

LESSON PLAN

DEPARTMENT OF TEXTILE TECHNOLOGY, ITT, CHOUDWAR

SUBJECT: YARN MANUFACTURING -III

Periods: 4/Week

SEMESTER: 5th

NAME OF FACULTY: Sri Rajiblochana Sahoo

No. of weeks/Sem as per SCTE&VT, Odisha Textile Tech/ Engg Syllabus: 15

Week	Class Day	Theory / Practical Topics
1st	1 st	Revision of YM-II
	2 nd	Purpose of ring spinning
	3 rd	Study of passage of material in R/F
	4 th	Study of different parts and functions of R/F
2nd	1 st	Concept of modern drafting system in R/F
	2 nd	Top roller weighting system, top covering and mounting
	3 rd	Roller setting in R/F
	4 th	Concept of spinning triangle , cots and aprons
3rd	1 st	Study of rings and travelers
	2 nd	Study of function, size of rings and flange number, running in of rings
	3 rd	Study of traveler, types, traveler number
	4 th	Selection of proper traveler, factors affecting traveler
4 th	1 st	Concept of twist in R/F and winding
	2 nd	Study of driving mechanism in R/F
	3 rd	Study of build of bobbin, building motion in R/F
	4 th	End break aspiration data monitoring, piecing device
5 th	1 st	Study of end breakage rate and ballooning in R/F
	2 nd	Study of ring data, automatic doffing
	3 rd	Special attachment like, auto doffing and pneumatic loading
	4 th	Study of gearing diagram in R/F
6 th	1 st	Speed calculation in R/F
	2 nd	Maintainace schedule in R/F
	3 rd	Cost minimization and production efficiency in R/F
	4 th	Brief idea on compact spinning
7 th	1 st	Principles and concept of doubling
	2 nd	Concept of wet and dry doubling, methods of threading
	3 rd	Study of creels, building motion, spindles in doublers
	4 th	Concept of balanced twist in ring doublers
8 th	1 st	Twist in double yarn and its relation to single yarn
	2 nd	Twist calculation
	3 rd	Study of TFO
	4 th	Contd.... TFO
9 th	1 st	Study of fancy doubler and fancy yarns
	2 nd	Study of different types of yarn

	3 rd	Concept of cable yarn and cord yarn its uses
	4 th	Doubt clearing/ short fall class.
10 th	1 st	Need of modern spinning system
	2 nd	Working mechanism of rotor spinning
	3 rd	Study of friction spinning system
	4 th	Production calculation
11 th	1 st	Maintenance schedule
	2 nd	Gearing diagram
	3 rd	Concept of air jet spinning
	4 th	Study of twist less spinning
12 th	1 st	Brief idea on self twisted yarn
	2 nd	Study of Siro spinning
	3 rd	Calculation related to modern spinning
	4 th	Calculation related to modern spinning
13 th	1 st	Defects and remedies
	2 nd	Comparative study different spinning system
	3 rd	Concept of woolen spinning
	4 th	Wool opening, cleaning and carding operation
14 th	1 st	Woolen spinning and worsted spinning system
	2 nd	Outline of Bradford and Continental system
	3 rd	Concept of worsted card and semi worsted card
	4 th	Study of Gill box concept
15 th	1 st	Study of filament yarn
	2 nd	Brief study on worsted D/F, R/F and finisher R/F
	3 rd	Yarn quality parameter analysis
	4 th	Doubt clearing/ Revision

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