# **FINAL EXAM**

Economics 412, Fall 2020

### Instructions

The pages of this exam are numbered 1 through 12. The exam will last for two hours and 30 minutes. Each question is worth one point, there are a total of 67 questions.

## Tips for Getting a Good Exam Score

- MANAGE YOUR TIME WISELY if you are banging your head against a wall on a question, move on! Do the easy questions first. "Go for the low-hanging fruit!"
- Select your answers on the google form (link will be shared by proctor at the time of the test)

## **Honor Regulations and Honor Pledge**

- You must <u>not</u> discuss the exam with anyone who has <u>not yet taken it.</u>
- You must <u>not</u> share this exam with <u>future students</u>.
- You may use a simple calculator, but they shouldn't be necessary.
- You must work alone on the exam.

#### Part A True/False:

- 1) One argument for shifting police funding towards social services is that social workers are better equipped to handle mental health-related issues.
  - a. True
  - b. False
- 2) Police departments receive less funding than the housing department in most major cities.
  - a. True
  - b. False
- 3) One argument for increasing police funding is that there is a causal relationship between increases in police funding and decreases in crime rates. At least some empirical evidence suggests that this is the case.
  - a. True
  - b. False
- 4) Police provide public safety and protection against crime which is a public good.
  - a. True
  - b. False
- 5) Private prisons arose as a solution to overcrowding in public prisons.
  - a. True
  - b. False
- 6) The large barriers to entry in the private prison market make it an example of imperfect competition (which is a market failure).
  - a. True
  - b. False
- 7) Universal basic income is a means-tested program.
  - a. True
  - b. False
- 8) Only citizens over 55 would receive a universal basic income.
  - a. True
  - b. False
- 9) Arkansas has something similar to universal basic income called the Arkansas Permanent Fund.
  - a. True
  - b. False

- 10) In the absence of market failures, raising taxes on high earners will increase deadweight loss.
  - a. True
  - b. False
- 11) The marginal tax rate for high earners is currently high relative to where it has been over the last 75 years:
  - a. True
  - b. False
- 12) One argument for increasing taxes on high earners is that their marginal utility of the last dollar earned/consumed is lower than the marginal utility for lower earners.
  - a. True
  - b. False
- 13) The United States corporate tax rate currently is the highest it has been in the past 100 years.
  - a. True
  - b. False
- 14) If the marginal utility per dollar is low for high income individuals, redistributing income to low income individuals can increase total social welfare.
  - a. True
  - b. False
- 15) The "leaky bucket" refers to the fact that transferring money from the rich to the poor has costs (inefficiencies). This also implies that for every dollar taxed from the rich less than one dollar will be given to the poor.
  - a. True
  - b. False
- 16) Means tested welfare programs restrict eligibility to groups of individuals with lower ability to earn high incomes like the elderly, blind, and disabled.
  - a. True
  - b. False

The following questions (17-19) relate to the paper "Moving to Opportunity: The Long-Run Effects of Public Housing Demolition on Children" by Eric Chyn.

- 17) This paper compares the outcomes of displaced individuals (those whose buildings were demolished) to their counterparts (who stayed in their public housing). This comparison is only valid if building selection for demolition was as good as random.
  - a. True
  - b. False

- 18) The results show that this move resulted in rapid improvements in the labor market outcomes of treated parents.c. Trued. False
- 19) Children in treated families earned higher incomes as adults and were less likely to drop out of school.
  - e. True
  - f. False
- 20) The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is means tested and provides in-kind benefits.
  - a. True
  - b. False
- 21) Supplemental Security Income (SSI) is a means tested "categorical" transfer program.
  - a. True
  - b. False
- 22) Temporary Assistance to Needy Families (TANF) provides in-kind benefits.
  - a. True
  - b. False
- 23) Supplemental Nutrition Assistance Program (SNAP) is a means tested program providing cash benefits to low income individuals and families.
  - a. True
  - b. False
- 24) Earned Income Tax Credit (EITC) is means tested.
  - a. True
  - b. False
- 25) Although Medicaid has some differences between states, it always provides means tested in-kind benefits.
  - a. True
  - b. False
- 26) Medicare is means tested.
  - a. True
  - b. False
- 27) Section 8 provides cash to individuals living in low income housing
  - a. True
  - b. False

