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Total No. of Pages : 02

Total No. of Questions : 09

BBA (Sem.-5)
OPERATION RESEARCH

Subject Code : BBA-501-18

M.Code : 78193

Date of Examination : 29-11-2024

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTIONS-B consists of FOUR Sub-sections : Units-I, II, III & IV.
3. Each Sub-section contains TWO questions each, carrying TEN marks each.
4. Student has to attempt any ONE question from each Sub-section.

SECTION-A

1. Write briefly :

- a) Discuss the Objectives of Operation Research.
- b) Discuss significance of Operation Research in modern management.
- c) Explain the meaning of Artificial Variables.
- d) What do you mean by Travelling Salesman Problems?
- e) Express why transportation model is good for business.
- f) What do you understand by Pure Strategies?
- g) Explain the term PERT.
- h) State the meaning of CPM.
- i) Discuss the term Replacement of items.
- j) What are the causes of Poor Inventory Control?

SECTION-B

UNIT-I

2. State three commonly used Operation Research Techniques in India. Briefly explain each one of them.
3. What are the essential characteristics of a Linear Programming Model?

UNIT-II

4. Explain the difference between Assignment Problem and Transportation Problem
5. Find the Initial Basic Feasible Solution to the following transportation problem by:
Least Cost Method.

	To			Supply
	2	7	4	
From	3	3	1	8
	5	4	7	7
	1	6	2	14
Demand	7	9	18	

UNIT-III

6. Find solution of process 5 jobs Through 3 Machines Problem

Job	1	2	3	4	5
Machine-1	8	10	6	7	11
Machine-2	5	6	2	3	4
Machine-3	4	9	8	6	5

7. What is Critical Path? Can a critical path change during the course of a project?

UNIT-IV

8. Explain clearly the different costs that are involved in inventory problems with suitable examples?
9. Why is replacement of items required? Distinguish between individual replacement and group replacement policies.

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.