

Management of Manufacturing Systems

Unit	Topic (from syllabus)	Lecture No.	Lecture Plan Date	Sub-Topics (& References from Text-books)	Assessment	Exam
1	Introduction	1		Introduction ,T1-Pg-9-10	Assignment / Quizzes/Case Study/Presentation/ Role Ply	First Term Exams
		2		Management system , Production function TI- Pg 9-14		
		3		Production and Productivity,T1-Pg23-26		
		4		Different Approaches to measure Productivity and problems, T1-Pg.26-32		
	Plant Organization	5		Organization and Principles of Organizations, T1-Pg 601-604		
		6		Organization structure and types, T1- Pg-604-605		
	Plant Layout	7		Plant location and site selection,T1-Pg 69-78		
		8		Types of plant layout- Process, Product and combination,T1- Pg 81-86		
		9		Economics of plant layout and group technology, T1-Pg87-88		
2	Production Planning and Control	10		Types of product and demand forecasting T1-Pg 46-50		
		11		Forecasting techniques- Curve fitting , Moving average, Weighted Moving Average T1-Pg51-66		
		12		Forecasting techniques-exponential Smoothing and Regression Analysis, Problems. T1-Pg51-66		
		13		Marketing strategies T1-Pg 779-790		
		14		Production planning and control. T1-Pg 125-136		
	Method Study	15		Work study T1-Pg.369-371		
		16		Method study T1Pg 372-391		
		17		Method study procedure T1Pg 372-391		
		18		Recording techniques and problems T1-Pg.386-387		
		19		Micro motion study,SIMO ChartsT1-Pg 386-387		
	Work Measurement	20		Therbligs T1-Pg387-391		
		21		Work Measurement, objective and techniques T1 Pg 393-400		
22			Time study equipments T1 Pg 393-400			
23			Work sampling T1 Pg 404-409			
24			Allowances and types of allowances,standard time, PMTS T1 Pg 401-402			
3	Industrial Maintenance	25		Concept of maintenance		
		26		Organization of maintenance department		
		27		Types of maintenance		
		28		Breakdown and preventive maintenance		
		29		Organization of maintenance department		
	Inventory control and replacement analysis	30		Introduction to Inventory control T1 Pg343-344		
		31		Strategies for selective Inventory control, T1 Pg-261-263		
		32		EOQ Models -I,II T1 Pg245-254		
		33		EOQ Models -III, IV T1 Pg 255-261		
		34		EOQ problems		
		35		Replacement policy and Method adopted T1 Pg-225-231		
4	Management Concept	36		Development of Management, T1 Pg 587-589		
		37		Management Concept T1 Pg 592-593		
		38		Management Principles T1 Pg 589		
		39		Scientific Management T1 pg 589-590		
		40		Human Relation Aspects, T1 pg 590-592		
	Production Cost Concept	41		Cost of production		
		42		Cost centre and unit		
		43		Break Even Analysis, T1-Pg 217-223		
		44		Break Even Analysis Problems T1-Pg 217-223		
5	Beyond Syllabus	45		6-Sigma, Introduction of TQM, T1-Pg-467-491		
		46		ISO9000 & ISO 14000 T1, Pg 492-498		
					2nd term exam.	

List of Books

Text books:

- [T1]. Ravi Shanker, "Industrial Engineering & Management", Galgotia publications
[T2]. S. K. Sharma, "Industrial Engineering & Operation Management", S. K Kataria and sons publications

Reference Bokks:

- [R1]. Joseph S. Martinich, "Production & Operation Management", John Wiley and sons.
[R2] S.N.Chary, "Production & Operation Management", TMH 4th edition

- [R3] Harold T. Amrine, John A. Ritchey, Colin L. Moodie, Joseph F. Kmec, " Manufacturing Organization and Management" Pe
- [R4]. S.Anil Kumar, N. Suresh," Production & Operation Management", New age international, 2nd edition
- [R5]. M. Mahajan , "Industrial Engineering & Production Management" , Dhanpat Rai & sons.