- 28) All children age 4-5 are eligible to participate in the Head Start program, which provides an in-kind benefit (pre-school).
  - a. True
  - b. False
- 29) Medicare is a "categorical" transfer program because families with young children are eligible.
  - a. True
  - b. False

## **Part B** Multiple Choice:

- 30) Which of the following is not an argument against raising taxes on high earners?
  - a. Higher taxes will increase DWL
  - b. High earners will avoid increased taxation through tax avoidance and evasion
  - c. Higher taxes on high earners will reduce income inequality
  - d. Higher taxes on high earners will reduce incentives for innovation and personal investment
  - e. None of the above
- 31) The United States has what type of income tax system?
  - a. Regressive tax
  - b. Progressive tax
  - c. Proportional/Flat tax
  - d. Democracy
- 32) Which of the following is an argument against universal basic income?
  - a. UBI will replace income lost to automation.
  - b. UBI will lead to inflation.
  - c. UBI will decrease income inequality.
  - d. None of the above.
- 33) Which of the following is not a negative externality of private prisons?
  - a. Incentivizing higher recidivism rates.
  - b. Incentivizing longer prison sentences.
  - c. Incentivizing better inmate treatment.
  - d. None of the above.
- 34) Which of the following are inefficiencies that result in a "leaky bucket" when transferring resources from the rich to the poor?
  - a. Program administration costs
  - b. Rich may work less or find other methods of evading taxes
  - c. Transfers may result in poor individuals working less
  - d. All of the above
  - e. All but B

- 35) "Categorical transfer welfare programs" can be more efficient than means tested programs if targeted characteristics:
  - a. Are verifiable by the government
  - b. Are impossible to change
  - c. Cause low earnings
  - d. Do not create an incentive to alter behavior
  - e. All of the above
  - f. All but C
- 36) Welfare becomes a less attractive option when individuals have more outside options. Which of the following could increase outside options for income?
  - a. Providing childcare options
  - b. Decreasing the benefit reduction rate
  - c. Providing labor market subsidies
  - d. All of the above
  - e. A and C
- 37) Providing childcare options allows parents ability to work outside the home. Empirically, this approach has been shown to:
  - a. Improve child outcomes if childcare is high quality
  - b. Increase the labor supply of mothers
  - c. Reduce children's criminal behavior in adulthood
  - d. Increase the gender pay gap
  - e. All of the above
  - f. All but D
- 38) Until the mid-1980's Medicaid was restricted to those on AFDC cash welfare. This resulted in:
  - a. An effective marginal tax rate of over 100% at the top of AFDC income eligibility levels.
  - b. Large increases in elective medical procedures among single mothers
  - c. A strong correlation between AFDC benefit levels and the fraction of children being raised by single mothers.
  - d. All of the above
- 39) Who would bear most of the economic burden of a potential tax on Shiner beer?
  - a. Shiner beer company
  - b. Current Shiner beer consumers
  - c. Other beer companies
  - d. The government
  - e. Alcoholics

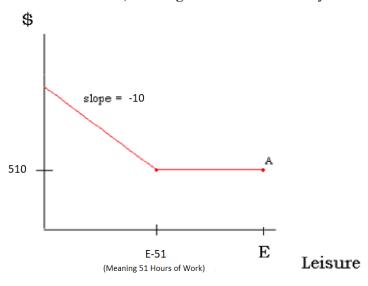
- 40) Under a simple progressive tax code (with perfect compliance), the average tax rate paid is generally \_\_\_\_\_ the tax rate on the last dollar of income earned.
  - a. Higher than
  - b. The same as
  - c. Lower than
  - d. Half
- 41) Karen and Carla earn very different amounts in the labor market. This is largely a result of Karen's choice to be a banker and Carla's choice to be a muralist. The government decides to levy a tax to fund mural spaces. Tina thinks that Karen should pay more of the tax, while Tonya thinks that Carla should pay more. Which of the following is most likely true?
  - a. Karen believes in the ability to pay principle while Carla believes in the horizontal equity principle
  - b. Karen believes in the benefit principle while Carla believes in the horizontal equity principle
  - c. Tina believes in the ability to pay principle while Tonya believes in the horizontal equity principle
  - d. Tina believes in the ability to pay principle while Tonya believes in the benefit principle
  - e. Tina believes in the benefit principle while Tonya believes in the ability to pay principle
- 42) Assume a simple tax schedule with marginal tax rates of 0 from 0-10,000, 5 percent from 10,000-20,000, 10 percent from 20,000-30,000, and 15 percent for 30,000+. George makes 29,999. What are George's marginal and average tax rates?
  - a. Marginal: 5 percent, Average: 10 percent
  - b. Marginal: 10 percent, Average: 5 percent
  - c. Marginal: 10 percent, Average: 10 percent
  - d. Marginal: 10 percent, Average: 7.5 percent
  - e. Marginal: 0 percent, Average: 7.5 percent
- 43) Who the tax is levied on legally influences who bears the economic incidence of a tax
  - a. True
  - b. False

