

School of Finance and Commerce

Commerce

Summer Term - September 2023

Time : 3 Hours

Marks : 50

Sem IV - BBAF2015 - Quantitative Techniques

Your answer should be specific to the question asked

Draw neat labeled diagrams wherever necessary

1. What are the requirements of linear programming? CO1 (2)
2. What is 'Unbalanced Transportation Problem'? CO2 (2)
3. Define the time estimates in network analysis CO3 (2)
4. Discuss the decision making under risk CO4 (2)
5. Explain Two person Zero sum game? CO5 (2)
6. Mention the advantages of Linear programming. CO1 (5)
7. Three jobs A, B and C one to be assigned to three machines U, V and W. The processing cost for each job machine combination is shown in the matrix given below. Determine the allocation that minimizes the overall processing cost. CO2 (5)

	Machines 1	Machines 2	Machines 3
Jobs 1	17	25	31
Jobs 2	10	25	16
Jobs 3	12	14	11

8. Solve the following Game using Graphical Method CO5 (6)

	Player B1	Player B2	Player B3	Player B4
Player A1	8	5	-7	9
Player A2	-6	6	4	-2

9. The project represented by the network diagram, find the earliest time and latest times to reach each node given the data CO3 (8)

Task	A	B	C	D	E	F	G	H	I	J	K
T0	4	5	8	2	4	6	8	5	3	5	6
Tp	8	10	12	7	10	15	16	9	7	11	13
Tm	5	7	11	3	7	9	12	6	5	8	9

10. Explain expected value of perfect information with examples in detail? CO4 (8)

11. Solve the game with the help of graphical method CO5 (8)

	Player B	
Player A	B1	B2
A1	2	0
A2	3	-1
A3	-3	2
A4	5	-4