Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Econ 280

**Exam 03**

* There are 110 possible points on this exam. The test is out of 100.
* You have one hour to complete this exam, but you should be able to complete it in less than that
* Please turn off all cell phones and other electronic equipment.
* You are allowed a calculator for the exam. This calculator cannot be capable of storing equations. This calculator cannot double as a cell phone or other device.
* Be sure to read all instructions and questions carefully.
* Remember to show all your work.
* Recall basic logic. “Water is wet” is a true statement. “Water is wet and leopards have stripes” is a false statement.
* *Please print clearly and neatly.*

**Part I: Multiple Choice.** *Choose the best answer to the following.*

5 points each.

1. Under which auction would you have an incentive to reduce the amount you bid?
   1. English
   2. Nash
   3. 2nd price sealed bid auction
   4. A & C
   5. None of the above
2. Which of the following is required for revenue equivalence?
   1. Bidders are risk neutral
   2. Values are independent and private
   3. The distribution of the values follows a normal distribution
   4. A & B
   5. None of the above
3. Which of the following is an example of the prisoner’s dilemma?
   1. An arms race
   2. Two people walking towards each other
   3. An agreement between competitors to keep prices high
   4. A & C
   5. None of the above
4. If values are correlated, which auction will generate the most revenue?
   1. Dutch
   2. 1st price sealed bid
   3. English
   4. A & B
   5. None of the above
5. In the following game, describe the Dodge strategy for Ben.

|  |  |  |  |
| --- | --- | --- | --- |
|  | | Ben | |
| Dodge | Straight |
| Alfred | Dodge | 0 , 0 | -1 , 1 |
| Straight | 1 , -1 | -3 , -3 |

* 1. Weakly Dominate
  2. Strictly Dominate
  3. Dominated by Straight
  4. Nash Equilibrium
  5. None of the above

1. Even though the \_\_\_\_\_ has a dominant strategy, Nash Equilibrium can persistently change if the game is \_\_\_\_ repeated
   1. Chicken Game; infinitely
   2. Prisoner’s Dilemma; infinitely
   3. Chicken Game; finitely
   4. Prisoner’s Dilemma; finitely
   5. None of the above
2. In the following game, what could X be to ensure there is no Nash Equilibrium?

|  |  |  |  |
| --- | --- | --- | --- |
|  | | Player 2 | |
| In | Out |
| Player 1 | Up | 1 , X | -1 , 2 |
| Down | -1 , 2 | 1 , -1 |

* 1. -2
  2. 1
  3. 3
  4. A & B
  5. None of the above

1. Night clubs are an example of a platform good, connecting men and women together. How does the night club encourage this connection?
   1. Men often pay for a woman’s drink.
   2. Women often arrive in groups with their friends.
   3. Women get in free while men must pay.
   4. Anyone may use the bathroom for free.
   5. None of the above.
2. Seventy-nine percent of U.S. households watched the series finale of *M\*A\*S\*H*, on February 28, 1983. While this television event was an experience made slightly more valuable because it was commonly shared, it is unlikely to be repeated on the same scale due to the expansion of cable television and now the internet. If *M\*A\*S\*H* was a network good, based on the information provided, which of the following has the most explanatory power for why TV shows lose so much of its networking power?
   1. Consumers were now able to be entertained by competitive goods
   2. There are now few legal barriers to entry
   3. The incumbents lost their hard to replicate resource
   4. The benefits of the network became less than benefit of watching something a person truly enjoyed
   5. None of the above
3. Which of the following is an example of a coordination game?
   1. Choosing a dress for a wedding while making sure no one is wearing the same thing.
   2. Divvying up the parts of a group project so you don’t have to do as much and everyone can work cohesively together.
   3. You’re not sure where your study group is supposed to meet but the library is the most likely place so you go there.
   4. Getting the roast beef at a restaurant—the same everyone else gets—because it is the best deal on the menu.
   5. None of the above

**Part II: True/False.** *Answer true or false, and justify your answer.*

10 points each.

1. A platform good is a type of network good.

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1. An example of the winner’s curse is paying to see a movie which turned out to be quite bad.

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1. If a product for a network good is slightly better than another, the nature of network goods will ensure that only the slightly better product will be around.

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**Part III: Short Answer.** *Answer the following.*

15 points each.

1. Below describes a possible game considering the Northwest Passage. (Due to climate change the Arctic Sea is covered with less ice, making it more navigable.) Two countries, Canada and Russia, are fighting over the mineral rights, minerals which can now be reached by ship. Find Nash Equilibrium. Indicate which, if any, strategy is dominant. Justify your answer.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | Russia | | |
| Claim Sovereignty | Compromise | Cede Rights |
| Canada | Claim Sovereignty | 2,2 | 5,1 | 6,0 |
| Compromise | 1,5 | 3,3 | 5,1 |
| Cede Rights | 0,6 | 1,5 | 0,0 |

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1. Consider the game below. Find rollback equilibrium. Then determine if there is a first or second mover advantage. Be sure to justify your answer.

Alpha

Beta

Beta

0,0

3,1

2,5

5,2

Run

Run

Don’t Run

Many Ads

Don’t Run

No Ads

Beta

1,4

4,3

Run

Don’t Run

Few Ads