

**MULTIPLE CHOICE.** Choose the one alternative that best completes the statement or answers the question.

- 1) Welfare economics
- A) examines the social desirability of alternative economic states.
  - B) does not depend on market interactions.
  - C) uses only concepts of efficiency to evaluate the alternatives.
  - D) only looks at the poorest parts of the economy.

Answer: A

- 2) The absolute value of the slope of the production possibilities curve is the
- A) contract curve.
  - B) marginal rate of transformation.
  - C) marginal rate of substitution.
  - D) offer curve.

Answer: B

- 3) The marginal rate of substitution is
- A) the slope of the utility possibilities curve.
  - B) the slope of the indifference curve.
  - C) the slope of the contract curve.
  - D) none of these answers is correct.

Answer: B

- 4) The First Fundamental Theorem of Welfare Economics requires
- A) that a market exists for each and every commodity.
  - B) producers and consumers to act as perfect competitors.
  - C) that no one has any market power.
  - D) all of these answers are correct.

Answer: D

- 5) Points outside the production possibilities curve are
- A) endowment points.
  - B) consumer equilibrium points.
  - C) producible.
  - D) unattainable.

Answer: D

- 6) Market failure can occur when
- A) individuals can influence prices.
  - B) some firms have market power.
  - C) a market for a commodity does not exist.
  - D) all of these answers are correct.

Answer: D

- 7) A public good is
- A) always provided by the government.
  - B) excludable and rival in consumption.
  - C) a good that the public must pay for.
  - D) nonexcludable and nonrival in consumption.

Answer: D

8) Merit goods

- A) increase in costs as demand increases.
- B) are provided for those who are well behaved and earn them.
- C) should be provided even if there is no demand for them.
- D) none of these answers is correct.

Answer: C

9) A social welfare function

- A) is a function that shows that the utilities of society are incorporated into society's well-being.
- B) is a function made by the Department of Welfare.
- C) can never be derived numerically.
- D) all of these answers are correct.

Answer: A

10) Movement from an inefficient allocation to an efficient allocation in the Edgeworth Box will

- A) decrease the utility of all individuals.
- B) increase the utility of all individuals.
- C) increase the utility of one individual, but cannot decrease the utility of any individual.
- D) increase the utility of at least one individual, but may decrease the level of utility of another person.

Answer: D

11) Points on the utility possibilities curve are

- A) inefficient.
- B) Pareto efficient.
- C) points of incomplete preferences.
- D) not producible.

Answer: B

12) The Edgeworth Box should

- A) never touch the production possibilities curve.
- B) lie inside the production possibilities curve.
- C) lie completely outside of the production possibilities curve.
- D) lie partially inside the production possibilities curve.

Answer: B

13) Pareto efficient points in the Edgeworth Box are

- A) found when one person cannot be made better off without making another person worse off.
- B) found when MRS are equal.
- C) found when indifference curves are tangent.
- D) all of these answers are correct.

Answer: D

14) According to the Second Fundamental Theorem of Welfare Economics,

- A) production must be twice as large as consumption.
- B) society can attain any Pareto efficient allocation of resources.
- C) not all points along the utility possibilities curve are attainable.
- D) equity cannot be achieved without inhibiting efficiency.

Answer: B

15) Welfare economics is concerned with individual desirability of alternative economic states.

- A) True
- B) False
- C) Uncertain

Answer: B

16) The contract curve is the collection of points where indifference curves are tangent in the Edgeworth box.

- A) True
- B) False
- C) Uncertain

Answer: A

17) The utility possibilities curve is derived from the contract curve.

- A) True
- B) False
- C) Uncertain

Answer: A

18) When the First Fundamental Theorem of Welfare Economics doesn't hold, there is a market failure.

- A) True
- B) False
- C) Uncertain

Answer: A

19) An example of an activity that generates an externality is pursuing a graduate degree in economics.

- A) True
- B) False
- C) Uncertain

Answer: A

20) Social indifference curves are the same as a social welfare function.

- A) True
- B) False
- C) Uncertain

Answer: A

21) A utility possibilities curve need not incorporate the utility of every individual.

- A) True
- B) False
- C) Uncertain

Answer: A

22) For Pareto efficiency, the MRT should not equal the MRS of all individuals.

- A) True
- B) False
- C) Uncertain

Answer: B

23) The government must intervene in markets in order to move the economy to the welfare maximizing point.

- A) True
- B) False
- C) Uncertain

Answer: B

24) There is only one Pareto efficient point on the contract curve.

A) True

B) False

C) Uncertain

Answer: B

25) Marginal cost is the incremental production cost of one more unit of output.

A) True

B) False

C) Uncertain

Answer: A

26) Pareto improvement can be a reallocation of resources that makes more than one person better off.

