



# Aggarwal College Ballabgarh

## LESSON PLAN

17 WEEKS (JAN-APRIL)-2025

Name of Faculty: Dr. Renu Bala

Qualification/ Department: Assistant Professor (Mathematics)

CLASS: M.Sc

SEMESTER: 2nd

SECTION:

SUBJECT: Operation Research

Week		
1	7-1-2025	
	8-1-2025	
	9-1-2025	Introduction of operational research, origin, Scope
	10-1-2025	No Lecture
	11-1-2025	No Lecture
	12-1-2025	S. U. N. D. A. Y.
2	13-1-2025	Formulation of linear programming
	14-1-2025	Examples related to formulation of linear programming
	15-1-2025	Solution of linear programming by Graphical method
	16-1-2025	Solution of linear programming by Simplex Method
	17-1-2025	No Lecture
	18-1-2025	No Lecture
	19-1-2025	S. U. N. D. A. Y.
3	20-1-2025	Examples based on Simplex Method
	21-1-2025	Big –M method
	22-1-2025	Examples based on Big –M method

	23-1-2025	Two phase method
	24-1-2025	No Lecture
	25-1-2025	No Lecture
	26-1-2025	<b>REPUBLIC DAY /S. U. N. D. A. Y.</b>
4	27-1-2025	Degeneracy in linear programming
	28-1-2025	Duality in Linear programming
	29-1-2025	Contd.
	30-1-2025	More examples in linear programming
	31-1-2025	No Lecture
	1-2-2025	No Lecture
	2-2-2025	<b>S. U. N. D. A. Y/BASANT PANCHAMI</b>
5	3-2-2025	Test
	4-2-2025	Introduction to transportation problem
	5-2-2025	Basis feasible solution of transportation by north west method
	6-2-2025	Basis feasible solution of transportation by least cost method
	7-2-2025	No Lecture
	8-2-2025	No Lecture
	9-2-2025	<b>S. U. N. D. A. Y</b>
6	10-2-2025	Solution of transportation by vogal approximation
	11-2-2025	More Examples by VAM
	12-2-2025	<b>HOLIDAY: GURU RAVIDAS JAYANTI</b>
	13-2-2025	Optimal solution of stepping stone method
	14-2-2025	No Lecture
	15-2-2025	No Lecture

	16-2-2025	<b>S. U. N. D. A. Y.</b>
7	17-2-2025	<b>Optimal solution by MODI method</b>
	18-2-2025	<b>More Examples</b>
	19-2-2025	<b>Unbalanced Transportation Problems</b>
	20-2-2025	<b>Degenerate Transportation Problem</b>
	21-2-2025	<b>No Lecture</b>
	22-2-2025	<b>No Lecture</b>
	23-2-2025	<b>S. U. N. D. A. Y.</b>
8	24-2-2025	<b>Transshipment problems</b>
	25-2-2025	<b>Introduction to Assignment problems and Use of assignment problems in many areas</b>
	26-2-2025	<b>HOLIDAY: MAHA SHIVRATRI</b>
	27-2-2025	<b>Hungarian method</b>
	28-2-2025	<b>No Lecture</b>
	1-3-2025	<b>No Lecture</b>
	2-3-2025	<b>S. U. N. D. A. Y.</b>
9	3-3-2025	<b>Examples on Hungarian method</b>
	4-3-2025	<b>Test</b>
	5-3-2025	<b>Unbalanced Assignment problem</b>
	6-3-2025	<b>Contd.</b>
	7-3-2025	<b>No Lecture</b>
	8-3-2025	<b>No Lecture</b>
	9-3-2025	<b>S. U. N. D. A. Y.</b>
10	10-3-2025	<b>Case of maximization in assignment problem</b>

	11-3-2025	Air crew assignment problems
	12-3-2025	More problems
	13-3-2025	Travelling salesman problems
	14-3-2025	No Lecture
	15-3-2025	No Lecture
	16-03-2025	<b>S. U. N. D. A. Y.</b>
11	17-3-2025	More examples on assignment problems
	18-3-2025	Practice more examples
	19-3-2025	Concept of stochastic processes
	20-3-2025	Poisson process and Examples related to poisson process
	21-3-2025	No Lecture
	22-3-2025	No Lecture
	23-3-2025	<b>S. U. N. D. A. Y.</b>
12	24-3-2025	Birth-death process
	25-3-2025	Basis component of queuing system
	26-3-2025	Steady state solution of markovian queuing models
	27-3-2025	Model-M/M/1
	28-3-2025	No Lecture
	29-3-2025	No Lecture
	30-3-2025	<b>S. U. N. D. A. Y.</b>
13	31-3-2025	<b>HOLIDAY: ID-UL-FITR</b>
	1-4-2025	Related Examples on Model-M/M/1
	2-4-2025	Model-M/M/C
	3-4-2025	Examples

	4-4-2025	No Lecture
	5-4-2025	No Lecture
	6-4-2025	<b>S. U. N. D. A. Y.</b>
14	7-4-2025	M/M/1/k model
	8-4-2025	Related examples
	9-4-2025	M/M/C/k model and Examples based on M/M/C/k model
	10-4-2025	<b>HOLIDAY: MAHAVIR JAYANTI</b>
	11-4-2025	No Lecture
	12-4-2025	No Lecture
	13-4-2025	<b>S. U. N. D. A. Y.</b>
15	14-4-2025	<b>HOLIDAY: AMBEDKAR JAYANTI</b>
	15-4-2025	Introduction of Inventory control
	16-4-2025	Economic order quantity model with uniform demand
	17-4-2025	EOQ model with different rates of demands
	18-4-2025	No Lecture
	19-4-2025	No Lecture
	20-4-2025	<b>S. U. N. D. A. Y.</b>
16	21-4-2025	Test
	22-4-2025	EOQ model when shortages are allowed
	23-4-2025	EOQ model with uniform replenishment
	24-4-2025	Inventory control with price breaks with Examples
	25-4-2025	No Lecture
	26-4-2025	No Lecture
	27-4-2025	<b>S. U. N. D. A. Y.</b>

17	28-4-2025	Game with saddle point, The Rule of dominance, Two- Person zero sum game
	29-4-2025	Algebraic, graphical method for solving mixed strategy game
	30-4-2025	<b>HOLIDAY: AKSHAY TRITYA</b>
	01-05-2025	Examples based on saddle point and dominance
	02-05-2025	Discussion of Previous year question papers
	03-05-2025	Discussion of Previous year question papers
	04-05-2025	<b>S. U. N. D. A. Y.</b>

Signature