

ELECTIVE COURSE – II : ADVANCED OPERATION RESEARCH

UNIT I

- ❖ Non – Liner Programming
- ❖ Quadratic Programming and Its Application to Portfolio Management Problems.

UNIT II

- ❖ Fractal Geometry and its Application to Capital Marks

UNIT III

- ❖ Integer Programming (Branch and bound procedure, modeling)
- ❖ Dynamic Programming

UNIT IV

- ❖ Network Models: Graph concepts – Shortest path problem – Spanning tree problem – Travelling salesman problem – Maximal flow problems – Minimum cost problem.

UNIT V

- ❖ Reliability theory
- ❖ Replacement theory

Reference Books:

1. Budnick – An introduction to Operation Research of Management
2. Gary E. Whitehouse and Ben L. Wechaler – Applied O.R
3. F.S Hillier and G.J. Liberman – Introduction to O.R
4. Mustafi C.K. – Operations Research : Methods & Practice Wiley Eastern Ltd
5. Chaos Theory and Capital Markets by Edgar Peters (John Wiley Publishers)