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I. Multiple Choice

- 1. Economics is best defined as the study of how people and societies:
 - A. Use unlimited resources to satisfy limited wants
 - B. Allocate scarce resources to satisfy unlimited wants
 - C. Distribute goods evenly among all citizens
 - D. Increase income and reduce costs
- 2. The concept of opportunity cost explains:
 - A. Why scarcity exists
 - B. Why we must give up one thing to gain another
 - C. Why all resources are free
 - D. Why trade is unnecessary
- 3. Which situation best represents a trade-off?
 - A. Choosing to work instead of going to a movie
 - B. Buying a product on sale
 - C. Recycling bottles to earn money
 - D. Selling old clothes
- 4. Which of the following is a positive statement?
 - A. The government should raise the minimum wage.
 - B. A higher minimum wage may increase unemployment.
 - C. Inequality is unfair.
 - D. The government ought to reduce taxes.
- 5. In a command economy, the basic economic questions are answered by:
 - A. Supply and demand
 - B. Market prices
 - C. Central government planning
 - D. Consumer choice
- 6. Which of the following would most likely be produced efficiently by the government rather than the market?
 - A. Pizza
 - B. Clothing
 - C. Street lighting
 - D. Smartphones
- 7. In a mixed economy like the United States:
 - A. The government controls all production
 - B. Only consumers make economic decisions
 - C. Market forces operate with some government regulation

- D. There is no private property
- 8. Which statement about microeconomics is correct?
 - A. It studies inflation and unemployment.
 - B. It examines national income as a whole.
 - C. It focuses on individual markets and decision-makers.
 - D. It cannot be tested with data.
- 9. The Production Possibilities Curve (PPC) shows:
 - A. The maximum combinations of two goods that can be produced
 - B. The total amount of resources in an economy
 - C. How prices change over time
 - D. The income distribution of households
- 10. A point inside the PPC represents:
 - A. Efficiency
 - B. Economic growth
 - C. Unemployment or underused resources
 - D. An unattainable combination
- 11. The bowed-out shape of the PPC reflects:
 - A. Constant opportunity costs
 - B. Decreasing opportunity costs
 - C. Increasing opportunity costs
 - D. No opportunity costs
- 12. Allocative efficiency occurs when:
 - A. Goods are produced at the lowest possible cost
 - B. Resources are used to produce what society values most
 - C. No one can be made better off
 - D. The economy operates inside the PPC
- 13. Rational decision-making occurs when:
 - A. Total benefit exceeds total cost
 - B. Marginal benefit equals marginal cost
 - C. Marginal benefit is less than marginal cost
 - D. Total utility is constant
- 14. The law of diminishing marginal utility means:
 - A. Each additional unit provides more satisfaction
 - B. Each additional unit provides less extra satisfaction
 - C. Total utility decreases with consumption
 - D. Consumers are irrational

- 15. According to the rule of utility maximization, a consumer is in equilibrium when:
 - A. $\frac{MU_x}{P_x} = \frac{MU_y}{P_y}$
 - B. $MU_x = MU_y$
 - $C. P_x = P_y$
 - D. $MU_x P_x = MU_y P_y$
- 16. Which statement about comparative advantage is true?
 - A. It depends on who can produce more with fewer resources.
 - B. It depends on who has the lower opportunity cost.
 - C. It means both producers have identical opportunity costs.
 - D. It prevents trade from being beneficial.
- 17. Trade between two countries can be mutually beneficial if:
 - A. Each has the same production capacity
 - B. Each specializes in goods for which it has a comparative advantage
 - C. Both produce the same good
 - D. Both have absolute advantage
- 18. An outward shift of the PPC indicates:
 - A. Economic decline
 - B. Increase in resource inefficiency
 - C. Economic growth due to new technology or resources
 - D. Reduction in opportunity cost
- 19. Productive efficiency means:
 - A. Producing goods people value most
 - B. Producing at the lowest possible cost
 - C. Fair distribution of income
 - D. Equal output for all goods
- 20. Distributive efficiency primarily concerns:
 - A. Resource allocation
 - B. Income equality
 - C. Productive technology
 - D. Opportunity cost
- 21. A rational decision-maker should continue an activity as long as:
 - A. Total benefit > Total cost
 - B. Marginal benefit > Marginal cost
 - C. Average benefit > Average cost
 - D. Opportunity cost = zero

- 22. If the marginal cost of producing one more unit exceeds its marginal benefit, the firm should:
 - A. Increase production
 - B. Reduce production
 - C. Keep production unchanged
 - D. Ignore costs because they are sunk
- 23. A student decides to study one more hour for an exam. The marginal benefit is 5 points gained; the marginal cost is 4 points lost in sleep. The rational decision is to:
 - A. Study the extra hour
 - B. Sleep instead
 - C. Study two extra hours
 - D. Drop the course
- 24. In economic reasoning, "marginal" refers to:
 - A. Total or overall changes
 - B. Extra or incremental changes
 - C. Average outcomes
 - D. Irrelevant factors

II. True / False

- 21. Scarcity exists only in poor countries.
- 22. Opportunity cost is the value of all possible alternatives.
- 23. In a market economy, prices act as signals for buyers and sellers.
- 24. Command economies usually experience inefficiencies due to lack of incentives.
- 25. Mixed economies include both private and public decision-making.
- 26. Positive economics involves value judgments about what should be.
- 27. Normative economics can be tested with data.
- 28. Microeconomics focuses on individual consumers and firms.
- 29. Macroeconomics studies aggregate outcomes like inflation and GDP.
- 30. The PPC shifts outward when productivity rises.

