Instructions:

- Do not turn to the next page before you are instructed to do so
- Write your name before you start the Exam
- Exam duration is 60 minutes
- You have 40 multiple choice questions
- Each question has exactly ONE correct answer
- Grades are equally distributed among the different questions
- There is no penalty, answer ALL questions
- If a question is not clear raise your hand and I will come asap to clarify it
- Cheating will be severely punished. DO NOT attempt to cheat
- When you finish the exam raise your hand, a proctor will come take your exam paper and then you will be allowed to leave

Good Luck!

- 1. Good A and Good B cost \$3 and \$4, respectively. Sarah, spending all of her income, buys 4 units of Good A and 3 units of Good B. The final unit of each good gives her 12 units of utility.
 - (a) Sarah is maximizing her utility.
 - (b) Sarah should buy more of Good A and less of Good B to maximize utility.
 - (c) Sarah should buy less of Good A and more of Good B to maximize utility.
 - (d) Sarah should buy less of both goods to maximize utility.
- 2. If all prices double and income doubles, the budget constraint will
 - (a) double.
 - (b) more inward.
 - (c) move outward by 50%.
 - (d) not shift position.
- 3. The wage rate rises. If the quantity of labor supplied falls, the most likely explanation is that the substitution effect
 - (a) is negative and it dominates the income effect.
 - (b) is negative and it is dominated by the income effect.
 - (c) is positive and it dominates the income effect.
 - (d) is positive and it is dominated by the income effect.
- 4. Jamil has had 4 hamburgers and 2 hot dogs this week and is now indifferent between them. Hamburgers cost \$2 and hot dogs cost \$1. Currently
 - (a) Jamil's marginal utility per unit of hamburgers is twice that of hot dogs.
 - (b) Jamil's total utility of hamburgers equals that of hot dogs.
 - (c) Jamil's total utility of hamburgers is twice that of hot dogs.
 - (d) Jamil's marginal utility per unit of hamburgers equals that of hot dogs.
- 5. The wage rate can be seen as a measure of the opportunity cost of
 - (a) work.
 - (b) saving.
 - (c) leisure.
 - (d) future consumption.
- 6. Lynn can buy two goods, Good X and Good Y. Good X is represented on the horizontal axis. Which of the following will cause the budget constraint to increase its slope?
 - (a) An increase in the price of Good X.
 - (b) An equal increase in the price of both goods.
 - (c) An increase in Lynn's income.
 - (d) An increase in the price of Good Y.

Use the following information for the next two questions. Hassan's income is \$100; the price of apples is \$5 per unit; the price of oranges is \$10 per unit. Assume a consumer choice diagram with apples on the vertical axis and oranges on the horizontal axis.

- 7. If Hassan's income falls to \$75, but the prices of apples and oranges remain unchanged, there will be
 - (a) a parallel shift inwards of the indifference curves.
 - (b) a parallel shift outwards of the budget line.
 - (c) a parallel shift inwards of the budget line.
 - (d) a decrease in Hassan's consumption of both apples and oranges.
- 8. If the price of apples increases to \$10 per unit,
 - (a) the budget line will rotate clockwise around the intersection of the budget line and the vertical axis.
 - (b) the budget line will rotate counterclockwise around the intersection of the budget line and the horizontal axis.
 - (c) Hassan will be on the same indifference curve, but fewer apples will be consumed.
 - (d) Hassan's consumption of apples will decrease.
- 9. Four workers produce 160 units of output and five workers produce 180. The marginal product of the fifth worker is
 - (a) 32 units of output.
 - (b) 4 units of output.
 - (c) 20 units of output.
 - (d) 36 units of output.
- 10. The return on investment that is just sufficient to satisfy the owners of a business is called
 - (a) normal profit.
 - (b) marginal profit.
 - (c) economic profit.
 - (d) excess profit.
- 11. Omar increases the amount of capital his workers use. The average product of labor will and the marginal product of labor will .
 - (a) increase; increase
 - (b) decrease; decrease
 - (c) increase; decrease
 - (d) decrease; increase

Use the following table to answer the next two questions.

Numbers of Workers	Marginal Product
1	19
2	26
3	24
4	20
5	18

- 12. Total product, if four workers are employed, is
 - (a) 20 units of output.
 - (b) 69 units of output.
 - (c) 89 units of output.
 - (d) 107 units of output.
- 13. Average product, if three workers are employed, is
 - (a) 24 units of output.
 - (b) 23 units of output.
 - (c) 26 units of output.
 - (d) 8 units of output.
- 14. In the short run which of the following is incorrect?
 - (a) Existing firms cannot leave the industry.
 - (b) New firms cannot enter the industry.
 - (c) The firms are operating under a fixed scale of production.
 - (d) Firms have no variable factors of production.
- 15. When marginal product is zero, total product is and average product is
 - (a) maximized; maximized
 - (b) maximized; decreasing
 - (c) decreasing; maximized
 - (d) decreasing; decreasing
- 16. The law of diminishing returns
 - (a) applies in the short run but not in the long run.
 - (b) requires that all factors of production must diminish in equal proportions.
 - (c) requires that all factors of production must diminish in unequal proportions.
 - (d) states that marginal product must always be less than average product.

