

MMPO-001

**Master of Business Administration (MBA)/ Master of Business Administration
(Online) MBA(OL) /Master of Business Administration (Operations
Management) (MBAOM)/ Post Graduate Diploma in Operations Management
(PGDIOM)**

**ASSIGNMENT
For
July 2024 and January 2025 Sessions**

MMPO-001: Operations Research

**(Last date of submission for July 2024 session is 31st October 2024
and for January 2025 session is 30th April, 2025)**



**School of Management Studies
INDIRA GANDHI NATIONAL OPEN UNIVERSITY
MAIDAN GARHI, NEW DELHI – 110 068**

ASSIGNMENT

Course Code	:	MMPO-001
Course Title	:	Operations Research
Assignment Code	:	MMPO-001/TMA/ JULY/2024
Coverage	:	All Blocks

Note: Attempt all the questions and submit this assignment to the Coordinator of your study centre. Last date of submission for July 2024 session is 31st October, 2024 and for January 2025 session is 30th April 2025.

1. What is a linear programming problem? Discuss the scope and role of linear programming in solving management problems.
2. Discuss the various methods of finding the initial basic feasible solution of a transportation problem and state the advantages, disadvantages and two areas of application for them.
3. Write a short note on the following.
 - a. Two-person zero-sum game.
 - b. Goal Programming.
 - c. Dynamic Programming.
 - d. Kendall's Notation.
4. Discuss integer linear programming. Give an example of each of a *pure* and *mixed* integer linear programming problem.
5. 'Game theory provides a systematic quantitative approach for analysing competitive situations in which the competitors make use of logical processes and techniques in order to determine an optimal strategy for winning'. Comment.