

Government Polytechnic for Women, Faridabad

Lesson Plan

Name of Faculty : Mr. B.K. Chutani (Theory)

Discipline : Mechanical Engineering

Semester : 6th

Subject : Industrial Engineering

Lesson Plan Duration : 15 weeks (from January 2020 to April 2020)

Work Load (Lectures) per week (in hours): Lectures-04

WEEK	THEORY	
	Lecture Day	Topic (Including Assignment / Test)
1 st	1 st	1.Productivity • Introduction to productivity • Factors affecting productivity
	2 nd	• Measurement of productivity • Causes of low productivity
	3 rd	• Methods to improve productivity
	4 th	Test of chapter-1
2 nd	5 th	2. Work Study • Definition and scope of work study
	6 th	• Interrelation between method study and work measurement
	7 th	• Human aspect of work study
	8 th	• Role of work study in improving productivity Assignment Topic: • Productivity • Work study and its scope • Relation between method study and work measurement

3 rd	9 th	Test of chapter -2
	10 th	3. Method Study Objectives
	11 th	Procedure for method analysis
	12 th	Information collection of method study
4 th	13 th	Recording techniques of method study
	14 th	Test of chapter-3
	15 th	4. Motion Analysis Principle's
	16 th	- Therbligs - SIMO charts
5 th	17 th	Normal work area
	18 th	Design of work places
	19 th	Ergonomics Assignment Topic: - Objective, procedure and techniques of method study - Therbligs - SIMO Chart - Ergonomics
	20 th	Test of chapter-4
6 th	21 st	5. Work Measurement - Objectives - Techniques
	22 nd	Stop watch time study - Principle - Equipment
	23 rd	Procedure
	24 th	System of performance rating
7 th	25 th	Calculation of basic time
	26 th	Various allowances
	27 th	Calculation of standard time
	28 th	Work Sampling

8 th	29 th	Standard data and its usage
	30 th	Test of chapter-5
	31 st	6. Wages and Incentives Schemes - Introduction - Wage payment for direct labour
	32 nd	- Wage payment for indirect labour - Wage payment planes
9 th	33 rd	Wage incentives
	34 th	Various incentive planes
	35 th	- Incentive for direct labour Assignment Topic: - Work measurement techniques - Work sampling - Wage payment for direct and indirect labour - Incentive plans
	36 th	Test of chapter-6
10 th	37 th	7. Production Planning and Control - Introduction - Objectives
	38 th	Functions of P.P.C
	39 th	Advantages of - Production planning - Production control
	40 th	Stages of P.P.C - Planning - Routing
11 th	41 st	- Scheduling - Dispatching and follow up
	42 nd	Routing - Purpose - Route sheets
	43 rd	- Scheduling purpose - Machine loading chart
	44 th	Gantt chart

12 th	45 th	Dispatching • Purpose and procedure Follow up • Purpose and procedure
	46 th	CPM Techniques
	47 th	PERT Techniques
	48 th	• Drawing of simple networks
13 th	49 th	• Critical time calculation
	50 th	• Production control in job order
	51 st	• Types of productions • Difference between controls of production
	52 nd	Test of chapter-7
14 th	53 rd	8. Estimating and Costing • Introduction • Purpose
	54 th	• Functions
	55 th	• Costing concept
	56 th	• Ladder of cost • Elements of cost
15 th	57 th	Difference between estimation and costing