EC101 DD/EE Midterm 1

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, so that you have a record of your answers. Then BUBBLE it on the Scantron sheet 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. Suppose the value of the Shanghai stock-market increases by 500 billion yuan because Chinese investors expect good luck. Then
   a. Chinese factories will become more productive.
   b. Chinese per capita income will fall.
   c. the Chinese GDP will increase by the same amount.
   d. *NONE* of the above

2. The supply curve of peanuts could shift to the left because of
   a. an advertisement showing happy children eating peanuts.
   b. an increase in the price of peanuts.
   c. a report that peanuts prevent liver disease.
   d. bad weather.

3. Most Americans eat bread with butter. The cross-price elasticity of demand for bread and butter is likely to be
   a. zero.
   b. infinite.
   c. negative.
   d. positive.

4. Which of the following is an advantage of selling and buying as compared with barter?
   a. Selling and buying is a two-step process.
   b. Selling and buying requires more markets than barter does.
   c. Selling and buying is more difficult to tax.
   d. Selling and buying yields prices that measure value.

5. Molasses is a dark syrup that is created during the production of white cane sugar. The cross-price elasticity of supply for molasses and sugar will be
   a. zero.
   b. infinite.
   c. negative.
   d. positive.

6. The demand for a good will be more elastic,
   a. the shorter the period of time.
   b. the greater the availability of close substitutes.
   c. the more it is regarded as a necessity.
   d. the lower the cost of production.

7. A shift to the right of the supply curve of milk could be caused by
   a. a decrease in the price of grain used to feed cows.
   b. a disease that kills cows.
   c. an increase in the income of urban consumers.
   d. a report that milk prevents cancer.

8. See Figure DSA. The quantity of apples supplied at a price of $4 is
   a. 300.
   b. 0.
   c. 200.
   d. 600.

9. See Figure DSA. At a price of $6, there would be:
   a. a shortage of 500 apples.
   b. a surplus of 200 apples.
   c. a surplus of $4.
   d. a shortage of 200 apples.

10. See Figure DSA. Which of the following is a good approximation of elasticity of demand when the price changes from $5 to $4?
    a. $-5/4$
    b. $-1/50$
    c. $-50$
    d. $-4/5$

11. See Figure DSA. Suppose the price changes from $9 to $10, and suppose the price elasticity of demand is $-1$. Then the new quantity demanded would be approximately
    a. 100.
    b. 50.
    c. 89.
    d. 0.

12. Capital formation is difficult in poor countries, because
    a. they cannot reduce their already low level of consumption.
    b. they cannot increase their money supply with creating inflation.
    c. they lack advanced technologies.
    d. most poor countries are undemocratic.
13. The short-run elasticity of supply of medical services in the US is low because
   a. many people do not have medical insurance.
   b. it takes a long time to train doctors and nurses.
   c. most people cannot afford the high cost of medicine.
   d. modern medical equipment is expensive.

14. Compared to a person who earns a minimum wage, a person who earns $40 per hour has
   a. a lower opportunity cost of driving farther to work.
   b. the same opportunity cost of spending time on leisure activities.
   c. a higher opportunity cost of taking a day off.
   d. a lower opportunity cost of working longer hours.

15. Paper money can function only if it is
   a. widely accepted.
   b. printed by the government.
   c. backed by gold.
   d. monetized by banks.

16. The market supply curve of rice contains information about
   a. the health effects of rice consumption.
   b. consumer trends in the market for rice.
   c. the quantity of rice that will be sold.
   d. how much rice producers would want to sell at various prices.

17. Which of the following is not necessarily a property of a perfectly competitive market?
   a. Buyers and sellers are self-interested.
   b. Buyers and sellers have complete information about the market.
   c. Buyers and sellers care about the welfare of the rest of society.
   d. Transactions are voluntary.

18. Arbitrage in the copper market is most likely to occur when
   a. copper mining is very profitable.
   b. copper is selling at different prices in different places.
   c. copper demand is unusually high.
   d. new copper mines have been opened.

19. Which of the following comes closest to perfect competition?
   a. department stores in Tokyo
   b. the market for soy-bean oil
   c. the sale and purchase of apartments in Mumbai
   d. supermarkets (for food and related items)

Figure MEQ. Supply and Demand

20. See Figure MEQ. At a price of $20,
   a. the market would be in equilibrium.
   b. there would be excess demand, but it is impossible to know by how much.
   c. There would be excess supply, but it is impossible to know by how much.
   d. there would be excess demand of approximately 25 units.
   e. there would be excess supply of approximately 25 units.

21. See Figure MEQ. Suppose all the sellers in this market started out asking for a price of $45 per unit. What is the most likely result?
   a. They would be forced to raise their prices because at $45 there would be excess demand.
   b. They would be forced to lower their prices because at $45 there would be excess supply.
   c. They would all just break even because $45 is the cost of production.
   d. They would all make a large profit because $45 is more than the equilibrium price.

