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 (fill in the small circles). 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, so that you have a record of your answers. Then BUBBLE it on the Scantron for grading.

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!

**DO NOT OPEN THIS BOOKLET OR TURN IT OVER**
[until told to do so]
1. A perfectly inelastic supply curve is
   a. diagonal
   b. vertical
   c. horizontal
   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 elasticity of demand for education is low.
   b. Skip considers leisure to be a complement of university education.
   c. Skip’s opportunity cost of going to class is smaller than the benefit.
   d. Professor Plum believes that his lectures are a normal good.

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

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

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. –0.015
   b. –1/5
   c. –5
   d. –1

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

7. Which of the following facts would be likely to affect the price elasticity of supply for cell-phone service?
   a. These days, consumers find it difficult to live without cell-phone service.
   b. Providing more cell-phone service would require the construction of more cell-phone towers.
   c. The batteries in newer cell phones do not need to be recharged as often as in older phones.
   d. Most cell phones have many apps.

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

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. hamburgers and pizzas
    b. butter and vegetable oil
    c. “Your haircut looks great.”
    d. houses and furniture

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

12. A market demand curve contains information about
    a. the total cost of production.
    b. the quantity each consumer has purchased.
    c. how much all consumers have purchased.
    d. how much all consumers would want to buy at various prices.

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

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

16. **See Figure DSQ.** Suppose that a lack of rain 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 fall and the quantity would decrease.
   b. Price would rise and the quantity would increase.
   c. Price would fall and the quantity would increase.
   d. Price would rise and the quantity would decrease.

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

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. $5/2
   c. $4/5
   d. $1/50

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

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

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

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

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

24. Which of the following is not a capital good?
   a. a house
   b. a factory building
   c. 100 shares of Google stock
   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 lower opportunity cost of driving farther to work.
   c. the same opportunity cost of spending time on leisure activities.
   d. a higher opportunity cost of taking a day off.

26. Economists use models, because
   a. omitting unimportant details makes analysis easier.
   b. exceptions to the model prove that people are irrational.
   c. models give precise results.
   d. computers are able to process even unimportant details.

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 up.
   c. the supply curve of milk would shift out to compensate for the smaller demand.
   d. there would be fewer dairy cows, because farmers would have less incentive to keep them.

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 value of goods produced would be $100 billion less.
   b. factories would be able to produce the same amount as earlier.
   c. the country is $100 billion poorer.
   d. prices of inferior goods would fall.

29. Suppose statistics show that regular coffee drinkers become sick with cancer a lot more often than other people do. Then we can be confident that
   a. chemicals in coffee cause cancer.
   b. avoiding coffee would reduce the chance of getting cancer.
   c. people who drink 4 cups of coffee each day are more likely to get cancer than those who drink 2 cups a day.
   d. NONE of the above.

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

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

32. Which of the following countries has lifted most people out of poverty during the last 40 years?
   a. the United States
   b. China
   c. India
   d. Brazil

33. A market supply curve summarizes information about
   a. the method of production.
   b. the quantities sold in each past and future time period.
   c. how much all producers would want to sell at various prices.
   d. the quantity sold.

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

35. If the price elasticity of demand for chicken is –2, by how much would the price of chicken have to fall so that consumers will want to buy 20% more chicken.
   a. 40%
   b. 10%
   c. 20%
   d. NONE of the above

36. The cross price elasticity of demand for two goods that are complements is
   a. zero.
   b. negative.
   c. positive.
   d. infinite.
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 $D'$.

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

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

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

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. 2
   c. 1
   d. $-2$