Biyani Girls College
I Internal Examination 2019-20
B.COM. HONORS (III Year)
Subject- Operation Research and Quantitative Techniques

Time: 1.30 Hrs.   Set: B   MM: 40

[I] Multiple Choice Questions   **(10*1=10)**

Q1. Game theory was developed by

(a). John voneuman   (b). Thomas
(c). Robert   (d).Donald

Q2. Q2Dominance rule is applicable for
(a). 2*4   (b). 2*3

(c). 3*3   (d). 3*2

Q3 Saddle point exist when

(a). Maximin= minimax   (b). Rows=calumn

(c)it is related to graphical method   (d). None of the above.
Q4 Full form of PERT
(a). Programme Equation Review Technique   (b). Programme Evaluation Revolving
Technique
(c). Programme Evaluation Review Targets   (d). Present Evaluation Review Technique

Q5 what is Degeneracy in transportation model?
(a).(m+n+1).   (b). (m+n-1)
(c). (m+n+2)   (d). (m+n-2)

Q6 In a balanced transportation model where supply equals demand,
(a). all constraints are equalities   (b). none of the constraints are equalities
(c). all constraints are inequalities   (d). none of the constraints are inequalities

Q 7 In a transportation problem, items are allocated from sources to destinations
(a). at a maximum cost   (b). at a minimum cost
(c). at a minimum profit   (d). at minimum revenue

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Q 8 The assignment model is a special case of the _____ model.

   (a). maximum-flow   (b). Transportation
   (c). Shortest-route   (d). none of the above

Q9 What do you mean by two person zero sum game?

   (a). Profit= loss   (b) There are two players
   (c). 1 and 2   (d). None of the above

Q10 Which one is not the method of game theory...

   (a).Oddoment   **(b).**Probability
   (c). Saddle point   (d). All of the above

B. Long type Questions:

Q1. Solve Transportation Problem

	W1	W2	W3	W4	Supply
F1	13	11	15	40	2
F2	17	14	12	13	6
F3	18	18	15	12	7
Demand	3	3	4	5	15

Q2. Two players R and C have one coin each. After a signal each of them exposes the coin. Player R wins a unit when there are two heads, wins nothing when there are two tails and looses1/2 unit when there is one head and one tail. Determine the payoff matrix, the best strategies for each player and the value of the game.

Q3. Find the critical path and all floats

Activity	Expected time
1-2	7
1-6	6
2-3	14
2-4	5
3-5	11
4-5	7
6-7	11
5-8	4
7-8	18