Solve the following multiple-choice problems and mark your answers on the scantron you were given. Write your name and section number on the scantron. (Each problem is worth 2 points)

1. At her current consumption levels, Linda derives 5 units of utility from the consumption of latte, which costs $3, and 2 units of utility from the consumption of coffee, which costs $1.50. What should Linda do if she is rational?
   (a) Only buy latte and not consumer any coffee
   (b) Buy more coffee and less latte
   (c) Buy more latte and less coffee
   (d) Retain her current consumption basket

2. Stan has an income elasticity of .4 for movies. If his income increases by 50%, by how much will Stan increase his monthly consumption of movies if he goes to 20 movies per month?
   (a) By 2 movies
   (b) By 4 movies
   (c) By 8 movies
   (d) By 10 movies

3. Which of the following goods is likely to have the largest income effect?
   (a) Jewelry
   (b) Houses
   (c) Milk
   (d) Guns

4. When the price of chicken increases from $4 to $5 per pound the quantity of chicken demanded decreases by 25%. What is the price elasticity of chicken?
   (a) 0.00
   (b) − .25
   (c) − .80
   (d) − 1.00

5. Levis decreased the price of their jeans from $40 to $20 and as a result the quantity of Levis jeans sold rises by 60%. What can we say about the price elasticity of demand for Levis jeans?
   (a) It is inelastic
   (b) It is elastic
   (c) It is unitary
   (d) It is negative
6. Based on figure 1 (above), how much consumer surplus would this consumer receive from the consumption of tea if a cup of tea costs $1.00?
(a) $1.00 (b) $1.50 (c) $1.75 (d) $3.00

7. What type of firm is most common type in the United States?
(a) Proprietorships (b) Partnerships (c) Corporations (d) Franchise

8. If hiring another worker increases the production of watches from 10 to 14 watches per hour and the wage rate of watchmakers is $8 per hour, what approximately is the marginal cost of the additional watches?
(a) $2 per watch (b) $4 per watch (c) $8 per watch (d) $16 per watch

9. If the average variable cost is $5 when 15 units are produced and the average fixed cost is $2, what does the total cost equal?
(a) $77 (b) $85 (c) $90 (d) $105

10. Which of the following statements is NOT true about perfectly competitive markets?
(a) The market price equals the firms’ average revenue (b) Firms make economic profit in the long run (c) There are many sellers (d) Firms are price takers

11. When Bikes inc. produces 50 bicycles the average total cost is $100 per bike and the marginal cost of the fiftieth bike is $120. Which of the following statements MUST be true at this production level?
(a) The marginal cost must be increasing (b) The marginal cost must be decreasing (c) The average total cost must be increasing
(d) The average total cost must be decreasing

12. **If an industry experiences diseconomies of scale, what will happen to price in the short and long runs if the demand for the good increases?**
   (a) It will rise in the short run and then decrease, but will stay above the original price
   (b) It will rise in the short run and then will fall back to the original price
   (c) It will rise in the short run and then will fall below the original price
   (d) It will rise in the short run and will rise further in the long run

*Use the table 1 (below), which shows the marginal costs and revenue of a firm producing calculators in a perfectly competitive market, to answer problems 13 through 15. Assume that the each calculator sells for $15 and that the fixed cost is $14.*

<table>
<thead>
<tr>
<th>Unit</th>
<th>MC</th>
<th>Revenue</th>
<th>TVC</th>
<th>TC</th>
<th>ATC</th>
<th>AVC</th>
<th>Profit</th>
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13. **How many calculators will this firm produce in order to maximize profit?**
   (a) 2 units  (b) 3 units
   (c) 4 units  (d) 5 units

14. **How much profit would this firm be making in the short run?**
   (a) $3  (b) $6
   (c) $9  (d) $12

15. **What is the firm’s average total cost of producing 4 units**
   (a) $8.5  (b) $10.0
   (c) $10.5  (d) $12.0

*Use figure 2 (below), which shows the revenues and costs for a firm in a perfectly competitive market, to answer problems 16 and 17.*
16. **What can you say about this firm?**
(a) It is making an economic profit
(b) It is making an economic loss, but is able to cover its variable cost
(c) It is making an economic loss and is unable to cover its variable cost
(d) It is breaking even

17. **Which one of the points in figure 2 is the shutdown quantity?**
(a) Point A
(b) Point B
(c) Point C
(d) Point D

Complete table 2 (below) and use it to answer problems 18 through 20. Assume wage = $20 and Total Fixed Cost = $16.

### Table 2

<table>
<thead>
<tr>
<th>Workers</th>
<th>Production</th>
<th>MP</th>
<th>TVC</th>
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18. **What is the average total cost of the firm represented in table 2 (above) after it adds its second worker?**
(a) $4
(b) $5
(c) $6
(d) $7

19. **What approximately is the marginal cost of producing an additional unit if the firm increases the number of workers from 1 to 2 workers?**
(a) $2.0
(b) $2.5
(c) $4.0
(d) $5.0

20. **What does total production equal after the fourth worker is added?**
(a) 22 units
(b) 24 units
(c) 26 units
(d) 28 units