
SECTION I: Multiple Choice (2 points each). Choose the one best answer for the question and place the letter corresponding to that answer in the space provided to the left of the question number.

- _____ 1. Suppose you have a limited money income and you are purchasing products A and B. Product A costs more than product B. If you are consuming the utility maximizing combination of A and B which of the following must be true?
- a. The total utility from product A is the same as the total utility from product B.
 - b. The marginal utility from the last unit of product A is the same as the marginal utility from the last unit of product B.
 - c. The marginal utility from the last unit of product A is more than the marginal utility from the last unit of product B.
 - d. Both "a" and "c" are true.
- _____ 2. According to the law of diminishing marginal utility:
- a. as you consume additional units of a good or service, the marginal utility from those additional units will start to increase.
 - b. as you consume additional units of a good or service, the price of the product will be equal to the marginal utility of the product.
 - c. as you consume additional units of a good or service, the marginal utility from those additional units will start to decrease.
 - d. both "b" & "c" are correct.
- _____ 3. "Normal" profit
- a. is equal to total revenue minus implicit costs .
 - b. is equal to total revenue minus explicit costs.
 - c. is the amount of payment necessary to keep a self-employed resource self-employed.
 - d. Both "b" and "c" are true.
- _____ 4. An indifference curve shows
- a. all combinations of two products which yield the same marginal utilities.
 - b. all combinations of two products from which the consumer derives the same total utility.
 - c. all possible quantities of two products which a consumer can afford to buy, given prices and the consumer's income.
 - d. the quantities of two products a consumer is willing to buy at different income levels.
- _____ 5. Donnie Baker is buying products X and Y with his money income. Suppose his budget line shifts leftward (inward). This would be the result of:
- a. his money income decreasing while the prices of X and Y remain constant.
 - b. the prices of X and Y decreasing while his money income remains constant.
 - c. his money income doubling while the prices of X and Y also double.
 - d. Both "b" and "c" are true.

- _____ 6. If indifference curve A shows a lower level of utility than indifference curve B:
- a. indifference curve A is straight while indifference curve B is convex.
 - b. indifference curve A is closer to the origin of the graph than indifference curve B.
 - c. indifference curve A is further away from the origin of the graph than indifference curve B.
 - d. indifference curve B will be concave while indifference curve A will be convex.
- _____ 7. Utility refers to:
- a. the usefulness of a good or service.
 - b. the price of a good or service.
 - c. the "want-satisfying power" of a good or service.
 - d. the cost of producing a good or service.
- _____ 8. In which market model would the number of firms be the fewest?
- a. monopolistic competition
 - b. pure competition
 - c. pure monopoly
 - d. oligopoly
- _____ 9. The law of diminishing marginal returns indicates that:
- a. as extra units of a variable resource are added to a fixed resource, the extra (or marginal) product will decline beyond some point.
 - b. because of economies and dis-economies of scale a competitive firm's long-run marginal product curve will be X-shaped.
 - c. marginal cost will increase, reach a maximum, and then decrease.
 - d. both "a" and "c" are correct.
- _____ 10. If marginal cost is less than average total cost, then we could say that:
- a. marginal cost is minimized.
 - b. average total cost is increasing.
 - c. average total cost is minimized.
 - d. average total cost is decreasing.
- _____ 11. When a firm produces 30,000 units of output per year, its average variable cost is \$5.00. This firm's total fixed cost is \$60,000.00. The total cost for the firm is:
- a. \$210,000.00
 - b. \$7.00.
 - c. \$60,005.
 - d. \$2.00.
- _____ 12. The demand curve for a purely competitive firm:
- a. is vertical at the market price.
 - b. coincides with the firm's marginal revenue curve.
 - c. will shift upward when market price decreases.
 - d. is characterized by all of the above.
- _____ 13. When a firm is experiencing dis-economies of scale:
- a. minimum efficient scale has already been reached.
 - b. long-run average total cost is decreasing.
 - c. long-run average total cost is increasing.
 - d. both "a" & "c" are true.

- _____ 14. Which of the following characterize a purely competitive market?
- a. Firms will earn zero long-run economic profits.
 - b. Competition forces firms to advertise.
 - c. Because of barriers to entry it is impossible for new firms to enter the market.
 - d. None of the above are true.

Answer questions fifteen and sixteen on the basis of the following diagram.

Number of Workers	Total Product
0	0
1	9
2	20
3	33
4	45
5	55
6	63

- _____ 15. The marginal product of the fifth worker:
- a. is 10 units of output.
 - b. is 2 units of output.
 - c. is 11 units of output.
 - d. cannot be calculated given the above information.
- _____ 16. Diminishing marginal returns start to set in when:
- a. worker number three is hired.
 - b. worker number four is hired.
 - c. worker number five is hired.
 - d. worker number six is hired.
- _____ 17. If a purely competitive firm is producing at the $MR = MC$ quantity of output and experiencing an economic loss, we can say that at that output:
- a. price is greater than ATC.
 - b. average variable cost exceeds average total cost.
 - c. firms will leave the market causing the loss to eventually disappear.
 - d. Both "a" and "c" are true.
- _____ 18. If a firm's fixed costs increase by fifteen percent, which of the following would be a true statement regarding the effect on marginal cost?
- a. Marginal cost would increase by more than 15 percent.
 - b. Marginal cost would increase by 15 percent.
 - c. Marginal cost would increase by less than 15 percent.
 - d. It would have no effect on marginal cost.

