Q. What is two person zero sum game with example.

Ans:

The two person zero sum game is a basic model in game theory. In this theory, there are two players, each with an associated set of strategies. While one player aims to maximize her payoff, the other attempts to take an action to minimize this payoff. In fact, the gain of a player is the loss of another.

E.g., The payoff depends on whether the pennies match or not. If both pennies are heads or tails, Player A wins and keeps Player B's Penny, if they do not match, then Player B wins and keeps Player A'penny. Tinvolves two players, A and B, simultaneously placing a penny on the

 $\bigcirc$  Q.2. What are the assumptions of two –person zero sum game?

There are two key assumptions about the behavior of the players. The first is that both players are rational.

The second is that both players are greedy meaning that they choose their strategies in their own interest (to promote their own Health)

What is two-person non- zero sum game?

In a non-zero-sum game the players payoffs no longer needs to sum to a constant value. Now it is possible for both players to gain or both players to lose.