

QUANTITATIVE METHODS FOR ENERGY MANAGEMENT & PLANNING

MODULE-I:

A review of probability concepts, Forecasting and decision making in view of multi-variant techniques, Linear programming, Graphical solution, Simplex method, Duality and post-optimality analysis, Integer programming .

MODULE-II:

Optimal technology mix in micro and macro level energy planning exercises, Sequencing, Queuing theory, Networks, PERT and CPM,

MODULE-III:

Decision theory, Markov analysis, Non linear programming, Decision making with uncertainty, decision making with multiple objectives, Deterministic and probabilistic dynamic programming, Regression analysis.

Text/References

1. Operations Research, An Introduction, Sixth Edition, 2000, by HA Taha, Prentice-Hall of India Pvt. Ltd.
2. Quantitative Techniques in Management, First Edition, 1997, by ND Vohra, Tata McGraw-Hill Publishing Company Ltd, New Delhi.