PSC/IR 270 Mechanisms of International Relations Prof. Phil Arena Fall 2014 Midterm Exam

- 1. Which of the following statements **is** consistent with the view of scientific inquiry expressed in Lecture 1?
 - 1. Models built on false assumptions are like houses built on rotten foundations—they are bound to collapse sooner or later.
 - 2. Less mature fields of inquiry are forced to make simplifying assumptions, while more mature ones generally avoid this practice.
 - **3.** The appropriateness of any given assumption cannot stated unconditionally because it depends on the question being asked.
 - 4. None of the above
- 2. Suppose some the probability of the average American contracting Ebola in the next six months is 1 in a billion, while the probability of contracting the measles in the same time frame is 1 in ten thousand. Suppose further that the government guaranteed access to vaccines for both diseases at a cost of five cents each. Individual *i* assigns a utility of -1,000,000 to contracting Ebola and -1,000 to the measles. Let $u_i(\$x) = x$.¹ Individual *i*, who has not previously received either vaccine, is considering doing so now.² Given these assumptions, if *i* seeks to maximize their expected utility, *i* will
 - 1. not get either vaccine.
 - **2.** get both vaccines.
 - **3.** get the Ebola vaccine.
 - 4. get the measles vaccine.

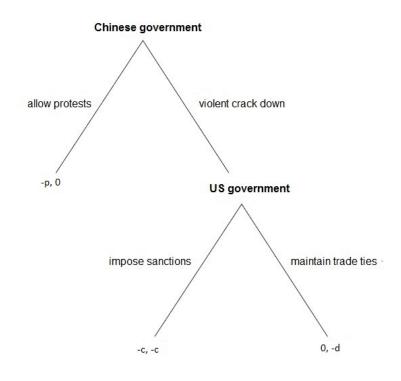
¹This indicates that *i* assigns a utility of 1 to gaining \$1 and -1 to spending \$1.

²Assume that i is unconcerned about the alleged link between vaccines and Autism. Note that the only study claiming to demonstrate such a link is known to be fraudulent.

- 3. Less than 1% of the states that have committed to the Nuclear Non-Proliferation Treaty (NPT) have subsequently developed nuclear weapons.³ In contrast, 50% of the states that never signed the NPT have developed nuclear weapons in the years since that treaty went into force.⁴ **On the basis of this information alone**, we can conclude that
 - 1. the NPT makes states who sign it to be more likely to proliferate.
 - 2. the NPT makes states who sign it to be less likely to proliferate.
 - **3.** the NPT has no effect on whether states proliferate.
 - 4. None of the above
- 4. Dictatorships that accede to the UN Convention Against Torture (CAT) torture their own people more frequently than dictatorships that have not acceded to the CAT do. On the basis of this information alone, we can conclude that
 - 1. the CAT makes dictators more likely to torture their people.
 - 2. the CAT makes dictators less likely to torture their people.
 - **3.** the CAT has no effect on whether dictators torture.
 - 4. None of the above

³North Korea is the only state to have developed nuclear weapons after acceding to the treaty. It later withdrew from the NPT.

⁴The NPT went into force in 1970. India tested its first nuclear weapon in 1974; Pakistan did so in 1998; Israel is widely believed to have possessed nuclear weapons since 1967; and South Sudan, the only other non-signatory, has no known nuclear program.



- 5. Suppose that the US government threatened to impose sanctions on China if the government cracks down violently on the protests currently taking place in Hong Kong. Let the following extensive form game serve as a simple model of subsequent decisions by the two governments, with p being the impact of the protests on China's government, c being the cost of sanctions (assumed, for the sake of simplicity, to be the same for both sides), and d being the domestic reaction if the US does not punish China's government for employing violence against the protesters. According to the model, the US government would strictly prefer imposing sanctions to maintaining trade ties iff
 - **1.** d > c.
 - **2.** c > d.
 - **3.** p > d.
 - **4.** d > p.

- 6. According to the same model, China's government would strictly prefer to allow the protests to continue iff
 - **1.** $c < \{d, p\}$.
 - **2.** p < c < d.
 - **3.** $c > \{d, p\}$.
 - 4. This game theory stuff is really annoying.
- 7. _____ problems make mutual cooperation difficult to arrive at, but do nothing to destabilize cooperation should it occur, whereas ______ problems not only prevent cooperation from occurring but make it unstable should it somehow still occur.
 - 1. Coordination; collaboration
 - 2. Collaboration; coordination
 - **3.** Trust; coordination
 - **4.** Collaboration; trust
- 8. Suppose that the Coordination Game from Lecture 2 was altered so that both players receive $\overline{\alpha}$ when both play **r**, and both receive $\underline{\alpha}$ when both play **b**. This would necessarily imply that the players
 - **1.** face a collaboration problem rather than a coordination problem.
 - 2. face a trust problem rather than a coordination problem.
 - **3.** face no problem at all and will coordinate on **r** in equilibrium.
 - 4. face no problem at all and will coordinate on b in equilibrium.
- 9. Which of the following best reflects the meaning of p_1 as it was used in the model presented in Lecture 2?
 - 1. The payoff player 1 receives if the players cooperate
 - 2. The probability that player 1 plays b
 - **3.** Player 1's belief about how likely player 2 is to play b
 - 4. None of the above

