Computational Game Theory –19/20

15/April/2020 (10:30 – 10:50)

FACULDADE DE CIÊNCIAS E TECNOLOGIA
UNIVERSIDADE NOVA DE LISBOA

Name: João Rafael Mira de Carvalho Pacheco	**Number: 56982**

1st Quiz - Example

I) Determine **the remaining pure strategies** after iteratively eliminating strictly dominated strategies in n×m games Q1, Q2 and Q3.

	Remaining Pure Strategies	
Game	Player 1	Player 2
Q1	B	X
Q2	2	3
Q3	4	5

II) Compute **a mixed strategy Nash equilibrium** in 2×2 games Q4, Q5 and Q6.

	Nash Equilibrium	
Game	Player 1	Player 2
Q4	0.75 → 1; 0.25 → 2	0.5 → 2; 0.5 → 1
Q5	0.33 → 1; 0.67 → 2	0.67 → 2; 0.33 → 1
Q6	0.46 → 1; 0.54 → 2	0.86 → 2; 0.14 → 1

III) Compute **a Nash equilibrium** in n×m games Q7, Q8 and Q9, assuming that they can be completely solved, or reduced to 2×2 games through iterative elimination of strictly dominated strategies.

	Nash Equilibrium	
Game	Player 1	Player 2
Q7	0.8 → C; 0.2 → E	0.53 → d; 0.47 → f
Q8	0.67 → A; 0.33 → C	0.5 → c; 0.5 → a
Q9	0.5 → C; 0.5 → B	0.67 → 6; 0.33 → 5

If you were not able to solve any of the previous questions, use this space to explain why.