A) True

B) False

C) Uncertain

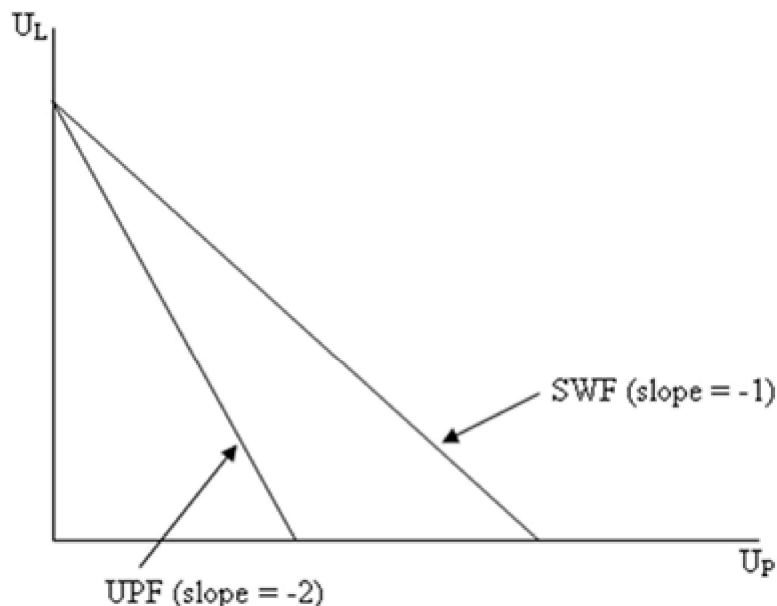
Answer: A

**ESSAY. Write your answer in the space provided or on a separate sheet of paper.**

27) Consider an Edgeworth economy where there are two citizens, Mr. Cortopassi and Ms. Thomas. There are only two goods to be consumed in the economy, Beer and Pretzels. The total amount of Beer is 12 units. The total amount of Pretzels is 12 units. Answer the following: Suppose Mr. Cortopassi has utility for the two goods characterized as  $U_C(B,P) = B + P$ . Ms. Thomas's utility function is  $U_T(B,P) = B + P$ . Identify the points that are Pareto efficient.

Answer: Since the MRSs of the two are equal at every point in the Edgewood Box, every point is Pareto efficient.

28) Imagine a simple economy with only two people, Leroy and Percy. If the social welfare function is  $W = U_L + U_P$ , and the utility possibilities curve is  $UPF = U_L + 2U_P$ , what will be the societal optimum



Answer: The optimum would be a corner solution found the same way as if goods were perfect substitutes. Percy receives none, and all goes to Leroy.

29) If James has an indifference curve characterized by the function of  $U = 2X^3 Y^2$ , what is his marginal rate of substitution between goods X and Y?

Answer: To find the MRSs, take the partial derivative of the function with respect to X and divide it by the partial derivative with respect to Y, which yields  $(3/2) * (Y/X)$ .

30) Consider a simple exchange economy where the marginal rate of transformation between two goods is greater than the marginal rate of substitution for the same goods. Can the Pareto equilibrium be derived?

Answer: It is possible to pick points along the production possibilities curve that have an MRT that matches the equilibrium set of MRS. Mathematically, it can be very difficult and sometimes impossible to find.

31) Suppose that a competitive firm's marginal cost of producing output q is given by  $MC = 5 + 2q$ . Assume that the market price of the firm's product is \$27. What level of output will the firm produce?

Answer:  $MC = P$  so  $27 = 5 + 2q$ , then  $q^* = 11$ .

32) Social welfare functions can be formed in many ways. They can be additive, meaning that the all utilities are added together. They can incorporate the idea of maximin, meaning that the utility of the person with the least is maximized. If you were a central planner for an economy, what type of social welfare function would you create?

Answer: Answers will vary, but generally you need a social welfare function that incorporates some collectively agreed upon notion of fairness. It must also be a function that can be implemented without causing undue stress on citizens or the economy.

33) Merit goods have been discussed towards the end of this chapter. Can concerts and other publicly provided services be rationalized using these ideas?

Answer: Yes, they fit the definition of a merit good, but no judgment should be made concerning the efficiency of such endeavours.

34) Why might asymmetric information contribute to the problem of a market failure?

Answer: One of the underlying tenets of economics is complete and free flowing information. Without such information, one side of a transaction could gain an unfair advantage, making free exchange impossible.

Answer Key  
Testname: UNTITLED18

- 1) A
- 2) B
- 3) B
- 4) D
- 5) D
- 6) D
- 7) D
- 8) C
- 9) A
- 10) D
- 11) B
- 12) B
- 13) D
- 14) B
- 15) B
- 16) A
- 17) A
- 18) A
- 19) A
- 20) A
- 21) A
- 22) B
- 23) B
- 24) B
- 25) A
- 26) A
- 27) Since the MRSs of the two are equal at every point in the Edgewood Box, every point is Pareto efficient.
- 28) The optimum would be a corner solution found the same way as if goods were perfect substitutes. Percy receives none, and all goes to Leroy.
- 29) To find the MRSs, take the partial derivative of the function with respect to X and divide it by the partial derivative with respect to Y, which yields  $(3/2) * (Y/X)$ .
- 30) It is possible to pick points along the production possibilities curve that have an MRT that matches the equilibrium set of MRS. Mathematically, it can be very difficult and sometimes impossible to find.
- 31)  $MC = P$  so  $27 = 5 + 2q$ , then  $q^* = 11$ .
- 32) Answers will vary, but generally you need a social welfare function that incorporates some collectively agreed upon notion of fairness. It must also be a function that can be implemented without causing undue stress on citizens or the economy.
- 33) Yes, they fit the definition of a merit good, but no judgment should be made concerning the efficiency of such endeavours.
- 34) One of the underlying tenets of economics is complete and free flowing information. Without such information, one side of a transaction could gain an unfair advantage, making free exchange impossible.