INSTRUCTIONS (***Read Carefully***):

**ON YOUR QUESTION BOOKLET:**
Fill in your name, Student ID, Discussion Section Number (e.g. D5) and your signature.

**ON YOUR SCANTRON:**
Enter the Course Number (EC101 DD or EE) and date on the lines at the top-left. In the boxes below, enter your Student ID, your DISCUSSION SECTION number (D1 - D9, E0 - E9), your NAME and your EXAM VERSION into the Scantron computer sheet. Be sure that you “bubble” all entries. I will subtract up to 5 points as punishment for errors in these data!

**DURING THE EXAM:**
Students who wish to leave the room for any reason must leave the Question Booklet and Scantron sheet with the instructor or teaching fellow. Students in EC101DD MUST turn in both the Question Booklet and the Scantron sheet at the end of the exam and exit from the front of the room. Students in EC101EE should keep their Question Booklet and turn in only their Scantrons. All students must show their BU Student IDs as they leave the exam room.

**MULTIPLE-CHOICE QUESTIONS:**
Choose the **BEST** answer for each of the multiple-choice questions. (Only ONE answer is allowed, even when more than one of the answers is technically correct.) On the Question Booklet, CIRCLE the letter that you chose, and then BUBBLE it on the Scantron sheet.

Never cross out an answer on your Scantron. Use a pencil to bubble your answers, and keep a good eraser with you. If you bubble the wrong answer on the Scantron, erase your mark COMPLETELY, and then bubble the correct answer.

***YOU MAY NOT USE A CALCULATOR, CELL PHONE OR LAPTOP.***

***However, INTERNATIONAL STUDENTS may use electronic translators or dictionaries.***

You have 60 minutes to complete the exam. Good luck!
1. A perfectly inelastic supply curve is
   a. horizontal
   b. diagonal
   c. vertical
   d. none of the above

2. On Tuesday, Professor Plum asked Skip why he came to class. Skip said it was because he didn't have anything better to do. This indicates that
   a. Skip’s opportunity cost of going to class is smaller than the benefit.
   b. Skip considers leisure to be a complement of university education.
   c. Professor Plum believes that his lectures are a normal good.
   d. Skip’s elasticity of demand for education is low.

3. Which of the following is not a determinant of demand?
   a. the price of an input used to produce the good
   b. the price of a complementary good
   c. the expected price of the good next month
   d. the price of a substitute good

4. When you calculate your (opportunity) costs of going to college, what portion of your room-and-board expenses should be included?
   a. Your full room-and-board expenses
   b. None of your room-and-board expenses
   c. The excess of your room-and-board expenses over the income you earn while attending college
   d. The excess of your room-and-board expenses over room-and-board expenses you would have had if you weren’t in college

5. When the price of hot dogs is $1.50 each, 500 hot dogs are sold every day. After the price falls to $1.35 each, 510 hot dogs are sold every day. At the original price, what is the price elasticity of demand for hot dogs?
   a. –1/5
   b. –5
   c. –1
   d. –0.015

6. The exchange of goods or services in a free market is likely to increase the welfare of both sides because
   a. free exchange eliminates poverty.
   b. the majority of individuals in a free market economy can obtain what they want.
   c. in free markets individuals tend to know the people that they trade with.
   d. in free markets exchange is voluntary.

7. If the price elasticity of supply for cell phone service is 3, a 20% price increase will cause the quantity supplied to increase by
   a. 60%
   b. 20%
   c. 3%
   d. 6.67%

8. Which of the following is not necessarily a property of a perfectly competitive market?
   a. A homogeneous good is being sold.
   b. All transactions are voluntary.
   c. Buyers and sellers are self-interested and rational.
   d. There are many more buyers than there are sellers.

9. A demand curve normally shifts when
   a. the price changes.
   b. the supply changes.
   c. the consumer’s income changes.
   d. the cost of production changes.

10. Which of the following would normally be considered to be an example of complements?
   a. butter and margarine
   b. “Your haircut looks great.”
   c. shirts and pants
   d. hamburgers and pizzas

11. An inward shift in the demand for lettuce could be caused by
   a. a report that Barack Obama throws his lettuce in the trash when his kids aren’t looking.
   b. a decrease in the price of lettuce.
   c. an increase in the price of fertilizer used by lettuce farmers.
   d. an increase in the population of lettuce-eating rabbits.

12. A market demand curve contains information about
   a. how much all consumers will actually buy in the marketplace.
   b. how much all consumers would want to buy at various prices.
   c. the quantity purchased.
   d. the determinants of individual demand.

13. Which of the following comes closest to perfect competition?
   a. the market for wheat
   b. restaurants in the Boston area
   c. supermarkets (for food and related items)
   d. the sale and purchase of designer clothing
14. **See Figure DSQ.** The market equilibrium price of flour is  
   a. 0  
   b. $7  
   c. $4  
   d. $3

15. **See Figure DSQ.** What is the elasticity of supply when the price goes from $5 to $6?  
   a. $2/3  
   b. $4/5  
   c. $5/4  
   d. $1

16. **See Figure DSQ.** Suppose that a drought destroys part of the wheat crop from which flour is made. Then, what would happen to the equilibrium price and quantity of flour sold?  
   a. Price would rise and the quantity would increase.  
   b. Price would rise and the quantity would decrease.  
   c. Price would fall and the quantity would increase.  
   d. Price would fall and the quantity would decrease.

