

Fundamentals of Game Theory

Game Theory · Answer Key · 10 Questions

1. What is the primary focus of Game Theory?

- A) The study of strategic decision-making**
- B) The history of board games
- C) The physical mechanics of dice
- D) The psychology of gambling

2. Who is credited with being one of the founders of modern game theory?

- A) John von Neumann**
- B) Isaac Newton
- C) Albert Einstein
- D) Charles Darwin

3. In a 'zero-sum' game, what must be true about the total gains and losses?

- A) The gains and losses must balance to zero**
- B) The winner takes all, and the loser gets nothing
- C) One player must lose more than the other gains
- D) The outcome is always a draw

4. What is a 'dominant strategy' in game theory?

- A) A strategy that is best for a player regardless of the opponent's choice**
- B) A strategy that requires physical force
- C) A strategy used only by the winner
- D) A strategy that relies entirely on luck

5. The 'Prisoner's Dilemma' is a famous example of which type of game?

- A) Non-zero-sum game**
- B) Card game
- C) Role-playing game
- D) Zero-sum game

6. What is a Nash equilibrium?

- A) A state where no player can benefit by changing their strategy alone**
- B) A game that has no winner
- C) A game that lasts forever
- D) A strategy that involves flipping a coin

7. Which field of study frequently uses game theory to analyze market competition?

A) Economics

B) Biology

C) History

D) Art

8. What is the name of a game where all players move simultaneously?

A) Simultaneous game

B) Sequential game

C) Endless game

D) Random game

9. In game theory, what is a 'payoff'?

A) The outcome a player receives for a specific combination of moves

B) The amount of money paid to enter a game

C) The cost of equipment

D) The speed at which a game is played

10. What is a 'cooperative game' in game theory?

A) A game where players can form enforceable agreements

B) A game where everyone works as a team from the start

C) A game played by children

D) A game that requires two boards