- 31. The law of diminishing marginal utility explains why demand curves slope upward.
- 32. Rational consumers equalize marginal utility per dollar across goods.
- 33. A country can have a comparative advantage even if it lacks absolute advantage.
- 34. Trade allows countries to consume beyond their own PPCs.
- 35. Consumer surplus is the difference between willingness to pay and market price.

III. Fill in the Blanks

41.	Economics is the study of how people and societies allocate resources to satisfy wants.
42.	The value of the next best alternative given up is called
43.	The phrase "all else equal" translates to
44.	In a market economy, decisions are guided by and
45.	In a command economy, the makes production and pricing decisions.
46.	A combination of both market forces and government involvement is called aeconomy.
	economics deals with objective facts, whileeconomics involves value judgments.
48.	The PPC illustrates the concept of, and
49.	A point on the PPC shows efficiency.
50.	Allocative efficiency occurs whenequals
51.	The law of increasing causes the PPC to bow outward.
52.	efficiency refers to the fair distribution of goods and income.
53.	A rational decision-maker continues an activity as long as \geq

54. The satis	4. The satisfaction gained from consuming goods is called		
55. The law satisfacti		_ explains why additional units provide less	
56. Consumo	ers maximize utility when MU/P is	across all goods.	
57	advantage refers to producing more	output with the same resources.	
58	advantage refers to having a lower of	opportunity cost.	
59. The	of trade must lie between each j	producer's opportunity costs.	
60. The sum	of consumer and producer surplus equal	ls total	

IV. Matching

61. Match the concept with its correct description:

Concept	Description
A. Scarcity B. Opportunity Cost C. Productive Efficiency D. Allocative Efficiency E. Distributive Efficiency F. Ceteris Paribus	1. Limited resources and unlimited wants 2. Value of the next best alternative given up 3. Producing at lowest possible cost 4. MB = MC; most valued combination of goods 5. Fairness in output distribution 6. "All else equal" assumption
G. Marginal Benefit H. Marginal Cost I. Comparative Advantage J. Absolute Advantage	7. Additional gain from one more unit8. Additional expense from one more unit9. Producing a good at lower opportunity cost10. Producing more of a good with same inputs

V. Short Answer

- 62. Explain why scarcity forces individuals and nations to make choices.
- 63. Provide a real-world example of opportunity cost.

- 64. Explain how comparative advantage can exist even when one producer has an absolute advantage in both goods.
- 65. Why does specialization according to comparative advantage lead to consumption beyond the PPC?
- 66. How does trade promote allocative efficiency at the global level?
- 67. Why are all choices considered economic choices?
- 68. Compare market, command, and mixed economies in terms of efficiency and equity.
- 69. Distinguish between positive and normative economics with your own examples.
- 70. Explain how microeconomic decisions affect macroeconomic outcomes.
- 71. Define an economic model and explain why simplification is necessary.
- 72. Explain how marginal analysis applies to government spending decisions.
- 73. How can the MB = MC rule explain environmental protection levels (e.g., clean air policies)?
- 74. Give a real-world example of diminishing marginal benefit in everyday life.
- 75. Explain why total utility can rise even while marginal utility falls.
- 76. What does it mean when marginal utility per price for one good exceeds that of another?
- 77. How does diminishing marginal utility explain why demand curves slope downward?
- 78. Why does total utility reach a maximum when marginal utility equals zero?
- 79. Define absolute advantage and comparative advantage.
- 80. Why is comparative advantage, not absolute advantage, the basis for trade?
- 81. Explain the terms of trade and how they determine whether both parties benefit.
- 82. Describe how specialization increases total world output.
- 83. How does marginal analysis prevent resource waste?
- 84. Define utility and marginal utility.

- 85. Explain why the PPC shifts outward when productivity improves.
- 86. Give three factors that increase long-run economic growth.
- 87. How do consumer and producer surplus measure market efficiency?
- 88. Why might a government accept some inefficiency to achieve distributive goals?
- 89. What does the law of diminishing marginal utility predict about satisfaction as consumption increases?
- 90. Why do rational consumers allocate spending so that the last dollar spent on each good yields the same marginal utility per dollar?