- 10. The United States is one of three countries that does not use the metric system. Insofar as this raises the cost of doing business internationally (if only by a modest amount), it represents an example of states failing to achieve all the benefits of cooperation due to a
 - 1. trust problem.
 - 2. coordination problem.
 - **3.** collaboration problem.
 - 4. None of the above
- 11. Suppose that in the simple model used to introduce the concept of comparative advantage, we'd said that R can produce 12 units of \mathcal{L} per month instead of 10. Then the surplus associated with specialization and trade, as compared to each pursuing self-sufficiency, would be
 - **1.** 32 units.
 - **2.** 48 units.
 - **3.** 96 units.
 - **4.** 144 units.
- 12. Suppose we have two states that each require 4 units of \mathcal{E} per month and would like to consume as much \mathcal{L} as possible. It takes 1 week to produce the first unit of \mathcal{E} or \mathcal{L} . After the first week, though, things start get easier, such that in the second consecutive week of producing of \mathcal{E} , a state can produce 3 units, and in the second consecutive week of producing \mathcal{L} , a state can produce 4 units. They get easier still after that. In the third consecutive week of producing of \mathcal{E} , a state can produce 4 units thereof, and in the third consecutive week of producing \mathcal{L} , a state can produce 10 units. No further increases in productivity occur thereafter, however, meaning that the fourth week spent producing a good yields the same amount as the third week and so on. If the two states pursue self-sufficiency, how many units of \mathcal{L} will each consume?
 - **1.** 0
 - **2.** 1
 - **3.** 5
 - **4.** 20

- 13. In the scenario described by the previous question, how many total units of \mathcal{L} would be produced if one state did nothing but produce \mathcal{L} and the other only started producing \mathcal{L} after it had produced enough \mathcal{E} to satisfy the needs of both states?
 - **1.** 25
 - **2.** 26
 - **3.** 40
 - **4.** 41
- 14. The primary downside of adopting a fixed exchange rates is that doing so requires states to give up control of their
 - **1.** fiscal policy.
 - **2.** monetary policy.
 - **3.** immigration policy.
 - 4. Finally, another easy question!
- 15. In the Model of Trust and Exploitation discussed in Lecture 4, if $1 < \underline{\tau}_1 < \overline{\tau}_1$ and $1 < \underline{\tau}_2 < \overline{\tau}_2$, then mutual cooperation
 - 1. is certain to occur.
 - **2.** is not possible.
 - 3. is possible, but not certain.
 - **4.** is what the fox says.
- 16. In the Model of Trust and Exploitation discussed in Lecture 4, if $\underline{\tau}_1 < \overline{\tau}_1 < 1$ and $\underline{\tau}_2 < \overline{\tau}_2 < 1$, $e_1 > 0$, and $e_2 > 0$, then mutual cooperation
 - **1.** is certain to occur.
 - **2.** is not possible.
 - 3. is possible, but not certain.
 - 4. Swedish Fish

- 17. Which of the following statements best summarizes the results of the statistical analysis presented in Lecture 4?
 - 1. High levels of trust are associated with a greater probability of cooperative trade relations when the stakes are high, but have no impact when they are low, contrary to theoretical expectations.
 - 2. High levels of trust are associated with a greater probability of cooperative trade relations when the stakes are high, but have no impact when they are low, as per theoretical expectations.
 - **3.** High levels of trust are associated with a greater probability of cooperative trade relations when the stakes are low, but have no impact when they are high, contrary to theoretical expectations.
 - 4. High levels of trust are associated with a greater probability of cooperative trade relations when the stakes are low, but have no impact when they are high, as per theoretical expectations.
- 18. Which of the following statements **is** consistent with the implications of the theoretical model discussed in Lecture 4?
 - 1. Within the conditionally cooperative equilibrium, the probability that both states allow imports is 1.
 - 2. Within the conditionally cooperative equilibrium, the probability that both states allow imports is $\phi_1 \phi_2$.
 - **3.** Within the conditionally cooperative equilibrium, the probability that both states allow imports is $\phi_1(1 \phi_2)$.
 - 4. Within the conditionally cooperative equilibrium, the probability that both states allow imports is $(1 \phi_1)(1 \phi_2)$.
- 19. According to Lecture 5, one way that international norms can cause cooperation that would not otherwise occur is by creating a shared sense of what behavior is socially appropriate or commonly expected, which can help to solve
 - 1. coordination problems.
 - 2. collaboration problems.
 - **3.** trust problems.
 - 4. None of the above

