Multiple Choice Questions: (3 points each)

1. I am taking ____________ of the exam.
   A. Version A

2. Between 1959 and 2016, the poverty rate in the United States has ranged between a
   A. minimum of 4.6% in 2015 and a maximum of 15.4% in 1980.
   B. minimum of 8.2% in 1964 and a maximum of 27.9% in 2016.
   C. minimum of 11.1% in 1973 and a maximum of 22.4% in 1959.
   D. minimum of 19.6% in 1998 and a maximum of 30.7% in 2004.

3. Evan’s income is higher than Sam’s income. Two of the notable differences between their jobs are that Sam gets to work in a climate controlled office building year-round and Evan runs a greater risk of being severely injured on the job. Based upon this information, it would seem reasonable to infer that at least part of the difference in incomes between the workers is due to
   A. the Labor Theory of Value.
   B. Compensating Differentials.
   C. gender discrimination by employers.
   D. the Economic Calculation Problem.

4. A group of teachers at an elementary school is trying to decide where to take their students on a field trip. They are considering three options: an art gallery, an amusement park, and a zoo. When voting between only the art gallery and the amusement park, the art gallery receives more votes. When voting between only the zoo and the art gallery, the zoo receives more votes. When voting between only the amusement park and the zoo, the amusement park receives more votes. These outcomes illustrate the
   A. Economic Calculation Problem.
   B. Coasian Solution to the problem of externalities.
   C. Free Rider Problem.
   D. Condorcet Paradox.

5. Which of the following statements about a Lorenz Curve must always be true?
   A. “A Lorenz Curve must pass through the points (0,0) and (1,1).”
   B. “A Lorenz Curve must lie above the 45 degree line.”
   C. “A Lorenz Curve must be positively sloped.”
   D. More than one (perhaps all) of the above answers is correct.

6. The city of Mos Eisley has a governmental agency that randomly inspects cantinas to make sure that they are serving drinks in compliance with local health codes. The agency assigns each cantina a numeric score/grade which must be displayed for potential customers to see. This government intervention in this market is most likely justified as a way to reduce a deadweight loss associated with a market failure due to
   A. a positive externality.
   B. a negative externality.
   C. lack of information by market participants.
   D. progressive taxation.
7. “Good Y” is non-rival in consumption and non-excludable. As a result, if “Good Y” were simply sold in the marketplace, we should expect
A. less than the efficient amount of the good to be produced/consumed.
B. exactly the efficient amount of the good to be produced/consumed.
C. more than (but less than double) the efficient amount of the good to be produced/consumed.
D. more than double the efficient amount of the good to be produced/consumed.

8. The “Distribution Function of Government” refers to
A. government production of goods or regulation of business, to ensure that the “right mix” of products are produced, each in the “ideal quantity” and at the “ideal quality.”
B. government policies aimed at minimizing fluctuations in overall macroeconomic activity.
C. government policies aimed at altering the final levels of consumption of goods/services across consumers/households, usually with the intention of realizing a “fairer” apportionment of consumption/income/wealth.
D. government policies intended to turn negative externalities into positive externalities.

Answer Questions 9 and 10 based upon the graph below. This graph illustrates the Lorenz Curve in “Country X,” along with two different Tax Concentration Curves in “Country X” – one for “Tax Code A” (its current tax policy) and one for “Tax Code B” (a proposed different tax policy). The value of: “Area (i)” is equal to .14; “Area (ii)” is equal to .09; “Area (iii)” is equal to .11; and “Area (iv)” is equal to .16.

9. The value of the Gini Coefficient in “Country X” is _______.
A. .14
B. .28
C. .34
D. .36

10. The value of the Stroup Coefficient is ___________ and would be ___________.
A. .09 ÷ .50 = .18 under “Tax Code A”; .20 ÷ .50 = .4 under “Tax Code B.”
B. .09 ÷ .36 = .25 under “Tax Code A”; .20 ÷ .36 ≈ .5556 under “Tax Code B.”
D. .23 ÷ .27 ≈ .8519 under “Tax Code A”; .34 ÷ .16 = 2.125 under “Tax Code B.”
11. When discussing government failure resulting from costs of complying with government bureaucracy, it was noted that in order to start a new business in ____________ it is necessary to follow only 1 procedure, a process which can take as little as half a day, and costs 0.3% of annual per capita income in the country.
   A. Venezuela
   B. New Zealand
   C. the United States
   D. Germany