VI. Calculations

- 91. Explain how a consumer can achieve equilibrium using the formula $\frac{MU_x}{P_x} = \frac{MU_y}{P_y}$.
- 92. A country producing 20 units of apple and 80 of bread can reallocate to produce 30 apples and 70 pieces of bread. Calculate the opportunity cost of 10 units of apple.
- 93. Suppose Country X has a lower opportunity cost for food, and Country Y has a lower opportunity cost for clothing.
 - a. Who should specialize in which good?
 - b. If 1 unit of clothing trades for 2 units of food, explain whether both benefit.
 - c. Describe what happens if the trade ratio lies outside the opportunity cost range.
- 94. Two nations, X and Y, produce the following per day:

Country	Corn	Steel
X	100	50
Y	80	20

- a. Determine opportunity costs for each good.
- b. Identify who has comparative advantage in corn and steel.
- c. Suggest possible terms of trade.
- 95. A consumer has \$20 to spend on coffee (\$5 per cup) and muffins (\$2 per muffin). The marginal utilities are as follows:

Quantity	MU (Coffee)	MU (Muffin)
1	50	24
2	40	20
3	30	16
4	20	12
5	10	8

- a. Compute MU/P for both goods.
- b. Find the combination of cups and muffins that maximizes total utility.
- c. If coffee's price falls to \$4, explain how consumption will adjust.
- 96. Two countries, Alpha and Beta, produce the following:

Country	Wheat	Corn
Alpha	40	20
Beta	10	5

- a. Calculate each country's opportunity cost of producing one unit of wheat and one of corn.
- b. Identify who has absolute advantage in each good.
- c. Identify who has comparative advantage in each good.
- d. Suggest an acceptable range for the terms of trade.
- 97. Two individuals, Tom and Jerry, can each produce the following per hour:

Person	Cheese (lbs)	Bread (loaves)
Tom	12	6
Jerry	8	4

- a. Who has an absolute advantage in cheese?
- b. Who has a comparative advantage in bread?
- c. What is the opportunity cost of 1 loaf of bread for each person?
- d. Show how both benefit from specialization and trade.
- 98. Two countries, Country A and Country B, produce cars and computers:

Country	Cars	Computers
A	10	40
В	20	20

- a. Compute opportunity costs for both goods in both countries.
- b. Identify comparative advantages.
- c. Provide a mutually beneficial trade ratio (terms of trade).
- d. Sketch simplified PPCs showing specialization and trade outcomes.
- 99. A student's marginal benefit and cost from studying are shown below. At what point should the student stop studying? Explain.

Hours	MB	MC
1	20	5
2	14	8
3	10	10
4	6	13

100. A consumer buys pizza and soda. Their utility is shown below.

Good	Price (\$)	Marginal Utility
Pizza	10	100
Soda	2	16

- a. Compute MU/P for each.
- b. Which product offers greater utility per dollar?
- c. What should the consumer do to maximize satisfaction?
- 101. A local bakery tracks the following marginal benefits (MB) and marginal costs (MC) of baking extra batches of bread:

Batches	MB (\$)	MC (\$)
1	90	30
2	70	40

3	50	50
4	35	60
5	20	70

- a. How many batches should the bakery produce to maximize net benefit?
- b. Identify where MB = MC and explain why that's the optimal level.
- c. What happens if the bakery continues producing beyond this point?

VII. Graphing Practice

- 102. Draw a production possibilities curve for a country that produces butter and machines.
 - a. Label axes: butter (X-axis) and machines (Y-axis).
 - b. Draw a bowed-out curve showing increasing opportunity costs.
 - c. Mark points A (inefficient), B (efficient), and C (unattainable).
 - d. Indicate opportunity cost between two efficient points.
 - e. Show outward shift and label it "economic growth."
- 103. Plot marginal benefit (MB) and marginal cost (MC) curves.
 - a. Identify equilibrium where MB = MC.
 - b. Shade the area representing net benefit.
- 104. Draw total utility (TU) and marginal utility (MU) on one graph.
 - a. Label the point where TU peaks and MU = 0.
 - b. Indicate how diminishing marginal utility appears.
- 105. Imagine a world made of only two countries: Economia and Industria.

Country	Steel	Textiles
Economia	60	30
Industria	40	10

- a. Compute opportunity costs for both goods.
- b. Identify which country should specialize in steel and which in textiles.
- c. Determine a range of terms of trade that makes both better off.
- d. Graph their PPCs before and after specialization, showing potential gains.

VIII. Long Answer (IB Students Only)

- 106. Evaluate the following statement: "Market economies are the best economic system to answer the three fundamental economic questions." (15)
- 107. Discuss why economics would not be a social science without the concept of scarcity. (10)
- 108. Evaluate whether comparative advantage is a better measure of economic well-being or absolute advantage. (15)
- 109. Discuss with reference to a production possibility curve the idea that scarcity is a fundamental concept in consumer decision making. (10)
- 110. Evaluate the extent to which government intervention improves the allocation of resources in a mixed economy. (15)