- 20. Which of the following best captures the epiphenomenal critique of international institutions laid out in Lecture 5?
 - 1. Across a wide range of substantive domains, the correlation between joint membership in international institutions and cooperative outcomes is statistically indistinguishable from zero.
 - 2. Across a wide range of substantive domains, the correlation between joint membership in international institutions and cooperative outcomes is sharply negative.
 - 3. The correlation between joint membership in international institutions and cooperation merely reflects the fact that those states that were already willing to cooperate are far more likely to join institutions than those that are not.
 - 4. Black helicopters. Need I say more?
- 21. Which of the following statements **is** consistent with the implications of the theoretical model discussed in Lecture 5?
 - 1. International agreements are most likely to facilitate cooperation that would not otherwise occur when their cost is low.
 - 2. International agreements are most likely to facilitate cooperation that would not otherwise occur when their cost is high.
 - **3.** International agreements do not appear to be capable of facilitating cooperation that would not otherwise occur, though cooperation surely does occur between states that sign agreements.
 - 4. None of the above
- 22. The Model of Reassurance discussed in Lecture 5 demonstrates that
 - 1. international institutions have no net impact on the overall level of cooperation in the international system.
 - 2. even if international institutions were mostly epiphenomenal, they'd still facilitate cooperation that would not otherwise occur.
 - **3.** international institutions sometimes have the ability to rearrange states' incentives, thereby eliminating collaboration problems.
 - 4. yet again that game theory is the worst.

- 23. According to Lecture 6, individual i participates in collective action iff
 - **1.** $p_i \nu_i > c_i$.
 - **2.** $\nu_i > c_i$.
 - **3.** $\nu_i > 0.$
 - **4.** All of the above
- 24. Which of the following stylized facts **is** consistent with our discussion of the collective action problem?
 - 1. The United States Congress recently considered, but did not pass, a bill that would have required stronger background checks for the purchase of new firearms, which 90% of the US public supports.
 - 2. Authoritarian governments typically enrich a small number of people at the expense of the rest of the country, yet their people rarely come together to protest rampant corruption and inequality.
 - **3.** Ecuador's government promised to preserve the rain forests of Yasuni National Park if it received \$3.6 billion. When less than 1% of that was pledged by donors worldwide, the plan was scrapped.
 - 4. All of the above
- 25. Which of the following statements is **not** consistent with our discussion of the collective action problem?
 - 1. Public goods are typically only provided on a global scale when it is in the interests of the hegemon to either provide it or encourage others to help do so through the use of selective incentives.
 - 2. Small groups tend to work together in support of a common goal more often than large groups do, and thus even democratically elected governments often favor narrow interests.
 - **3.** If people better understood such critical concepts as the tragedy of the commons and the collective action problem, they would be more likely to work together to overcome the problems we all face.
 - 4. It is difficult to get people to participate in collective action by reminding them that everyone stands to gain a great deal if the group succeeds in working together.

- 26. Which of the following best summarizes the evidence presented in lecture with respect to the relationship between WTO membership and patterns of international trade?
 - 1. WTO members exhibit higher levels of trade in manufactured goods but not agriculture or footwear, consistent with our theoretical expectations.
 - 2. WTO members exhibit higher levels of trade in manufactured goods but not agriculture or footwear, contrary to our theoretical expectations.
 - **3.** WTO members exhibit higher levels of trade in agriculture and footwear but not manufactured goods, consistent with our the-oretical expectations.
 - 4. WTO members exhibit higher levels of trade in agriculture and footwear but not manufactured goods, contrary to our theoretical expectations.
- 27. Which of the following constitutes an example of issue-linkage?
 - 1. Pledging to defend another state in the event that they are attacked provided that they agree to remove or reduce trade barriers.
 - 2. Offering to reduce carbon emissions or limit logging in exchange for some amount of foreign aid.
 - **3.** Both **1** and **2**.
 - 4. Neither 1 nor 2.
- 28. According to Lecture 7, linking issues together is most likely to facilitate cooperation that would not otherwise occur when
 - 1. there is complete information and the two dimensions are of equal value to each of the players.
 - 2. the primary obstacle to cooperation is a trust problem and the stakes are lower for one dimension than the other.
 - 3. Both 1 and 2.
 - 4. Neither 1 nor 2.

- 29. Which of the following best reflects the meaning of ρ_1 , as it was used in the theoretical mode discussed in Lecture 7?
 - 1. The relative weight player 1 places on the first dimension.
 - 2. The probability of mutual cooperation along the first dimension.
 - 3. The probability that player 1 will cooperate on the first dimension.
 - 4. None of the above
- 30. Which of the following statements is **not** consistent with the implications of the theoretical model discussed in Lecture 7?
 - 1. If the benefits of cooperating on the first dimension are too small, reassurance is unlikely to occur.
 - 2. If the benefits of cooperating on the first dimension are too large, reassurance is unlikely to occur.
 - **3.** If the benefits of cooperating on the first dimension are moderate, reassurance is unlikely to occur.
 - 4. All of the above