

SHREE NARAYANA COLLEGE OF COMMERCE
AHMEDABAD
ASSIGNMENT (2026 – 2027)

Name of the Department: Dept. of Statistics
Subject: MINOR 1 and 2 - Operation Research
Class & Semester: B. COM. Sem V
Faculty Name: Dr. Neeta M. Mandaliya

Minor-1
DSC-M-STA-354

Unit-1 Introduction to Operation Research

- Q-1 What is model? Discuss in detail the methodology operation research.
- Q-2 Write short note on: “Techniques of OR”
- Q-3 What are the phases of OR. Explain it in detail.
- Q-4 Define OR and give its Uses and Limitation. Also its Characteristics.

Unit-2 Linear Programming Problem

- Q-1 Explain the following terms:
 - a) Decision variable
 - b) Objective of function
 - c) Feasible solution
 - d) Constraint
- Q-2 Write down Mathematical formulation of LPP and Uses of LPP
- Q-3 Examples (Illustrations):
4,5

Unit-3 Transportation Problem

- Q-1 Explain General transportation table and give its mathematical form.
- Q-2 Examples (Illustrations):
2,5,7

Unit-4 Assignment Problem

- Q-1 Explain Hungarian method for solving Assignment problem.
- Q-2 Examples (Illustrations):
2,3,5,6

Minor-2
Operation Research-II
DSC-M-STA-355

Unit-1 Decision Theory

- Q-1 What is the decision theory?
- Q-2 Write the definitions of the following:
 - a) Act
 - b) Event
 - c) Pay of Matrix
- Q-3 Write short note:

- a) EMV
- b) EVPI

Q-4 Examples (Illustrations):
1,3,4,5

Unit-2 Game theory

Q-1 Explain:

- 1) Saddle Point
- 2) Pure and Mixed Strategy

Q-2 Explain the principles of Dominance.

Q-3 State the assumptions of game theory.

Q-4 Examples (Illustrations):
1,4,5,6

Unit-3 PERT and CPM

Q-1 Explain the following terms:

- a) Activity
- b) Event
- c) Expected time (Formula)
- d) Dummy Activity

Q-2 Give the difference between PERT and CPM.

Q-3 Explain the meaning of PERT and give its characteristics. Also advantageous and limitation of PERT.

Q-4 Examples (Illustrations):
4,5,8

Unit-4 Sequencing Problem

Q-1 Give Principles assumption made while dealing with sequencing problem.

Q-2 Examples (Illustration):
2,3,5.