State the methods of sample preparation for identification. ✔ Describe different identification process for fiber.	✔ Student will be able to identify fiber. ✔ Name of tests for fiber, yarn & fabric. ✔ Student will understand the factors affecting necessity of fiber identification for fiber, yarn & fabric. ✔ To realize the different identification process for fiber.	• White Board, Marker • Projector showing- • Slide Share • https://www.youtube.com/watch?v=RhWBmi_qcTE bangle • https://www.youtube.com/watch?v=kb4tCcnA6jo English
12	Review class	Chapter:04,05 (Regarding students' problem)	Reviewing the Chapter according to student's problem.	• White Board, Marker • Projector showing- • Slide Share
13	**Class Test + Quiz Test**	**Chapter 04 &05 (Theoretically based)**	**Understand the chapter 4 & 5.**	Exam paper, Printed question paper etc.

Lecture	Chapter	Learning Area	Learning Outcome	Supporting Equipment's
14	PRACTICAL	Fiber identification by (1) Microscopic test (ii) Burning test (iii) Chemical test	✔ Student will be able to know how to identify the fiber by (1) Microscopic test (ii) Burning test (iii) Chemical test ✔ Student will be capable of mastering Fiber identification	• White Board, Marker • Projector showing- • Slide Share • https://www.youtube.com/watch?v=RhWBmi_qcTE bangle • https://www.youtube.com/watch?v=kb4tCcnA6jo English
15	**Understand fiber length & its measurement.**	✔ Think about your length. ✔ Define fiber length. ✔ Why fiber length significant? ✔ State the importance of fibre length. ✔ Define the term: Staple length, effective length, mean length, modal length, spun length, floating fiber percentage, uniformity ratio. ✔ Describe the methods of fiber length measurement by conventional & modern instruments, such as comb sorter, digital fibro graph, HVI, AFIS	✔ To know about basic things of fibre length, Staple length, effective length, mean length, modal length, spun length, floating fiber & digital fibro graph, HVI, AFIS. ✔ Can describe the length measurement by conventional & modern instruments, such as comb sorter, digital fibro graph. ✔ Student can define: Staple length, effective length, mean length, modal length, spun length, floating fiber percentage, uniformity ratio.	• White Board, Marker • Projector showing- • Slide Share • https://www.youtube.com/watch?v=gm4DVkqiQGM

Lecture	Chapter	Learning Area	Learning Outcome	Supporting Equipment's
16	Review class	Chapter:01,02&03 (Regarding students' problem)	Reviewing the Chapter according to student's problem.	• White Board, Marker • Projector showing- • Slide Share
17	Review class	Chapter:04,05&06 (Regarding students' problem)	Reviewing the Chapter according to student's problem.	• White Board, Marker • Projector showing- • Slide Share
18	**Understand fiber strength & its measurement.**	✔ Say the importance of fiber strength. ✔ Mention the factors influencing fiber strength. ✔ Describe the methods of fiber strength measurement by pressley fiber bundle strength tester & stelometer.	✔ To be able to know about basic things of fiber strength, factors influencing fiber strength and fiber strength measurement by pressley fiber bundle strength tester & stelometer ✔ **Student can understand the description of** pressley fiber bundle strength	• White Board, Marker • Projector showing- • Slide Share • https://www.youtube.com/watch?v=Hj4a8RAHnOs
19	**Quiz Test**	**Chapter 07** **(Theoretically based)**	**Understand the Chapter 06.**	Exam paper, Printed question paper etc.
20	**Understand Trash, Neps & Their measurement**	✔ Define trash & Neps. ✔ Discus the necessity of trash & neps measurement.	✔ Student can perceive about basic thing trash & Neps and necessity of trash & neps measurement	• White Board, Marker • Projector showing- • Slide Share

Lecture	Chapter	Learning Area	Learning Outcome	Supporting Equipment's
21	PRACTICAL	Fiber length measurement by (i) Comb-sooter	✔ Student will be able to know how to measure the fiber strength by Comb-sooter. ✔ Student will be capable of mastering fiber strength measurement.	• White Board, Marker • Projector showing- • Slide Share • https://www.youtube.com/watch?v=gm4DVkqiQGM
22	Review class	Chapter:07&08 (Regarding students' problem)	Reviewing the Chapter according to student's problem.	• White Board, Marker • Projector showing- • Slide Share
23	**Class Test**	**Chapter 07 & 08 (Theoretically based)**	**Understand the Chapter 06 & 07**	Exam paper, Printed question paper etc
24	**Understand linear density or fiber fineness.**	✔ Define fiber linear density. ✔ Discuss the importance of fiber fineness measurement. ✔ Describe different methods & instruments for fiber fineness measurement.	✔ Students can define the linear density, importance of fiber fineness measurement & different methods & instruments for fiber fineness measurement. ✔ They will be able to know the importance of different methods & instruments for fiber fineness measurement.	• White Board, Marker • Projector showing- • Slide Share • https://www.youtube.com/watch?v=3n4xWrqSHyM
25	**Quiz Test**	**Chapter 09 (Theoretically based)**	**Understand the Chapter 09.**	Exam paper, Printed question paper etc.
26	**Understand Micron ire**	✔ State micron ire value & fiber maturity.	✔ To Know about the micron ire value & fiber maturity &	• White Board, Marker • Projector showing- • Slide Share

Lecture	Chapter	Learning Area	Learning Outcome	Supporting Equipment's
	value & fiber maturity.	✔ Explain the importance of micron ire value & fiber maturity	importance of micron ire value & fiber maturity	
27	PRACTICAL	Fiber strength measurement by (i) Pressley bundle strength tester	✔ Student will be able to know how to measure the fiber strength by this machine. ✔ Student will be capable of mastering fiber strength measurement.	• White Board, Marker • Projector showing- • Slide Share • https://www.youtube.com/watch?v=Hj4a8RAHnOs
28	**Understand Micron ire value & fiber maturity.**	✔ Classify cotton fiber according to mic value. ✔ Discuss the maturity measurement method.	To Know about the cotton fiber according to mic value and maturity measurement method.	**Exam paper, Printed question paper etc.**
29	**Class Test**	**Chapter 09 & 10 (Theoretically based)**	**Understand the Chapter 09 & 10**	Exam paper, Printed question paper etc.
30	Review class	Chapter: 01, 02&03. (Regarding students' problem)	Reviewing the Chapter according to student's problem.	• White Board, Marker • Projector showing- • Slide Share
31	Review class	Chapter: 04,05 &06 (Regarding students' problem)	Reviewing the Chapter according to student's problem.	• White Board, Marker • Projector showing- • Slide Share
32	Review class	Chapter: 07,08,09 &10 (Regarding students' problem)	Reviewing the Chapter according to student's problem.	• White Board, Marker • Projector showing- • Slide Share

Lecture	Chapter	Learning Area	Learning Outcome	Supporting Equipment's
33	**Model Test**	**Chapter: 1-10 (Theory based)**	**Reviewing the all syllabus.**	**Exam paper, Printed question paper etc.**