12. Which of the following was discussed in lecture to illustrate how something akin to the “Coasian Solution to Externalities” has been implemented in practice?
   A. How the “Defenders of Wildlife” established the “Bailey Wildlife Wolf Compensation Trust” in order to facilitate the re-introduction of the gray wolf into the wild in the western United States (by compensating ranchers who suffered livestock losses).
   B. How the 8 teams in the Alliance of American Football could possibly be ordered from strongest to weakest in 40,320 different ways.
   C. How kids at “Chuck E. Cheese’s” will often try to ride the carousel for free after another child pays a token to start the ride.
   D. How competition between countries/cities to host the Olympic Games results in an inefficient use of otherwise productive resources.

For question 13, consider the graph below which illustrates the “Average Tax Rate” as a function of income which results from an income tax in Country A, Country B, and Country C.

13. It appears that the income tax in Country A is a ____________ tax, the income tax in Country B is a ____________ tax, and the income tax in Country C is a ____________.
   A. progressive; proportional; progressive.
   B. progressive; proportional; regressive.
   C. proportional; regressive; progressive.
   D. regressive; progressive; proportional.
14. On April 29, 2017, former heavyweight boxing champion Wladimir Klitschko fought Anthony Joshua at Wembley Stadium in London, England in an unsuccessful attempt to regain the IBF, IBO, and WBA Super Heavyweight Championships of the world. This fight was available in the U.S. on “Pay Per View TV.” The broadcast of this bout on “Pay Per View TV” was non-rival in consumption and excludable. Thus, the broadcast was a
A. Club Good.
B. Common Good.
C. Public Good.
D. Private Good.

For Questions 15 through 17, consider a good for which Marginal Private Benefits, Private Costs, Social Benefits, and Social Costs are as illustrated below.

15. Based upon this graph, it appears as if production and consumption of this good generates
A. a positive externality (but no negative externality).
B. a negative externality (but no positive externality).
C. neither a positive externality nor a negative externality.
D. both a positive externality and a negative externality.

16. The free market level of trade is __________; the efficient level of trade is __________.
A. 137 units; 260 units.
B. 169 units; 212 units.
C. 212 units; 260 units.
D. 260 units; 169 units.

17. At the free market outcome there would be a Deadweight-Loss equal to
A. “area a.”
B. “areas a+b+c.”
C. “area d.”
D. “area e.”
18. Regulatory Capture refers to a situation in which
A. firms in a regulated industry influence a regulatory agency to the point where the agency
makes decisions which are in the best interest of the firms (even if the decisions are not in
the best interest of the public).
B. government regulators collect bribes from the firms being regulated.
C. legislators trade votes in order to have multiple policies enacted (each of which would
otherwise not garner a majority of support).
D. voters remain uninformed about the views and policy positions of candidates in an election.

19. Based upon a poverty threshold of $1.90 per day, between 1981 and 2015 the percentage of people
living in poverty for the world as a whole
A. increased moderately from 30.5% to 33.7%.
B. decreased dramatically from 44.3% to 9.6%.
C. decreased slightly from 53.1% to 50.7%.
D. remained essentially constant, changing from 8.3% to 8.1%.

20. The country of Freedonia imposes an income tax which reduces the value of its Gini Coefficient
from .50 to .44. This implies that the value of the Pechman-Okner Coefficient for this tax is ______.
A. .06
B. .12
C. .47
D. .94

For questions 21 and 22, consider a situation in which representatives from seven legislative districts
need to consider two proposals. The surplus that would be realized by constituents in each legislative
district for each project is given by the table below.