### **Part** C Multi-Part Questions:

Note: While these problems are similar to the problem set, a number of changes have been made to dollar values, hours worked, and the questions themselves. **Do not assume the questions or answers are identical to problem set 5.** 

Suppose you are a single mother with two children living in Oregon, which has a TANF maximum guaranteed benefit of \$510 per month. If you work, you earn \$10/hour. You have no non-labor income.

Suppose your benefits are reduced dollar for dollar with any labor income and consider the leisure-consumption model presented in class ("more is better" for both goods, and standard indifference curves). The figure below illustrates your budget constraint.

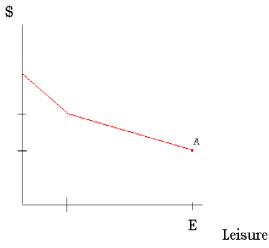


E is total time endowment.

- 44) If, in the absence of TANF, you would work 60 hours per month, how many hours does the model predict you will work now?
  - a. 0 Hours
  - b. 40 Hours
  - c. More than 0 but less than 40
  - d. More than 40
  - e. Not enough information
- 45) Could TANF incentivize you to work more?
  - a. Yes
  - b. No

- 46) Could TANF result in no change in your work hours?
  - a. Yes
  - b. No
- 47) Could TANF result in you working zero hours?
  - a. Yes
  - b. No
- 48) Could TANF result in you working fewer hours, but not zero?
  - a. Yes
  - b. No

Suppose that your benefits are reduced by fifty cents for each dollar of labor income and consider the leisure-consumption model presented in class ("more is better" for both goods, and standard indifference curves). The figure below illustrates your budget constraint.



E is total time endowment.

- 49) There is a kink in the budget constraint (a point where the slope of the line changes). This occurs at \_\_\_\_\_ hours of work and \_\_\_\_ dollars of total income.
  - a. 102, 510
  - b. 51,510
  - c. 184, 920
  - d. 102, 1020
- 50) If you are currently working full time (i.e. 160 hours per month), what is the marginal value of your last hour of work?
  - a. 0
  - b. 10
  - c. 5
  - d. 7.5

- 51) If you are currently working 0 hours, what is the marginal value of your first hour of work?
  - a. 0
  - b. 2.5
  - c. 5
  - d. 7.5
  - e. 10
- 52) If you had not been working and had been receiving TANF benefits when benefits were reduced dollar for dollar with income, is it possible that you might now work?
  - a. Yes
  - b. No

Suppose you decide each month how much of your disposable income to spend on health insurance and on other goods. Suppose that both "health insurance" and "other goods" are normal goods.

Now suppose the government gives everyone a non-transferable voucher good for 20 units of health insurance per month. [You can buy additional health insurance on top of that at the normal price.]

- 53) Will your consumption of both health insurance and other goods rise after you are given the voucher?
  - a. Yes
  - b. No
  - c. Not enough information to answer.
- 54) Is it possible that some individuals will prefer to consume less than 20 units of health insurance?
  - a. Yes
  - b. No
  - c. Not enough information to answer

A government critic slams the new policy, saying, "Instead of a voucher, they should just give out cash."

