

Yamuna Polytechnic for Engineering, Gadholi

Lesson Plan for Even Semester 2018

Name of Faculty : Sh. Yogesh Bhardwaj

Discipline : Automobile Engineering

Semester : VI

Subject: **Industrial Engineering**

Lesson Plan Duration :

15 Weeks w.e.f

09/01/2018

Week	Theory		Practical	
	Lectuer Day	Topic (including assignment/test)	Practical Day	Topic
I	1	1.Introduction to Industrial Engg., Concept of productivity		
	2	Factors Affecting productivity		
	3	Measurement of Productivity		
	4	Causes of Low Productivity		
II	5	Methods to improve productivity		
	6	Methods to improve productivity		
	7	Introduction to Work Study, Definition, Importance of Work Study		
	8	Scope and Applications of work study		
III	9	Introduction to Method Study		
	10	Concept of Work measurement		
	11	Inter-relation between method study and work measurement		
	12	Human aspects of work study		
IV	13	Work Study and Ergonomics		
	14	Historical Developments, The Work of Taylor		
	15	The Work of Gilbreths		
	16	Role of work study in improving productivity		
V	17	Review of Work Study		
	18	Introduction to Method Study, Definition		
	19	Objectives of Method Study		
	20	Procedure for Method analysis		
VI	21	Select the job – on which method study is to be applied		
	22	Obtain information and record		
	23	Examine the Information Critically		
	24	Develop the most practical, economical and effective method by considering real limitations of the situation		
VII	25	Install the new method as standard practice		
	26	Maintain the Standard Practice by Regular Follow Up		
	27	Principles of Motion analysis		
	28	Therbligs		
VIII	29	SIMO charts		
	30	Use of SIMO charts & Draw SIMO Chart		
	31	Normal Work Area and Design of Work Places		
	32	Ergonomics		

IX	33	Checking of Class work & Assignment –I
	34	Introduction to Work Measurement, Definition & its Objectives
	35	Work measurement techniques, stop watch time study
	36	Procedure of Time Study, Equipment used, Selection of Job & Selection of Worker for time Study
X	37	Systems of performance rating, Normal Performance
	38	Calculation of basic times and various allowances
	39	Calculation of standard time(Numerical)
	40	Numerical problems on Calculation of Standard time and Normal Time
XI	41	Work sampling, standard data and its usage, Advantage and Disadvantages
	42	Introduction to wages, Wage payment for direct and indirect labor
	43	Various Wage payment plans
	44	Incentives and various incentive plans
XII	45	incentives for indirect labor, Numerical on Wage Payments
	46	Production Planning and Control, introduction, objectives and components (functions) of P.P.C
	47	Advantages of production planning and Production Control, stages of P.P.C
	48	process planning, routing, scheduling
XIII	49	scheduling – purpose, machine loading chart, Gantt chart,
	50	dispatching and follow up, routing purpose, route sheets
	51	Dispatching – purpose, and procedure, follow up – purpose and procedure.
	52	Introduction to CPM/PERT technique, Objectives and Applications of CPM/PERT
XIV	53	Drawing of simple networks and critical time calculation
	54	Production Control in job order, batch type and continuous type of productions
	55	Introduction, purpose/functions of estimating, costing concept
	56	Ledger and elements of cost,difference between estimation and costing
XV	57	Overheads and their types
	58	Estimation of material cost & Cost for Machining processes
	59	Some numerical on Estimation & Costing of Mechanical Components
	60	Checking of Class Work & Assignment-II

Yamuna Polytechnic for Engineering, Gadholi

Lesson Plan for Even Semester 2018

Name of Faculty : Sh. NirmalJeet Singh

Discipline : Automobile Engineering

Semester : VI

Subject: **EDM**

Lesson Plan Duration :

15 Weeks w.e.f

09/01/2018

Week	Theory		Practical	
	Lectuer Day	Topic (including assignment/test)	Practical Day	Topic
I	1	Concept /Meaning and its need Qualities and functions of entrepreneur and barriers in entrepreneurship		
	2	Sole proprietorship and partnership forms of business organization		
	3	ASSIGNMENT : Schemes of assistance by entrepreneurial support agencies at National, State, District level: NSIC, NRDC, DC:MSME, SIDBI, NABARD, Commercial Banks, SFC's TCO, KVIB, DIC, Technology Business Incubator (TBI) and Science and Technology Entrepreneur Parks (STEP).		
II	4	Market Survey and Opportunity Identification (10 hrs.): Scanning of business environment		
	5	Salient features of National and State industrial policies and resultant business opportunities		
	6	Types and conduct of market survey		
III	7	Assessment of demand and supply in potential areas of growth		
	8	Identifying business opportunity		
	9	Considerations in product selection		
IV	10	Project report Preparation: Preliminary project report		
	11	Detailed project report including technical, economic and market feasibility		
	12	Common errors in project report preparations: Exercises on preparation of project report		
V	13	Introduction to Management : Definitions and importance of management		
	14	Functions of management: Importance and Process of planning, organising, staffing, directing and controlling		
	15	Principles of management (Henri Fayol, F.W. Taylor) Concept and structure of an organization		
VI	16	Types of industrial organizations a)Line organization b)Line and staff organization c)Functional Organization		
	17	FEEDBACK of previous chapter/ test		

