

UMBC
Department of Economics
First Examination

Economics 102
Spring, 2017

Professor Gindling

Name: _____ (Please Print.)

The exam consists of two parts. Part I contains 35 multiple choice questions. Circle the letter of the correct answer. Each is worth 2 points for a total of 70. Part II contains short answers. Answer all questions in this section. Part II is worth 30 points. You have the entire class period to complete the exam. Do not begin until you are told to do so.

Part I. Multiple Choice. 2 point each (70 points total). Circle the correct answer.

- 1) Which of the following would an economist classify as capital?
 - A) a \$50 bill
 - B) a corporate bond
 - C) a post office employee
 - D) a guitar used by a musician

- 2) Because resources are scarce, the opportunity cost of investment in capital is:
 - A) zero.
 - B) forgone investment.
 - C) forgone present consumption.
 - D) infinite.

- 3) A society can produce two goods: donuts and beer. The society's production possibility frontier is negatively sloped and "bowed outward" from the origin. As this society moves along its production possibility frontier, producing more and more units of donuts, the opportunity cost of producing donuts:
 - A) decreases.
 - B) remains constant.
 - C) increases.
 - D) could decrease or increase depending on the technology.

- 4) Which of the following is studied in macroeconomics but not microeconomics?
 - A) Inflation.
 - B) How does the price of milk change if sales taxes increase?
 - C) How many widgets a specific firm will produce?
 - D) How many widgets a household will buy?

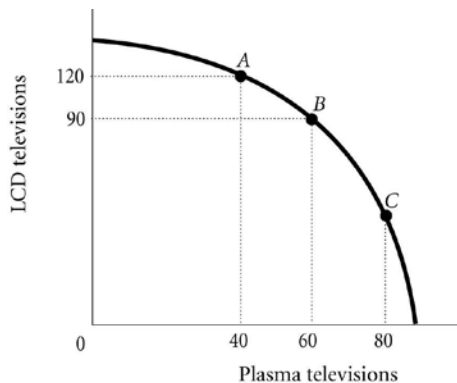


Figure 1

- 5) Refer to Figure 1. The economy is currently at Point A. The opportunity cost of moving from Point A to Point B is the:
 - A) 90 LCD televisions that must be forgone to produce 20 additional plasma televisions.
 - B) 30 LCD televisions that must be forgone to produce 60 additional plasma televisions.
 - C) 120 LCD televisions that must be forgone to produce 40 additional plasma televisions.
 - D) 30 LCD televisions that must be forgone to produce 20 additional plasma televisions.

- 6) Consumers expect their income to rise. For a normal good, this will result in an increase in:
- A) quantity demanded and a fall in price.
 - B) demand and a fall in price
 - C) quantity demanded and a rise in price.
 - D) demand and a rise in price.
- 7) In markets for factors of production:
- A) consumers purchase products.
 - B) firms supply factors of production.
 - C) households supply factors of production.
 - D) households demand factors of production.
- 8) In a market for goods and services (output market):
- A) households demand goods and services.
 - B) firms purchase factors of production.
 - C) households earn income.
 - D) households supply factors of production.
- 9) Which of the following is held constant along the demand curve?
- A) price of the good
 - B) quantity
 - C) income
 - D) both A and B
- 10) If the price of a substitute for Milky Way bars increases, this will result in:
- A) an increase in the supply of Milky Way bars.
 - B) an increase in demand for Milky Way bars
 - C) a decrease in the supply of Milky Way bars.
 - D) a decrease in quantity demanded for Milky Way bars.
- 11) Suppose that video game discs are normal goods. If the income of video game players decreases, you predict that in the market for video games:
- A) both equilibrium price and quantity will fall.
 - B) both equilibrium price and quantity will increase.
 - C) equilibrium price will increase, and quantity will decrease.
 - D) equilibrium price will fall, but quantity will increase.
- 12) Equilibrium in markets for goods and services exists when:
- A) quantity supplied equals quantity demanded.
 - B) a surplus exists.
 - C) a shortage exists.
 - D) only in the minds of slightly deranged economists.
- 13) When price ceilings exists, the methods of non-price rationing include:
- A) ration coupons.
 - B) favored customers.
 - C) waiting in line.
 - D) all of the above
- 14) For a particular product, an effective price floor results in:
- A) quantity demanded greater than quantity supplied.
 - B) quantity supplied greater than quantity demanded.
 - C) quantity demanded equal to quantity supplied.
 - D) demand equal to supply.

