

a)

Y			
X	4	6	4
	2	10	0

b)

Y			
X	2	-1	3
	4	5	6

Q11. Determine the optimum strategies and the value of the following games:

a)

A	B			
	-3	4	2	9
	7	8	6	10
	6	2	4	-1

b)

A	B			
	-1	9	6	8
	-2	10	4	6
	5	3	0	7
7	-2	8	4	

c)

A	B				
	10	4	2	9	1
	7	6	5	7	8
	3	5	4	4	9
	6	7	3	3	2

Q12. Find the value of the games shown below. Also indicate whether they are fair or strictly determinable.

a)

A	B			
	1	9	6	0
	2	3	8	-1
	-5	-2	10	-3
7	4	-2	-5	

b)

A	B			
	6	-2	-3	8
	-1	-2	-7	0
	8	9	-6	-7
9	5	-7	7	

Q13. Find the range of values of p and q so that the entry (2,2) is a saddle point in the following games:

a)

A	B		
	2	q	4
	p	6	11
	7	3	4

b)

X	Y		
	0	2	3
	8	5	q
	2	p	4

Q14. Two players A and B match coins. If the coins match, then A wins one unit of value; if the coins don't match, then B wins one unit of value. Determine the optimum strategies for the players and the value of game.

Q15. In a game of matching coins with two players, suppose A wins one unit of value when there are two heads, wins nothing when there are two tails and losses $\frac{1}{2}$ unit of value when there are one one head and one tail. Determine the payoff matrix, the best strategies for each player and the value of the game to A.

Q16. Solve by using dominance property, the following game:

A	B			
		I	II	III
	I	1	7	2
	II	6	2	7
	III	6	1	6

Q17. Find the best strategy and the value of the following game:

A	B			
		I	II	III
	I	-1	-2	8
	II	7	5	-1
	III	6	0	12

Q18. Find the optimum strategies for Y and the value of game.

X	Y				
	4	-1	4	-1	2
	2	2	3	-4	2
	1	-3	1	0	-4

Q19. Solve the following game:

Player A	Player B				
	10	81	32	43	93
	59	63	39	69	73
	71	20	05	27	84
	34	14	44	44	69

Q20. Reduce the following game to 2×2 game by using dominance and modified dominance property and then solve the game.

A	B				
		B ₁	B ₂	B ₃	B ₄
	A ₁	1	2	-1	2
	A ₂	3	1	2	3
	A ₃	-1	3	2	1
	A ₄	-2	2	0	-3

Q21. Solve by using dominance property, the following game:

A	B						
		I	II	III	IV	V	VI
	1	4	2	0	2	1	1
	2	4	3	1	3	2	2
	3	4	3	7	-5	1	2
	4	4	3	4	-1	2	2
	5	4	3	2	-2	2	2

Q22. Reduce the following game to 2×2 game by using graphical method:

a)

	B				
	3	0	6	-1	7
A	-1	5	-2	2	1

b)

	B				
	0	4	-8	-5	1
A	1	5	8	-4	0

c)

	B	
	2	3
A	6	7
	-6	10
	-3	-2
	3	2

d)

	B	
	-4	3
A	-7	1
	-2	-4
	-5	-2
	-1	-6

f)

		B			
		I	II	III	IV
A	I	2	2	3	-1
	II	4	3	2	6

Q23. Solve by using the method of matrices, the following game:

	B		
	1	0	2
A	3	0	0
	0	2	1

Q24. Solve by using the method of matrices, the following game:

A	B		
	1	-1	-1
	-1	-1	3
	-1	2	-1

Q25. Solve by using the method of matrices, the following rectangular game:

A	B			
	3	-1	1	2
	-2	3	2	3
	2	-2	-1	1

Q26. Solve the following game by linear programming:

A	B		
	0	2	2
	3	-1	3
	4	4	-2

Q27. Solve the following 3×3 game by linear programming:

A	B		
	1	-1	-1
	-1	-1	3
	-1	2	-1

