

Exam Prep

Phil 444

2024-04-12

- The actual exam will be 6 questions taken from the questions below.
- The numbers in the numerical questions will be changed, but the wording won't be.
- For any question asking for a verbal answer (e.g., explain this notion, or this constraint), you should answer in about 250 words. These are *short answer* questions, not essays, and the aim is to either (a) simply describe a concept or idea, or (b) present one reason for or against some notion. Don't try to write a five paragraph essay for each one!

Questions

1. Explain the Conditionalisation constraint in Russell, Hawthorne and Buchak's paper *Groupthink*.
2. In a local election, with 100 voters, the voters have the following preferences. 45 people rank the candidates ADBC (i.e., A first, D second, B third, C fourth); 25 rank them BCDA; 20 rank them DABC; 10 rank them CDBA. Who would win if the voters vote sincerely, and the city uses first-past-the-post voting? Who would win if the voters vote sincerely, and the city uses ranked choice (i.e., alternate vote) voting? Very briefly (in a couple of sentences), which verdict do you think better reflects the will of the voters?
3. State Arrow's **Independence of Irrelevant Alternatives** condition.
4. Describe an example where Sen's Condition L (Liberalism) and Condition P (Pareto) conflict.
5. Consider an Axelrod-style Prisoners Dilemma tournament with just the following three strategies: Tit-for-Tat (i.e., C at move one, then do whatever the other person did last time); Grim Trigger (i.e., C until the other person plays D, then D forever); and a strategy that plays D until the other person plays D, then C forever. Each will play 100 rounds against the other two. The payoffs each round are (as normal), 5 points for playing D against C, 3 points for playing C against C, 1 point for playing D against D, 0 points for playing C against D. How many points over the 200 games (i.e., 100 rounds against 2 opponents) will each of them end up with?
6. Describe an example of a **focal point** in Schelling's sense.

7. In Table 1, what will be the result if both players use iterated deletion of strictly dominated strategies to decide what to do? (In each cell, Row's payouts are first, and Column's are second.)
8. In Figure 1, what will be the result if all players use backward induction to solve the problem? (At each terminal node, the payouts are player 1's, then player 2's, then player 3's. Each player moves once; first player 1, then player 2, then player 3.)
9. In Figure 2, describe a separating equilibrium of the game.
10. What is the human capital theory of the explanation of the college wage premium? Describe one objection to it. (You do not have to answer the objection.)

Table 1: Game table for Q7

	L	C	R
U	1,1	2,0	2,2
M	0,3	1,5	4,4
D	2,4	3,6	3,0

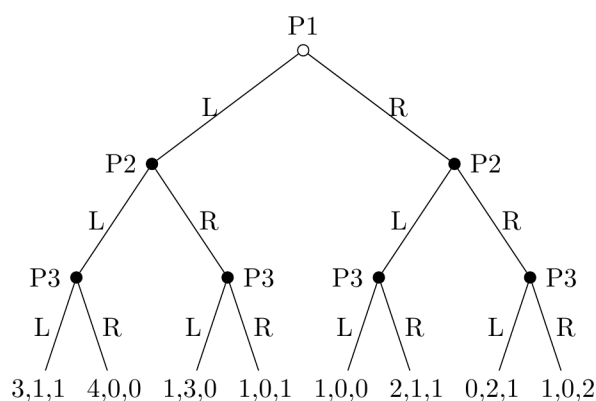


Figure 1: Tree for Q8

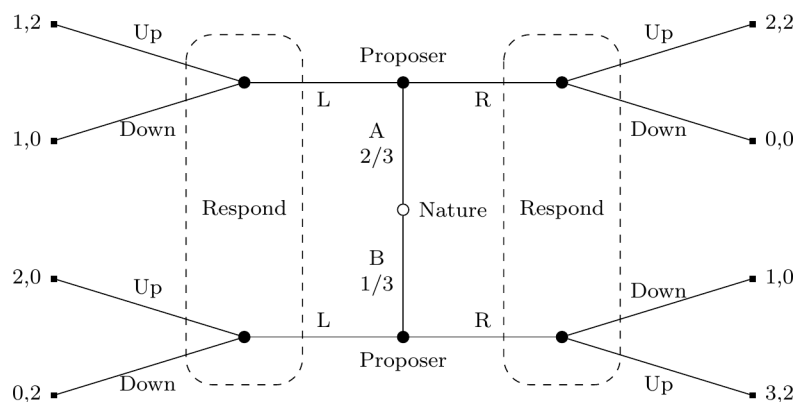


Figure 2: Tree for Q9