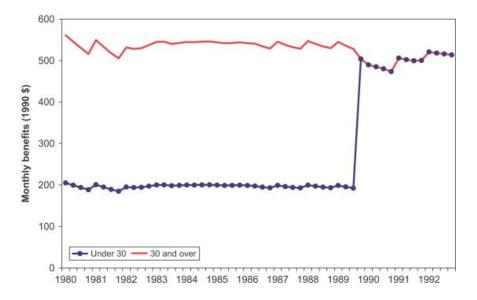
- 55) One valid argument in support of this critic is that:
  - a. Vouchers sell for more than their market value on the black market
  - b. While cash is a fiat currency, cash stimulus has a lower money multiplier effect than in-kind transfers
  - c. Giving vouchers effectively increases an individual's income which creates a disincentive to work
  - d. None of these are valid arguments supporting this critic

- 56) On the other hand, health insurance vouchers might be preferred because:
  - a. Individuals may get discounts from medical providers for paying in cash.
  - b. A smaller portion of cash grants would be spent on health insurance, meaning that cash grants are less effective per dollar at increasing health insurance coverage
  - c. Vouchers sell for less than their market value on the black market.
  - d. There are no valid arguments for vouchers.

Suppose that, instead of the voucher program, the government subsidizes health insurance so that consumers only pay half price per unit.

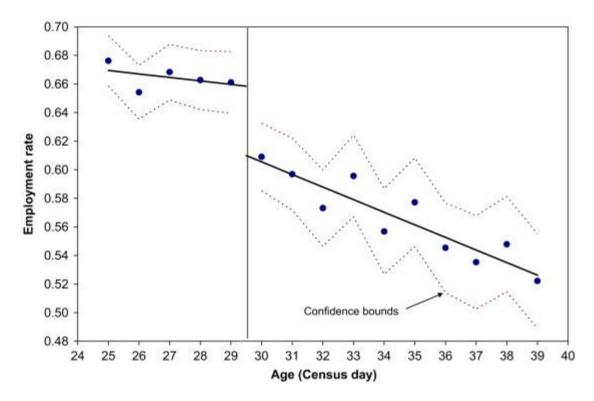
- 57) Will your consumption of health insurance rise?
  - a. Yes
  - b. No
  - c. Not enough information to answer
- 58) Will your consumption of other goods rise?
  - a. Yes
  - b. No
  - c. Not enough information to answer

In their 2008 paper, "Incentive effects of social assistance: A regression discontinuity approach" authors Thomas Lemieux and Kevin Milligan study the impact of social assistance (welfare) on employment in Quebec. The figure below illustrates the variation in benefits (in Quebec) that they use in their research.



- 59) For most of the 1980's, benefit levels were higher for individuals who were less than 30 years old.
  - a. True
  - b. False

- 60) If researchers compared the differences between the employment rate of young adults (less than 30) between Quebec and the rest of Canada both before and after the 1989 policy change, they would be using a \_\_\_\_\_\_ research design.
  - a. Regression Discontinuity
  - b. Instrumental Variables
  - c. Difference-in-differences
  - d. Control for observables
  - e. Randomized Control Trial



- 61) The figure above suggests that higher welfare benefits disincentivize employment.
  - a. True
  - b. False
- 62) If this figure represents employment by age in 1989, we could expect than an equivalent figure for 1992 would:
  - a. Have no meaningful differences
  - b. Show an increasing employment rate with age
  - c. Show no discontinuity at age 30
  - d. Show a discontinuous increase in employment at age 30
- 63) This approach, leveraging the discontinuity in benefits available based an individual's age, would typically be referred to as a difference-in-differences design.
  - a. True
  - b. False

- 64) This research design would be invalid if Quebec also offers free college tuition for all adults over the age of 30.
  - a. True
  - b. False
- 65) This research design would be invalid if employment levels generally decrease as individuals age, even without any age-based changes in benefit levels.
  - a. True
  - b. False
- 66) The 1989 law change that made benefit levels the same for individuals should be expected to have what effect on the gov budget.
  - a. Increased expenditures because it raised benefit levels for young people
  - b. Increased expenditures by increasing the total number of young people enrolled in benefits
  - c. Decrease revenue by reducing the number of employed adults age 30+
  - d. Decrease revenue by decreasing the number of adults employed in their 20's
  - e. All but C
- 67) Increasing social assistance benefits effectively reduces the returns to employment (and the number of people looking for employment). If the market for labor is competitive, what impact would this have on equilibrium wages?
  - a. No Impact
  - b. Not enough information
  - c. Wages increase
  - d. Wages decrease