17. **See Figure DSQ.** The quantity of flour supplied at a price of $3 is:  
   a. 300  
   b. 100  
   c. 150  
   d. 0

18. **See Figure DSQ.** Which of the following is a good approximation of elasticity of demand when the price changes from $5 to $4?  
   a. $−5/4  
   b. $−4/5  
   c. $−5/2  
   d. $−1/50

19. Emily buys more milk when the price of milk is lower, because  
   a. low prices indicate the presence of a surplus of the product.  
   b. low prices are correlated with low quality in perishable goods.  
   c. low prices allow her to buy milk for less important purposes.  
   d. supply curves are always upward sloping.

20. In a complex economy, selling and buying is a more effective procedure for exchange than barter is, because  
   a. barter leads to low quality goods and services.  
   b. selling and buying requires the use of money.  
   c. with barter it is difficult to find an appropriate trading partner.  
   d. barter cannot be applied to services.

21. The supply curve for broccoli could shift to the left because of  
   a. an increase in the population of insects that attack the broccoli plant.  
   b. a decrease in the price of broccoli.  
   c. a report that eating broccoli causes liver disease.  
   d. a statement by Barack Obama that broccoli tastes bad.

22. Arbitrage is likely to occur  
   a. when the same goods are sold at different prices.  
   b. in markets for luxury goods.  
   c. when profit margins are high.  
   d. none of the above

23. Capital formation requires  
   a. the printing of stock certificates.  
   b. a sacrifice of consumption.  
   c. an increase in the money supply.  
   d. the availability of advanced technologies.

24. Which of the following is not a capital good?  
   a. a factory building  
   b. 100 shares of Google stock  
   c. a washing machine  
   d. a screwdriver
25. Relative to a person who earns $7 per hour, a person who earns $30 per hour has
   a. a lower opportunity cost of working longer hours.
   b. a higher opportunity cost of taking a day off.
   c. a lower opportunity cost of driving farther to work.
   d. the same opportunity cost of spending time on leisure activities.

26. Economists use models, because
   a. computers are able to process even unimportant details.
   b. every economic situation is essentially the same, so specific details are unnecessary.
   c. exceptions to the model prove that people are irrational.
   d. the omission of unimportant details makes analysis easier.

27. If people stop drinking milk,
   a. there would be more dairy cows, because more calves (baby cows) would have milk to drink.
   b. the supply curve of milk would shift out to compensate for the smaller demand.
   c. there would be fewer dairy cows, because farmers would have less incentive to keep them.
   d. the supply curve of milk would shift up.

28. Suppose the total value of US stocks drops by $100 billion because Donald Trump announces that a black cat is bringing him bad luck. Then,
   a. the country is $100 billion poorer.
   b. the GDP will be $100 billion less.
   c. prices of inferior goods would fall.
   d. factories would be able to produce the same amount as earlier.

29. Suppose it is established that regular coffee drinkers are more likely to get cancer than other people. Then we can conclude that
   a. avoiding coffee would reduce the chance of getting cancer.
   b. chemicals in coffee cause cancer.
   c. people who drink 4 cups of coffee each day are more likely to get cancer than those who drink 3 cups a day.
   d. coffee drinking is associated with cancer.

30. The distribution of goods and services is more important in advanced economies than in primitive economies, because
   a. production is more specialized in advanced economies.
   b. advanced economies tend to use fiat money.
   c. barter is more important in primitive economies.
   d. average wealth is greater in advanced economies.

31. To an economist, “saving” is
   a. depositing money in a savings account.
   b. consuming less than you produce.
   c. selling stocks or mutual funds.
   d. donating money to the poor.

32. In the United States, which of the following types of business is least likely to be government owned?
   a. universities
   b. hospitals
   c. farms
   d. subway systems

33. A market supply curve summarizes information about
   a. how much all producers would want to sell at various prices.
   b. how much producers will sell in the marketplace.
   c. the quantity sold.
   d. the method of production.

34. As compared with barter, selling and buying
   a. yields more useful information about market value.
   b. makes it easier to find trading partners.
   c. requires the use of a widely accepted medium of exchange.
   d. ALL of the above

35. If the price elasticity of demand for chicken is 2, a 20% decrease in the price of chicken will lead to a _______ in the quantity demanded of chicken.
   a. 10% decrease
   b. 40% increase
   c. 40% decrease
   d. 10% increase

36. The cross price elasticity of demand for two goods that are complements is
   a. uncertain.
   b. negative
   c. zero
   d. positive
Figure SFD. The graph below describes the market for cups of coffee. Changes in the market cause supply to shift from $S$ to $S'$ and demand to shift from $D$ to $D'$.

![Graph showing market for cups of coffee with shifts in supply and demand.](image)

37. **See Figure SFD.** In the original market equilibrium
   a. 30 cups of coffee are sold for $1.50 each.
   b. 40 cups of coffee are sold for $2.00 each.
   c. 50 cups of coffee are sold for $2.50 each.
   d. 60 cups of coffee are sold for $1.50 each.

38. **See Figure SFD.** What might cause demand to shift from the $D$ to $D'$?
   a. An increase in incomes.
   b. A decrease in the price of tea.
   c. A report that coffee is bad for your health.
   d. An expectation that coffee prices will fall in the future.

39. **See Figure SFD.** What might cause supply to shift from the $S$ to $S'$?
   a. The price of tea goes up.
   b. A storm in South America destroys many coffee plants.
   c. More people start drinking coffee.
   d. Better coffee machines make more cups of coffee from the same quantity of coffee beans.

40. **See Figure SFD.** What is the elasticity of supply on curve $S$ when the price changes from $2$ to $2.50$?
   a. 0
   b. 1
   c. 2
   d. −2