TEST 2

Player 1 / Player 2	x	y	z
a	1,1	-3,2	2,3
b	2,3	2,-1	3,1
c	0,-1	1,3	1,2

1. **Given that player 1 palys ©, the best response for player 2 is:**
   - x
   - z
   - **y**

2. **Given the matrix from question 1, the dominant strategy for player 1 is:**
   - c
   - **b**
   - a

3. **Considering the same matrix, is the strategy (a,z) Pareto optimal?**
   - **Verdadero**
   - Falso

4. **The only Nash equilibrium for such matrix is:**
   - (b,z)
   - **(b,x)**
   - (a,z)

5. **The only rational outcome for two self-interested agents playing the IPD with a finite number of attempts, known by both payers, is:**
   - Mistrust
   - All-C
   - **All-D**
   - Tit-For-Tat
   - SpiteFul

6. **The use of Inductive Logic Programming for machine learning suffers from many of the problems found in deliberative architectures:**
   - **Verdadero**
   - Falso

7. **A Bayesian Network is a type of learning technique that uses Bayes Theorem to determine a set of neural network connections, linked with probabilities that can discriminate among several sets of data.**
   - Verdadero
   - **Falso**

8. **A problem usually found when using CBR is that there is a need for human intervention in the revise phase. This is due to the nature of this type of learning technique that usually can be solved combining it with inductive Logic Programming.**
   - Verdadero
   - **Falso**

9. **Q-Learning and Learning Automata are two classes of Reinforcement Learning techniques, that use states and weighs/probabilities for action selection:**
    - **Verdadero**
    - Falso

10. **Using learning in MAS is:**
    - a problem without solution as agents can not predict the environment dynamics in a MAS.
    - we can not try to model realistic multi-agent learning problems, we just can add a set of agents and assume independence.
    - a direct extension of isolate agent learning.
    - **a complicate problem as other agent's behaviors affect the environment dynamics.**

11. **Robert Axelrod have found, when running his tournaments in the 80s, that Tit-For-Tat is the optimal strategy for playing the Iterated Prisoner's Dilemma (IPD):**
    - True
    - **False**

12. **The Haw-Done game matrix cannot be used as a valid Iterated Prisoner's Dilemma matrix, because there is a condition that should be fulfilled, and it cannot be. What is the condition?**
    - We must have that V=C.
    - **We must prevent that alternating cooperation and defection provides a greater reward than mutual cooperation.**
    - We must ensure that C>V.
    - We must ensure that V>C.

13. **Doing graffitis over the walls is:**
    - a nightmare.
    - none of the previous.
    - a practical example of quasi-linear emergence with self-organizing properties
    - **a kind of stigmergy.**

14. **There can be emergence in a non-selforg system and vice versa.**
    - **True.**
    - False

15. **A system with a central until still can be a weak Selforg system.**
    - **True**
    - False

Pregunta 1

Correcto
Puntuación: 1,00 sobre 1,00

Consider the next matrix:

Player 1 / Player 2	x	y	z
a	1,1	-3,2	2,3
b	2,3	2,-1	3,1
c	0,-1	1,3	1,2

Given that player 1 plays (a), the best response for player 2 is:

Seleccione unha:

- y
- z ✓
- x

Pregunta 2

Correcto
Puntuación: 1,00 sobre 1,00

Given the matrix from question 1, the dominant strategy for player 1 is:
Seleccione unha:

- c
- a
- b ✓

Pregunta 3

Correcto
Puntuación: 1,00 sobre 1,00

Considering the same matrix, is the strategy (b,z) Pareto optimal?
Seleccione unha

- Verdadeiro ✓
- Falso

Pregunta 4

Correcto
Puntuación: 1,00 sobre 1,00

The only Nash equilibrium for such matrix is:
Seleccione unha:

Pregunta 4

Correcto
Puntuación: 1,00 sobre 1,00

The only Nash equilibrium for such matrix is:
Seleccione unha:

- (b,x) ✓
- (a,z)
- (b,z)

Pregunta 5

Correcto
Puntuación: 1,00 sobre 1,00

The only rational outcome for two self-interested agents playing the IPD with a finite number of attempts, known by both players, is:
Seleccione unha:

- SpiteFul
- Tit-For-Tat
- Mistrust
- All-D ✓
- All-C

Pregunta 6

Correcto
Puntuación: 1,00 sobre 1,00

Robert Axelrod have found, when running his tournaments in the 80s, that Tit-for-Tat is the optimal strategy for playing the Iterated Prisoner's Dilemma (IPD).
Seleccione unha

- Verdadeiro
- Falso ✓

Pregunta 7

Correcto
Puntuación: 1,00 sobre 1,00

The Hawk-Dove game matrix cannot be used as a valid Iterated Prisoners Dilemma matrix, because there is a condition that should be fulfilled, and it cannot be. What is that condition?
Seleccione unha:

a. We must prevent that alternating cooperation and defection provides a greater reward than mutual cooperation. ✓

Pregunta 7

Correcto
Puntuación: 1,00 sobre 1,00

The Hawk-Dove game matrix cannot be used as a valid Iterated Prisoners Dilemma matrix, because there is a condition that should be fulfilled, and it cannot be. What is that condition?
Seleccione unha:

a. We must prevent that alternating cooperation and defection provides a greater reward than mutual cooperation. ✓
b. We must have that V = C
c. We must ensure that V > C
d. We must unsure that C > V

Pregunta 8

Correcto
Puntuación: 1,00 sobre 1,00

Doing graffitis over the walls is:
Seleccione unha:

a. an emergent property
b. a practical example of quasi-linear emergence with self-organizing properties
c. a kind of stigmergy ✓
d. great to enhance public accounts

Pregunta 9

Correcto
Puntuación: 1,00 sobre 1,00

Self-organization and emergence always appear together.
Seleccione unha

Verdadeiro
Falso ✓

Pregunta 10

Correcto
Puntuación: 1,00 sobre 1,00

A system with external central control still can be a weak Selforg system
Seleccione unha

Verdadeiro
Falso ✓