- 15) **The total market value of all final goods and services produced within a given period by factors of production located within a country is:**
- A) Gross Domestic Product (GDP).
 - B) Gross National Product (GNP).
 - C) Net National Product (NNP).
 - D) Net National Income (NI).
- 16) **In a capitalist market economy:**
- A) private households own all factors of production.
 - B) the government planning ministry determines what to produce, how to produce it, and who gets production.
 - C) large firms control the economy.
 - D) the government owns all of the land.
- 17) **National defense is a public good. This means that:**
- A) The public is expected to volunteer to defend the country.
 - B) If one person "consumes" national defense, that does not exclude another person from also "consuming" the same national defense.
 - C) It leads to an increase in the power of the public over government.
 - D) National defense actions are all open to public scrutiny.
- 18) **Which of the following is a good or service counted in the GDP?**
- A) A used car with used tires that you buy from your father.
 - B) A used tire you buy for your personal car
 - C) A new tire you buy for your personal car
 - D) Used tires bought by a used car dealer to put on a car on his lot
- 19) **Which of the following would NOT be counted in 2016's GDP?**
- A) the value of a boat produced in 2008 you purchase from a boat dealer in 2016.
 - B) the 2016 salary of a used motorcycle salesperson.
 - C) the value of a refrigerator manufactured in 2016 but not sold in 2016.
 - D) the value of a milky way bar produced and sold in 2016.
- 20) **The income Mexican citizens earn in the U.S. and send back to families in Mexico counts in the:**
- A) U.S. GNP.
 - B) Mexican GNP.
 - C) Mexican GDP.
 - D) both U.S. and Mexican GDP.
- 21) **Which of the following is the biggest source of U.S. Federal Government revenue?**
- A) Corporate taxes.
 - B) Excise taxes.
 - C) Campaign contributions.
 - D) Personal income taxes.
- 22) **The Federal government spends the most on which of the following?**
- A) Transfers to low-income people ("welfare").
 - B) Foreign aid.
 - C) Transfers to the elderly (Social Security, Medicare, etc.).
 - D) Defense.

23) Exports are

- A) Goods and services produced in our country but sold to consumers in other countries.
- B) Goods and services produced in other countries but sold to consumers in our country.
- C) Goods and services produced in our country and sold to consumers in our country.
- D) Ports where ex-ships are scrapped.

24) If GDP is \$10,000 and the population is 100, then the GDP per capita is:

- A) \$9,990
- B) \$10,000
- C) \$100
- D) 10%

25) Purchasing power parity rates:

- A) are used to compare purchases over time.
- B) are used to compare Gross Domestic Product across countries in a way that reflects differences in cost of living.
- C) are a way to compare Gross Domestic Product across countries that includes estimates of illegal and non-market production.
- D) measure inflation.

Table 7.3

Employed	95,000 people
Unemployed	5,000 people
Not in the Labor Force	80,000 people

26) Refer to Table 7.3. The unemployment rate is:

- A) 2.8%.
- B) 5%.
- C) 5.3%.
- D) 7.2%.

27) If the number of unemployed equals 10,000, the number of employed equals 70,000, and the number not in the labor force is 20,000, the labor-force participation rate is:

- A) 60%.
- B) 70%.
- C) 80%.
- D) 90%.

28) Lola is classified as a discouraged worker. That is, she is not employed and she would like to work but and she is not actively looking for work. Lola is:

- A) part of the labor force.
- B) structurally unemployed.
- C) frictionally unemployed.
- D) not part of the labor force.

29) The increase in unemployment that occurs during recessions and depressions is called _____ unemployment.

- A) cyclical
- B) frictional
- C) natural
- D) structural

- 30) If period 1 is the base year, the bundle price of goods in period 1 is \$300, and the bundle price of goods in period 2 is \$600, the period 2 price index is:
- A) 600.
 - B) 200.
 - C) 300.
 - D) 50.
- 31) The Consumer Price Index (CPI) in period 1 is 300 and the CPI in period 2 is 150. The rate of inflation between period 1 and period 2 is:
- A) 100%.
 - B) 50%.
 - C) -50%.
 - D) 33.33%.
- 32) The difference between the nominal interest rate on a loan minus the inflation rate is the:
- A) nominal interest rate.
 - B) inflation premium.
 - C) real interest rate.
 - D) expected interest rate.
- 33) Inflation is defined as:
- A) a general rise in average prices.
 - B) an unrealistic increase in stock prices (also known as a "bubble.").
 - C) economic growth.
 - D) unemployment.
- 34) Which of the following is a cost of inflation?
- A) Prices rise faster than income, leading to falling spending.
 - B) Price lists (menus) have to be changed more often if inflation is high, increasing menu costs to businesses.
 - C) Discouraged workers.
 - D) Purchasing power parity.
- 35) Which of the following can be used to predict when recessions will occur?
- A) the GDP Price Deflator.
 - B) the Index of Leading Economic Indicators.
 - C) the Gross Domestic Product.
 - D) the prime rate.

Part II. Answer all questions. 30 points in total.

1 (8 points): Given a fixed amount of capital, land, entrepreneurial ability, and a fixed technology, the chart below shows how many Milky Way bars can be produced in one hour by different amounts of labor.

Number of Workers	Milky Way bars
1	1
2	5
3	8
4	10

a. Plot these points on a graph. Use these points to draw a Production Function.

b. Using the graph you drew in (a), show how the production function would change if the amount of capital available to the workers increased (label the new production function "b").

2 (6 points). Assume that the supply curve for Milky Way bars is $Q_s=30+2P$ and that the demand curve is $Q_d=60-4P$. What is the equilibrium price **and** quantity in this market? **Please show your work.**

3 (8 points). For each example below draw a graph showing an initial equilibrium in the market given. On the same graph show a shift in either the supply or demand curve that would cause equilibrium price (P_e) and quantity (Q_e) to change as indicated. In each case give a reason that could explain this change in the market.

a. Market - ice cream $P_e \uparrow$ $Q_e \downarrow$

b. Market - ice cream $P_e \uparrow$ $Q_e \uparrow$

4 (8 points): Draw a circular flow diagram and use it to explain why a fall in government spending is likely to increase unemployment. The simple circular flow diagram must include households, firms and government.