- 17. The income tax is "progressive". This means that
 - (a) progressively more persons are taxed each year.
 - (b) those with higher income pay a higher percentage of it in taxes.
 - (c) if a person earning \$10,000 pays \$3,000 in taxes, a person earning \$20,000 would pay twice as much in taxes.
 - (d) the more you earn, the more you pay.
- 18. In successive decades, Country A records a Gini coefficient of 0.3 (1980s), 0.7 (1990s), and 1.0 (2000s). Population size has remained stable throughout the time period. We can state that
 - (a) Country A's income distribution has become more equal as time has passed.
 - (b) Country A had fewer poor people in 2000s than in the 1980s.
 - (c) the top 20% of income was earned by a smaller number of families in the 2000s than in the 1980s.
 - (d) the gap between Country A's Lorenz curve and the 45° line has decreased as time has passed.
- 19. According to Marx, the major source of inequality in the distribution of income is
 - (a) property income.
 - (b) labor income.
 - (c) human capitalism.
 - (d) social contracts.
- 20. Each of the following is an assumption in Rawl's theory except that
 - (a) individuals are risk averse.
 - (b) individulas may become rich.
 - (c) individuals may become poor.
 - (d) individuals may opt out of the social contract.
- 21. The TVC of 11 units is \$100. The TVC of 12 units is \$120. The MC of the twelfth unit is
 - (a) \$60.
 - (b) \$10.
 - (c) \$120.
 - (d) \$20.
- 22. The short-run supply curve for a perfectly competitive firm is upward sloping because, as production increases,
 - (a) the firm must pay higher hourly wages to its workers.
 - (b) total fixed costs increase.
 - (c) the firm is able to assign its workforce to specialized tasks.
 - (d) the marginal productivity of additional workers decreases.

- 23. In the short run, which of the following is possible?
 - (a) AFC may be greater than ATC.
 - (b) MC may intersect ATC when ATC is decreasing.
 - (c) AFC may be greater than AVC.
 - (d) TFC falls as output rises.
- 24. The firm is at the output level where marginal cost intersects average variable cost. We can infer that
 - (a) average variable cost is rising.
 - (b) average variable cost is falling.
 - (c) average total cost is falling.
 - (d) average total cost is rising.
- 25. Opel cuts usage of all inputs by 50%. Production falls by more than 50%. Opel is experieding
 - (a) external economies of scale.
 - (b) external diseconomies of scale.
 - (c) increasing returns to scale.
 - (d) decreasing returns to scale.
- 26. In the short run, a perfectly competitive firm incurring losses should still produce if it can cover its
 - (a) average costs.
 - (b) variable costs.
 - (c) fixed costs.
 - (d) economic costs.

Use the following information for the next four questions. Ipad sell for \$400 a piece. Apple can produce one Ipad for a total cost of \$300, two Ipads for a total cost of \$600, three for \$1000, four for \$1500, and five for \$2100. Total fixed cost is \$100.

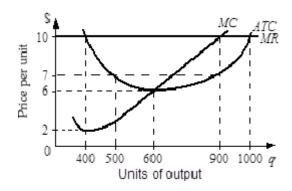
- 27. The marginal revenue of the fourth unit is
 - (a) \$200
 - (b) \$300
 - (c) \$400
 - (d) \$500
- 28. The marginal cost of the second unit is
 - (a) \$300
 - (b) \$400
 - (c) \$500
 - (d) \$600

- 29. To maximize profits, Apple will produce
 - (a) two units,
 - (b) three units.
 - (c) four units.
 - (d) five units.
- 30. The average variable cost of five units is
 - (a) \$ 380
 - (b) \$400
 - (c) \$ 420
 - (d) \$440

Use the following information for the next two questions. Total fixed cost is \$20.

Output	ATC
2	\$20
3	\$15
4	\$14
5	\$ 16

- 31. Which of the following statement is false?
 - (a) The total cost of producing four units is \$56.
 - (b) The marginal cost of the fifth unit is \$2.
 - (c) The average variable cost of the fifth unit is \$12.
 - (d) The marginal cost of the third unit is \$5.
- 32. If the price of this product was \$10, units should be produced. profit would be made.
 - (a) three; \$ 15
 - (b) three; -\$15
 - (c) four; \$16
 - (d) four; -\$16
- 33. A perfectly competitive firm sells its output for \$40 per unit. Its current output is 1,000 units. At that level, its marginal cost is \$50 and increasing, average variable cost is \$35, and average total cost is \$60. To maximize short-run profits, the firm should
 - (a) increase production.
 - (b) increase price.
 - (c) decrease production.
 - (d) shut down.



Use the diagram above, which refer to Halloum production, to answer the next six questions.

- 34. The profit maximizing output level is
 - (a) 400
 - (b) 600
 - (c) 900
 - (d) 1000
- 35. If the firm produces 600 Halloum, its profit will be
 - (a) zero.
 - (b) \$2,400.
 - (c) \$3,600.
 - (d) \$6,300.
- 36. If the firm produces 400 Halloum, its total cost will be
 - (a) \$10.
 - (b) \$400.
 - (c) \$800.
 - (d) \$4,000.
- 37. if the firm is producing 600 Halloum it should to maximize profits.
 - (a) increase output to 900
 - (b) increase output to 1,000
 - (c) maintain its current output level
 - (d) increase price to \$20 and increase output to 1,000
- 38. If the firm produces 900 Halloum, total revenue is
 - (a) \$2,700.
 - (b) \$5,600.
 - (c) \$6,300.
 - (d) \$9,000.

- 39. If the firm expands production from 600 halloum to 900 Halloum, profit will
 - (a) increase from zero to \$2,700.
 - (b) decrease from \$2,400 to zero.
 - (c) decrease from \$2,400 to \$1,800.
 - (d) increase from m \$2,400 to \$2,700.
- 40. When P < LRAC, we would expect and firms in this industry.
 - (a) investment; fewer
 - (b) investment; more
 - (c) disinvestment; fewer
 - (d) disinvestment; more