22. Monica bought an iPod that came with a $10 rebate form (for a $10 refund). Monica should fill out and mail in the form if
   a. the opportunity cost of the time required is more than $10.
   b. only if she would not have bought the iPod without the rebate.
   c. $10 is more than 10% of the price of the iPod.
   d. the opportunity cost of the time required is less than $10.
23. If, at the current price, there is a shortage of a good, 
   a. the price is below the equilibrium price. 
   b. sellers are producing more than buyers wish to buy. 
   c. quantity demanded equals quantity supplied. 
   d. the market must be in equilibrium. 

24. Two different prices cannot prevail in a perfectly competitive market, because 
   a. at least one buyer and one seller could set a price that would make them better off. 
   b. money is legal tender. 
   c. the established value of money permits only one price. 
   d. it is illegal to charge two different prices for the same commodity. 

25. If the price elasticity of demand for a good is –4.0, then a 10 percent increase in price results in a 
   a. 40 percent decrease in the quantity demanded. 
   b. 0.4 percent decrease in the quantity demanded. 
   c. 2.5 percent decrease in the quantity demanded. 
   d. 4 percent decrease in the quantity demanded. 

26. If Julie and Sarah buy rice for the same price, but Julie is willing to pay more for rice than Sarah is, then 
   a. rice is an inferior good for Sarah. 
   b. Sarah does not have full information about the quality of rice. 
   c. exchange is not voluntary. 
   d. Julie will get more consumer surplus from rice than Sarah will. 

27. Which of the following is most likely to be used as an intermediate good? 
   a. an iPod 
   b. a locomotive 
   c. a factory building 
   d. a roll of cloth 

28. The own-price elasticity of an upward sloping supply curve 
   a. is always negative. 
   b. can be either positive or negative. 
   c. is always positive (but not always 1). 
   d. is always 1. 

29. The price elasticity of demand for widgets is –2. At a price of $10, a store sells 200 widgets per month. The store owner decides that she wants to sell 260 widgets per month. What price should she set? 
   a. $7.00 
   b. $4.20 
   c. $9.50 
   d. $8.50 

30. Last night you had to study for your economics exam. If you hadn’t been studying, you would have gone to a Red Sox game in Fenway Park with your friends. You also could have watched The Sky Divers on television or eaten dinner with your roommate Anandi. The opportunity cost of studying was 
   a. the Sky Divers. 
   b. dinner with Anandi. 
   c. the Red Sox game. 
   d. ALL of the above. 

31. Suppose the 1st apple gives Kamwing $4 worth of pleasure, the 2nd gives him $3 worth, the 3rd gives him $3 worth, and the 4th $2 worth. If the price of apples is $2.50 each, then how many apples should Kamwing buy? 
   a. 4 
   b. 2 
   c. 3 
   d. 1 

32. In the United States, the price elasticity of supply of cotton is .3 in the short run and 1.0 in the long run. This difference could be explained by the fact that 
   a. harvesting cotton is expensive. 
   b. it takes several years to prepare land for growing cotton. 
   c. most cotton clothing is imported from China. 
   d. people don’t replace their clothing quickly. 

33. As compared with the real world, economic models 
   a. are less political. 
   b. are simpler. 
   c. are more difficult to analyze. 
   d. use more data. 

34. Which of the following is not a capital good? 
   a. experience as an architect 
   b. a robot in an automobile factory 
   c. trust in other people 
   d. electric power used in production 

35. The term “perfect competition” refers to 
   a. the economies of many countries. 
   b. an economic model. 
   c. the British industrial revolution. 
   d. NONE of the above 

36. When per capita income falls from $25,000 to $20,000, the quantity of potatoes demanded by consumers increases by 30%. Then the income elasticity of demand for potatoes is _____. 
   a. 1.5 
   b. 3 
   c. –1.5 
   d. –3
Scenario HCW. Suppose farmers start injecting cows with a hormone that causes them to give more milk. Then, the government announces that people who drink the milk from the hormone-treated cows will be healthier and live longer.

[You may draw in the space below to help you answer the following questions. The drawing will NOT be graded.]

37. See Scenario HCW. The supply curve for milk will
   a. rotate.
   b. shift right.
   c. be unaffected.
   d. shift left.

38. See Scenario HCW. The demand curve for milk will
   a. shift left.
   b. rotate.
   c. shift right.
   d. stay in the same position.

39. See Scenario HCW. The equilibrium quantity of milk purchased
   a. could increase or decrease.
   b. will decrease.
   c. will not change.
   d. will increase.

40. See Scenario HCW. The equilibrium price of milk
   a. could increase or decrease.
   b. will not change.
   c. will increase.
   d. will decrease.