

10 EA 314 INDUSTRIAL ENGINEERING AND MANAGEMENT

III B.Tech I Semester

(with effect from the academic year 2012-2013)

*Lectures/week: 4 Hrs.
University Exam: 3 Hrs*

*Credits: 4
Sessional Marks: 40
End Examination Marks: 60*

UNIT-I

Administration, Management and Organization. Scientific Management. Functions of Management . Principles of Management. Types of Organization. Principles of Organization. Fayol's and Taylor's contributions to Management. Personnel Management –functions of personnel management.

UNIT-II

Plant Location – Location factors, concept of Weber theory. Choice of city, Suburban and country locations.

Plant Layout – Definition, Objectives, Salient features of product, process and fixed position layouts.

Material Handling – Definition, Objectives, Classification of material handling equipment and factors influencing their selections

UNIT-III

Sales forecasting – need, Classification moving average exponential smoothing and linear regression technique.

Production Planning and Control – Objectives, Salient features of functions of PPC.

UNIT-IV

Work study – Definition, objectives ; Method study – definition, Objectives and steps in a Method study.

Time study – Definition, need, functions.

Work Measurement- Objectives, Techniques, Time Study- Basic steps in Time Study, Determination of Standard Time; Work Sampling: Method of Work Sampling, Advantages and Disadvantages of Work Sampling, Introduction to PMTS.

UNIT-V

Safety in industry – need for safety programs, causes of accidents, accident prevention. A brief outline of Factories Act, Industrial disputes Act and Workmen's Compensation Act.

Job evaluation and Merit rating. Incentive plans – Piece Rate System, Halsey 50-50 System, Bedaux system and Taylor's differential piece rate system.

TEXT BOOKS:

1. Industrial Engineering And Management : Khanna O P
2. Principles Of Motion And Time Study : Ralph Barnes

REFERENCES:

1. Modern Production/Operation Management : Buffa E S
2. Business Organization & Management : Dowar S.R
3. Management For Business Industry : Clade S. George Jr