

OBE based Teaching Lesson Plan 2020-21

Program: B.Com(ACCA)

Course Name: **Course Code:** OPERATIONS RESEARCH (C4 15 MC 601)

Name of the Teacher- Mr.Dileep Kumar Shetty

Semester:VI

Lecture hours: 60

Coordinator: Mr.Dileep Kumar Shetty

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 a Linear Programming model and maximization or minimization of objective function by using graphical method.	T6
CO3	Solve a Linear Programming problem by using simplex or Big-M method for business decision making.	T3
CO4	Solve a Transportation problem for business decision making using various methods	T3
CO5	Solve an assignment problem for business decision making by using Hungarian method	T3
CO6	Develop a project network diagram and analysis by Pert or CPM method for project management.	T6

Module No. & Topics Covered	Course Outcome No.	No. of Lecture Hours	Pre-Class Activity	Instructional techniques	Assessment	T level
Module - 1 : Introduction to OR:	CO1	4	YouTube video (NPTEL)	<ul style="list-style-type: none"> • Online Videos • Lecture with the help of power Point presentation • Discussion 	Evaluation through MCQs	T2
Module 2- Introduction to Linear Programming	CO2	12	YouTube video	<ul style="list-style-type: none"> • Lecture • Case Study • Discussion • Problem solving 	Evaluation through tests and MS excel	T6
Module 3: Simplex Method:	CO3	14		<ul style="list-style-type: none"> • Lecture • Discussion • Problem solving 	Evaluation through tests	T3
Module 4: Transportation Problem:	CO4	14		<ul style="list-style-type: none"> • Lecture • Case Study • Discussion • Problem solving 	Evaluation through tests and MS Excel	T3
Module 5: Assignment Problem:	CO5	8		<ul style="list-style-type: none"> • Lecture • Discussion • Case study • Problem solving 	Evaluation through tests and MS Excel	T3

Module 6: Network Analysis	CO6	8		<ul style="list-style-type: none"> • Lecture • Discussion • Problem solving • Case Study 	Evaluation through MCQs, group activity and tests	T6
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Continuous Internal Assessment

- Class test 1: Last week of February
- Assignment : Second week of March.
- Class test 2 : First week of April.

Books for Reference:

- *Anderson Sweeney Williams: An Introduction to Management Science Quantitative Approaches to Decision, Thomson.*
- *Chacko, George K: Applied Operations Research/Systems Analysis in Hierarchical Decision Making, North Holland Publishing Co.*
- *Taha, Hamdy A: Operations Research, Prentice Hall, India.*
- *Hiller/Lieberman: Introduction to Operations Research, Tata McGraw Hill.*
- *Sharma S D: Operations Research, Kedarnath Ramnath & Co.*

Approved by: