





DEPARTMENT OF MATHEMATICS ACADEMIC YEAR - 2011 - 12(ODD SEMESTER)

UNIT-I LINEAR PROGRAMMING(LP)

QUESTION BANK

SUBJECT CODE/NAME: MG1402 - OPERATIONS RESEARCH YEAR/SEM: IV/VII

BRANCH: EEE

PART-A

- 1. What is operations research?
- 2. What are the phases of an operations research study?
- Define a feasible solution.
- Define optimal solution.
- 5. What is the difference between feasible solution and basic feasible solution?
- Define unbounded solution.
- What are the two forms of a LPP?
- 8. What do you mean by standard form of LPP?
- What do you mean by canonical form of LPP?
- 10. What are the limitations of LPP?
- 11. What are the slack and surplus variables?
- 12. what is meant by decision variable?
- Define artificial variable.
- 14. What are the methods used to solve an LPP involving artificial variables?
- 15. What is degeneracy?

PART-B

- (a) Explain the scope of OR.
 - (b) List the phases of OR and explain them.

- (8)
- 2 (a) A company manufactures two products A and B. Each unit of B takes twice as long to produce as one unit of A and if the company were to produce only A it would have time to produce 2000 units per day. The availability of the raw material is sufficient to produce 1500 units per day of both a and B combined. Product B recuiring a special Ingredient only 600units can be made per day. If A fatches a profit of Rs.2 per unit and B a profit of Rs.4 per unit, Formulate the optimum product min.

Mg1402 Operations Research

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