

AMAG21 SYSTEMS ENGINEERING

UNIT-1 SYSTEM CONCEPTS

- 1.1 Requirements for a linear programming problems.
- 1.2 Mathematical Formulation of Linear Programming problems and its Graphical solution.

UNIT-2 RESPONSE OF SYSTEMS

- 2.1 Computer as a tool in system analysis.
- 2.2 Simplex method.
- 2.3 Degeneracy and- Duality in Linear programming.
- 2.4 Artificial variable techniques, Big M method and two phase methods.

UNIT-3 MATHEMATICAL MODELS OF PHYSICAL SYSTEMS.

- 3.1 Modelling of Agricultural Systems and operations.
- 3.2 Cost analysis.

UNIT-4 TRANSPORTATION PROBLEMS.

- 4.1 Assignment problems.
- 4.2 Waiting line problems.

UNIT-5 PROJECT MANAGEMENT BY PERT/CPM.

- 4.1 Resource scheduling.

Reference Book:

1. Kapoor, V.K. (1994). Operations Research. Sultan chand & sons, New Delhi.

