



DOON UNIVERSITY, DEHRADUN
Semester final Examination, even Semester, 2016
School of Mangement
IMBA. 4th Sem
Course: Quantitative techniiques

Time – 2 hours

IMBA 401

MAX Marks – 30

Section A: Attempt Any two

(5*2= 10 marks)

Q -1. Solve the following with VAM method and test for optimality.

(5 marks)

	W_1	W_2	W_3	W_4	Supply
F_1	10	0	20	11	20
F_2	12	7	9	20	25
F_3	0	14	16	18	15
Demand	10	15	15	20	

Q2- Explain the types of Operations Research Models. Briefly explain the phases of Operations Research.

Q3- What do you mean by unbalanced assignment problem? How do you overcome it?

Section B: Attempt Any two

(5*2= 10 marks)

Q 4- A Company has four men available for work on four separate jobs. Only one man can work on any one job. The cost of assigning each man to each job is given in Table 2.2. Assign men to jobs in such a way that the total cost of assignment is minimum.

PTO

		Job			
		I	II	III	IV
Person	A	20	25	22	28
	B	15	18	23	17
	C	19	17	21	24
	D	25	23	24	24

Q-5- Solve by Matrix Minima Method

		D1	D2	D3	Supply
S1		3	1	M	5
S2		4	2	4	7
S3		M	3	3	3
Demand		7	3	5	

Q-6: What are the application areas of Decision making analysis

Section C: Attempt Any two

(5*2= 10 marks)

Q 7: Solve by NWCM Method

		W ₁	W ₂	W ₃	W ₄	Supply
F ₁		10	0	20	11	20
F ₂		12	7	9	20	25
F ₃		0	14	16	18	15
Demand		10	15	15	20	

Q-8: Explain Decision Tree Analysis

Q-9: What are the various strategy and situation for decision analysis, explain