- _____ 19. Implicit costs are:
- a. the payments that self-employed resources could earn in their "next-best" use.
 - b. costs which vary directly with output.
 - c. are considered an accounting cost but not considered to be an economic cost.
 - d. both "a" & "c" are correct.
- _____ 20. When a negative externality exists
- a. less than the socially optimal amount of an activity (the consumption or production of the good or service) takes place.
 - b. more than the socially optimal amount of an activity (the consumption or production of the good or service) takes place.
 - c. the government will often subsidize the production or consumption of the good or service in order to increase the amount of the activity.
 - d. Both "a" & "c" are true.
- _____ 21. "I prefer "Dogma" to "Clerks". I prefer "Clerks" to "Mallrats". Therefore I prefer "Dogma" to "Mallrats"." The previous statements is an illustration of:
- a. the law of demand.
 - b. the equimarginal principal.
 - c. transitivity of preference.
 - d. the law of diminishing marginal utility.
- _____ 22. A public good
- a. is typically provided by the government with tax dollars.
 - b. has a non-exhaustible benefit.
 - c. is a good for which no individual may be excluded from the benefit.
 - d. is characterized by all of the above.
- _____ 23. A purely competitive firm will be willing to produce at a loss in the short run:
- a. if price is greater than or equal to average variable cost.
 - b. only if the government provides tax breaks to counteract the loss.
 - c. only if it had an economic profit in the previous short-run period.
 - d. When all of the above are true.
- _____ 24. What does it mean when the consumption or production of a good or service gives off a positive externality?
- a. A third party benefits from the activity.
 - b. A third party is harmed by the activity.
 - c. A third party is not affected by the activity.
 - d. The company's stockholders lose money.
- _____ 25. Which is true regarding a perfectly competitive firm's short run supply curve?
- a. it is the section of the marginal cost curve that lies above the demand curve.
 - b. it is the section of the marginal cost curve that lies above the average variable cost curve.
 - c. it is the section of the marginal cost curve that lies above the average total cost curve.
 - d. it is the section of the marginal cost curve that lies below the average cost curve.

SECTION II Short Answer/Essay/Problem Answer the following questions using the information provided. If a graph is necessary to explain your answer be sure to label all axes. Points as indicated.

1. The following table shows the total utility which a particular consumer would get by purchasing various quantities of apples, bananas, and Chocodiles. Answer parts a and b on the basis of the table. **(12 points)**

<u>Quantity Purchased</u>	<u>Total Utility Apples</u>	<u>Total Utility Bananas</u>	<u>Total Utility Chocodiles</u>
1	36	36	72
2	60	66	128
3	81	94	170
4	99	118	198
5	114	136	219
6	126	148	235
7	135	157	247
8	141	163	255

- a. If the price of Apples is \$4, Bananas is \$3, and Chocodiles is \$7, and the consumer has \$80 to spend on these three products, what combination of the three products should be purchased in order to maximize utility? How much total utility will this consumer derive from these goods?

Units of Apples Purchased	_____	Total Utility from Apples	_____
Units of Bananas Purchased	_____	Total Utility from Bananas	_____
Units of Chocodiles Purchased	_____	Total Utility from Chocodiles	_____
Total Utility from All Purchases			_____

- b. Now suppose that the price of Apples is \$3, Bananas is \$6, and Chocodiles is \$4, and the consumer has \$79 to spend on these three products. What combination of the three products should be purchased to maximize utility? How much total utility will this consumer derive from these goods?

Units of Apples Purchased	_____	Total Utility from Apples	_____
Units of Bananas Purchased	_____	Total Utility from Bananas	_____
Units of Chocodiles Purchased	_____	Total Utility from Chocodiles	_____
Total Utility from All Purchases			_____

2. Assume a firm has fixed costs of \$30 and variable costs as indicated in the table below. (14 points)

a. Complete the cost table.

Quantity	Variable Cost	Total Cost	ATC	AVC	MC
0	\$0	_____	NA	NA	NA
1	\$16	_____	_____	_____	_____
2	\$30	_____	_____	_____	_____
3	\$42	_____	_____	_____	_____
4	\$52	_____	_____	_____	_____
5	\$60	_____	_____	_____	_____
6	\$69	_____	_____	_____	_____
7	\$80	_____	_____	_____	_____
8	\$94	_____	_____	_____	_____
9	\$110	_____	_____	_____	_____
10	\$128	_____	_____	_____	_____

- b. At what quantity of output does this firm reach minimum efficient scale (if we pretended we were looking at long-run average costs instead of short run average costs)? What information in the above table indicates this?
- c. After which unit of output do diminishing marginal returns begin to set in? What information in the above table indicates this?
- d. What is this firm's "shut-down price"? What information in the above table indicates this?

3. Using the table from problem #2 answer the following questions, assuming the firm in question is a perfectly competitive firm. **(12 points)**

- a. At a price of \$14 how much will this firm produce in the short run? What will its profits or losses be?

Quantity Produced _____ Profit/Loss _____

- b. At a price of \$11 how much will this firm produce in the short run? What will its profits or losses be?

Quantity Produced _____ Profit/Loss _____

- c. At a price of \$16 how much will this firm produce in the short run? What will its profits or losses be?

Quantity Produced _____ Profit/Loss _____

4. In a well defined essay, describe verbally and show graphically the adjustments from short run to long run for **both a perfectly competitive market and a firm in that market** when in the short run, firms in the market are experiencing economic profits. (You should have at least **TWO** properly labeled graphs for your answer) (12 points)

[BONUS] 5 points

Lexie is an economist and Lola is an accountant. They decide to start a business. After one year they "look at the books" for the company. Lola looks at everything and says, "We made a profit of \$30,000." Lexie looks at everything and says, "No, we had a loss of \$20,000." **Neither one is incorrect and they both looked at the same numbers.** Why do they disagree, and what is the reason behind their disagreement? (For full credit elaborate on the differences.)