

OBE based Teaching Lesson Plan 2020-21

Program: B.Com (Travel & Tourism)

Course Name: Operations Research

Course Code: C2 15 MC 602

Semester: VI

Lecture hours: 60

Faculty in-charge: Mr. Vinay Pradeep C

Course Outcome No.	Course Outcomes	T level Indicator
CO1.	Describe the nature and scope of OR models and its applications for Business decision making.	T2
CO2.	Develop linear programming models by using graphs for maximization and minimization objectives and interpret such solutions.	T6
CO3.	Solve Transportation problems for business decision making and interpret such solutions.	T3
CO4.	Solve assignment problems for business decision making and interpret such solutions.	T3
CO5.	Compare and contrast different Queuing models and its applicability on arriving at business solutions.	T4
CO6.	Solve business problems by using Monte-Carlo simulation technique.	T3

Continuous Internal Assessment:

Module No. & Topics Covered	Course Outcome No.	No. of Lecture Hours	Pre-Class Activity	Instructional techniques	Assessment	Level
Module - 1: Introduction to Operation Research	CO1	4 Hrs	YouTube video on Introduction to OR	Lecture, Discussion	Evaluation through tests and Question & Answer	T2
Module - 2: Introduction to Linear Programming	CO2	12 Hrs	YouTube video on Linear Programming	Lecture, Discussion and Problem Solving	Evaluation through tests and Question & Answer	T6
Module - 3: The Transportation Problem	CO3	16 Hrs		Lecture, Discussion, and Problem Solving	Evaluation through tests and Question & Answer	T3
Module - 4: The Assignment Problem	CO4	10 Hrs		Lecture, Discussion, and Problem Solving	Evaluation through tests and Question & Answer	T3
Module - 5: Queuing Theory	CO5	6 Hrs		Lecture, Discussion, and Problem Solving	Evaluation through tests and Question & Answer	T4
Module - 6: Simulation	CO6	12 Hrs		Lecture, Discussion, and Problem Solving	Evaluation through tests and Question & Answer	T3

- Class test 1 : Last week of February
- Assignment : 2nd week of March
- Class test 2: 1st week of April

Books for Reference:

- Budnik, Frank S Dennis Mcleavey & Richard Mojena: Principles of Operation Research, AIT BS, New Delhi.
- Gould F J: Introduction to Management Science, Englewood Cliffs N J Prentice Hall
- Kalavathy S: Operation Research, Vikas Pub Co.

- Naray J K: Operation Research, Theory and applications, McMillan, New Delhi.
- Richard, I. Levin & Charles A. Kirkpatrick: Quantitative Approaches to Management, McGraw Hill, Kogakusha Ltd.
- Sharma J K: Operation Research, Theory and Applications, McMillan, New Delhi.
- Srivastava V. K. et al: Quantitative Techniques for Managerial Decision Making, Wiley Eastern Ltd.
- Taha Hamdy: Operations Research, Prentice Hall of India.

Approved by: