

BS (4 Years) for Affiliated Colleges



Code	Subject Title	Cr. Hrs	Semester
MATH-412	Operations Research - I	3	VII
Year	Discipline		
4	Mathematics		

Objectives:

Linear Programming

- Linear programming, formulations and graphical solution
- Simplex method
- M-Technique and two-phase technique
- Special cases
- Duality and Sensitivity Analysis
- The dual problem, primal-dual relationships
- Dual simplex method
- Sensitivity and postoptimal analysis

Transportation Models

- North-West corner
- Least-Cost and Vogel's approximations methods
- The method of multipliers
- The assignment model
- The transshipment model
- Network minimization

Recommended Books:

- Hamdy A. Taha, Operations Research - An Introduction , (Macmillan Publishing Company Inc., New York, 1987)
- B. E. Gillett, Introduction to Operations Research , (Tata McGraw Hill Publishing Company Ltd., New Delhi)
- F. S. Hillier and G. J. Lieberman, Operations Research, (CBS Publishers and Distributors, New Delhi, 1974)
- C. M. Harvey, Operations Research, (North Holland, New Delhi, 1979)