VII	18	Leadership and Motivation a) Leadership: Definition and Need
	19	Qualities and functions of a leader
	20	Manager V/s leader
	21	Types of leadership
VIII	22	Motivation : Definitions and characteristics
	23	Factors affecting motivation
	24	Theories of motivation (Maslow, Herzberg, McGregor)
IX	25	FEEDBACK of previous chapter/ test
	26	Management Scope in Different Areas a) Human Resource Management Introduction and objective
	27	Introduction to Man power planning, recruitment and selection
X	28	Introduction to performance appraisal methods
	29	Material and Store Management Introduction functions, and objectives
	30	ABC Analysis and EOQ
XI	31	Marketing and sales: Introduction, importance, and its functions
	32	Physical distribution
	33	Introduction to promotion mix
XII	34	Sales promotion
	35	Financial Management: Introductions, importance and its functions
	36	Elementary knowledge of income tax, sales tax, excise duty, custom duty and VAT
XIII	37	Miscellaneous Topics : Customer Relation Management (CRM): Definition and need
	38	Types of CRM
	39	Total Quality Management (TQM): Statistical process control
XIV	40	Total employees Involvement
	41	Just in time (JIT)
	42	Intellectual Property Right (IPR) Introductions, definition and its importance
XV	43	Infringement related to patents, copy right, trade mark
	44	FEEDBACK of previous chapter/ test
	45	FEEDBACK of previous chapter/ test

Yamuna Polytechnic for Engineering, Gadholi

Lesson Plan for Even Semester 2018

Name of Faculty : Sh.Gurpreet Singh

Discipline : **Automobile Engineering**

Semester : VI

Subject: **TRACTOR AND SPECIAL PURPOSE VEHICLES**

Lesson Plan Duration :

15 Weeks w.e.f

09/01/2018

WEEK	DAY	THEORY (Topic including assignment/test)		
I	1	Classification of tractors,		
	2	main tractor assemblies		
	3	types of engine used,		
II	4	human factor in tractor design		
	5	applications of tractors		
	6	Basics trends in tractor design		
III	7	forces acting on a tractor on move		
	8	parallel pull and rolling resistance		
	9	tractor stability		
IV	10	Weight performance		
	11	Types of clutch used in tractors		
	12	transmission system buyout		
V	13	final drive		
	14	Reduction gear		
	15	tractor brake system		
VI	16	operator seat design		
	17	Power take off shaft		
	18	draw bar working		
VII	19	double clutch system traction control unit		
	20	belt pulley three point linkages		
	21	Salient features of wheels.		
VIII	22	Salient features of tyres.		
	23	Salient features of wheel base/wheel tracks.		
	24	Specifications of wheels.		
IX	25	Specifications tyres.		
	26	dual versus tendum tyres		
	27	tread design		
X	28	effect of tyre inflation.		
	29	Functions of hydraulic system.		
	30	hydraulic system layout		
XI	31	various components of hydraulic system and their functions		
	32	Methods of attaching implements		
	33	Various control systems – depth control, position control		
XII	34	draft control, combination control		
	35	Working of hydraulic control levers		
	36	other uses of hydraulic control system		
XIII	37	Special purpose vehicle		

	38	Description and working principles of Bull Dozer		
	39	Bull Dozer		
XIV	40	Front end loader		
	41	Front end load		
	42	Fire station vehicle		
XV	43	Fire station vehicle		
	44	Cranes		
	45	Cranes		

Yamuna Polytechnic for Engineering, Gadholi

Lesson Plan for Even Semester 2018

Name of Faculty : Sh. O.P.Gera

Discipline : Automobile Engineering

Semester : VI

Subject: **EMPLOYABILITY SKILLS – II**

Lesson Plan Duration :

15 Weeks w.e.f 09/01/2018

Week	Theory		Practical						
	Lectuer Day	Topic (including assignment/test)	Practical Day	Topic					
I	1		1	How to prepare a resume and Covering Letter, How to Face Interview Do's and Don't During Interviews					
	2								
	3								
II	4			2	Mock Interview practice				
	5								
	6								
III	7				3	Make a Check list to attend a meeting with Senior, peer & subordinate			
	8								
	9								
IV	10					4	Mock meeting		
	11								
	12								
V	13						5	Group discussion rules, points to be remember during GD	
	14								
	15								
VI	16							6	Group Discussion
	17								
	18								

VII	19	7	Group Discussion		
	20				
	21				
VIII	22				
	23			8	How to make a power point Presentation, Elements of Good Presentation, Various Tools used to make a presentation.
	24				
IX	25			9	Power Point Presentation (10 Minutes only)
	26				
	27				
X	28			10	Power Point Presentation (10 Minutes only)
	29				
	30				
XI	31			11	Paper Reading Exercise
	32				
	33				
XII	34	12	Paper Reading Exercise		
	35				
	36				
XIII	37	13	To Give Seminar on any topic of Mech.Engg. With report		
	38				
	39				
XIV	40	14	To Give Seminar on any topic of Current Affair With report		
	41				
	42				
XV	43	15	Viva-Voce		
	44				
	45				