<table>
<thead>
<tr>
<th>District</th>
<th>District 2</th>
<th>District 3</th>
<th>District 4</th>
<th>District 5</th>
<th>District 6</th>
<th>District 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal I</td>
<td>–75</td>
<td>–125</td>
<td>–175</td>
<td>–225</td>
<td>150</td>
<td>50</td>
</tr>
<tr>
<td>Proposal II</td>
<td>275</td>
<td>300</td>
<td>–75</td>
<td>–25</td>
<td>225</td>
<td>–200</td>
</tr>
</tbody>
</table>

21. First suppose that each proposal is considered separately, with representatives voting for/against
each based upon surplus realized by constituents of his/her own district. Under this procedure,
“Proposal I” would be ________ and “Proposal II” would be ________.
A. defeated; defeated.
B. approved; approved.
C. approved; defeated.
D. defeated; approved.

22. Now suppose that the representatives from District 1 and District 7 agree to “trade votes” – the
representative from District 1 votes in favor of “Proposal I” in exchange for the representative from
District 7 voting in favor of “Proposal II.” Continue to suppose that the other representatives vote
truthfully (i.e., in the best interest of their own constituents) and that there is a separate vote on
each proposal. When the representatives from Districts 1 and 7 trade votes in this manner,
A. both proposals are approved and the realized value of total social surplus is decreased (i.e.,
realized total social surplus is smaller than it would be if no vote trading took place).
B. both proposals are approved and the realized value of total social surplus is increased (i.e.,
realized total social surplus is larger than it would be if no vote trading took place).
C. both proposals are approved and the realized value of total social surplus is unchanged (i.e.,
realized total social surplus is the same at it would be if no vote trading took place).
D. both proposals are rejected and the realized value of total social surplus is unchanged (i.e.,
realized total social surplus is the same at it would be if no vote trading took place).
23. In 2015, the “Top 1%” of income earners in the U.S. earned ________________ in the country and paid ________________ under the U.S. Federal Income Tax.
   A. 12.89% of all income earned; 43.12% of all tax dollars paid.
   B. 15.63% of all income earned; 52.41% of all tax dollars paid.
   C. 18.54% of all income earned; 25.43% of all tax dollars paid.
   D. 20.65% of all income earned; 39.04% of all tax dollars paid.

For questions 24 through 27, consider a situation in which five candidates (Vernon, Wendy, Xavier, Yair, and Zack) are potentially running for a vacant Senate seat. Actual voter preferences are summarized by the table below. Assume throughout that all people actually vote and do so sincerely and truthfully (i.e., in-line with their actual preferences).

<table>
<thead>
<tr>
<th>Voter Type</th>
<th>1st Choice</th>
<th>2nd Choice</th>
<th>3rd Choice</th>
<th>4th Choice</th>
<th>5th Choice</th>
<th>% of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>[i]</td>
<td>Vernon</td>
<td>Wendy</td>
<td>Xavier</td>
<td>Yair</td>
<td>Zack</td>
<td>15</td>
</tr>
<tr>
<td>[ii]</td>
<td>Wendy</td>
<td>Vernon</td>
<td>Xavier</td>
<td>Zack</td>
<td>Yair</td>
<td>19</td>
</tr>
<tr>
<td>[iii]</td>
<td>Xavier</td>
<td>Vernon</td>
<td>Wendy</td>
<td>Yair</td>
<td>Zack</td>
<td>11</td>
</tr>
<tr>
<td>[iv]</td>
<td>Xavier</td>
<td>Vernon</td>
<td>Yair</td>
<td>Wendy</td>
<td>Zack</td>
<td>6</td>
</tr>
<tr>
<td>[v]</td>
<td>Yair</td>
<td>Xavier</td>
<td>Wendy</td>
<td>Zack</td>
<td>Vernon</td>
<td>5</td>
</tr>
<tr>
<td>[vi]</td>
<td>Yair</td>
<td>Xavier</td>
<td>Zack</td>
<td>Vernon</td>
<td>Wendy</td>
<td>4</td>
</tr>
<tr>
<td>[vii]</td>
<td>Yair</td>
<td>Zack</td>
<td>Xavier</td>
<td>Wendy</td>
<td>Vernon</td>
<td>7</td>
</tr>
<tr>
<td>[viii]</td>
<td>Zack</td>
<td>Yair</td>
<td>Wendy</td>
<td>Vernon</td>
<td>Xavier</td>
<td>33</td>
</tr>
</tbody>
</table>

24. With five different candidates to pick from, the maximum possible number of distinct orderings of the candidates that voters could conceivable have is (i.e., the maximum possible different types of voters) is ________.
   A. 5
   B. 8
   C. 1×2×3×4×5 = 120
   D. 120

25. If there were a three way election between only Vernon, Xavier, and Zack, which voter types would vote for Xavier?
   A. Only types [iii] and [iv].
   B. Only types [iii], [iv], [v], and [vi].
   C. Only types [ii], [iii], [iv], [v], [vi], and [vii].
   D. Only types [i], [ii], [iii], [iv], [v], [vi], and [vii].

