

# VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY BURLAHA

## DEPARTMENT OF MECHANICAL

### LESSON PLAN FOR Production and Operation Management

SUBJECT CODE: 8<sup>th</sup> Semester Electronics & Telecommunication



Lecture	Topics to be covered	Remark
Lecture 1	Productivity: Importance, productivity ratio, productivity measurement, productivity index	
Lecture 2	Awareness – improvement – maintenance (A.I.M) process, Production System, Models of production system	
Lecture 3	Product Vs. Services, Process-focused & product- focused systems	
Lecture 4	Product strategies, product life cycle, production function	
Lecture 5	Forecasting: Methods	
Lecture 6	Moving average, Exponential smoothing	
Lecture 7	Regression analysis, coefficient of co-relation	
Lecture 8	Delphi, Market survey	
Lecture 9	Facilities planning: Site location, facilities layout	
Lecture 10	Types of facility layout, Planning using CRAFT work place design	
Lecture 11	Working conditions – noise illumination etc.	
Lecture 12	Problems on single facility location using median method	
Lecture 13	Problems on single facility location using minimax method and gravity method	
Lecture 14	Problems on single facility location using Euclidean-distance location	
Lecture 15	Motion study, Principles of motion- economy, method study	
Lecture 16	Rules concerning human body, workplace layout and materials handling,	
Lecture 17	Rules concerning tools and equipments design, time conservation	
Lecture 18	Time study and work measurement techniques	

Lecture 19	Performance rating and different types of allowances	
Lecture 20	Production planning and control- Aggregate planning	
Lecture 21	Sequencing and line balancing	
Lecture 22	Flow control	
Lecture 23	Dispatching, centralized and decentralized dispatching	
Lecture 24	Expediting and Gantt chart	
Lecture 25	Line of balance and learning curve	
Lecture 26	Project management, network scheduling	
Lecture 27	PERT with problems	
Lecture 28	Problems	
Lecture 29	Critical path method with problems	
Lecture 30	Problems	
Lecture 31	Resource levelling	
Lecture 32	Basic concepts of CAD, CAM, FMS	
Lecture 33	CIM, JIT, ISO 9000	
Lecture 34	Quality circle, Kaizen, Kanbans	
Lecture 35	Poke Yoke, Supply chain management	
Lecture 36	Revision of problems	
Lecture 37	Revision of problems	
Lecture 38	Revision of problems	
Lecture 39	Revision of problems	
Lecture 40	Revision of problems	

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