26. In an election between all five candidates, __________ would receive the most votes.
   A. Wendy
   B. Xavier
   C. Yair
   D. Zack

27. Suppose that the position were filled by first having a vote over all five candidates, followed by a head-to-head runoff between the two highest vote getters. The person chosen as the eventual winner from this process would be __________.
   A. Vernon
   B. Wendy
   C. Xavier
   D. Zack
A. increased from .272 to .376; increased further from .376 to .513.
B. increased from .398 to .455; increased further from .455 to .481.
C. decreased from .421 to .397; decreased further from .397 to .298.
D. decreased from .502 to .443; increased from .443 to .588.

29. ________________ wrote Anarchy, State, and Utopia (1974), in which many of the Libertarian Justice arguments against coercive income redistribution were articulated.
A. Karl Marx
B. Robert Nozick
C. John Rawls
D. Jeremy Bentham and John Stuart Mill

For questions 30 and 31, consider the imposition of a per unit tax in a market with Supply and Demand as illustrated below. Suppose that the free market level of trade without a tax is efficient.

30. Imposing a per unit tax of $3.00 on sellers in this market would
A. generate tax revenue of $139,500.
B. create a Deadweight-loss equal to “areas c+d.”
C. decrease Consumers’ Surplus by “areas a+b+c+d.”
D. More than one (perhaps all) of the above answers is correct.

31. Consider the following two proposed taxes: “Tax A” is a $1.30 per unit tax imposed on sellers; “Tax B” is a $1.70 per unit tax imposed on buyers. We can infer that
A. the quantity of trade would be identical under “Tax A” and “Tax B.”
B. producers would prefer “Tax A” over “Tax B.”
C. Deadweight-Loss would be larger under “Tax A” than under “Tax B.”
D. None of the above answers are correct.
For questions 32 and 33 consider the following scenario. “Company X” wants to construct a new manufacturing facility near an existing residential neighborhood. If they construct and operate the facility, they can do so at one of four different sizes: “very small plant,” “kind of small plant,” “kind of large plant,” or “very large plant” (building “no plant” is also an option). However, their economic activity would impose external costs from pollution on the nearby residents. The resulting profit (for “Company X”) and external costs (to residents of the adjacent neighborhood) of each possible choice are specified in the table below:

<table>
<thead>
<tr>
<th>Plant Size</th>
<th>Profit</th>
<th>External Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>no plant</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>very small plant</td>
<td>$60,000</td>
<td>$75,000</td>
</tr>
<tr>
<td>kind of small plant</td>
<td>$85,000</td>
<td>$1,150,000</td>
</tr>
<tr>
<td>kind of large plant</td>
<td>$775,000</td>
<td>$1,275,000</td>
</tr>
<tr>
<td>very large plant</td>
<td>$625,000</td>
<td>$1,350,000</td>
</tr>
</tbody>
</table>

32. If “Company X” was able to choose its plant size without having to account for the external cost to nearby residents whatsoever, they would choose
   A. very small plant.
   B. kind of small plant.
   C. kind of large plant.
   D. very large plant.

33. Suppose that property rights can be clearly defined, individuals must pay compensation if they infringe upon the property rights of others, and the impacted parties can negotiate with one another. If “Company X” is initially given the property right to choose whatever plant size they want, we would expect that ultimately
   A. “Company X” would choose to build a “kind of small plant” with no payments made between the homeowners and “Company X.”
   B. “Company X” would choose to build a “very large plant” with no payments made between the homeowners and “Company X.”
   C. “Company X” would choose to build a “very small plant” with the homeowners paying “Company X” some amount between $250,000 and $400,000.
   D. “Company X” would choose to build “no plant” with the homeowners paying “Company X” some amount between $850,000 and $1,150,000.