# **Principles of Economics**

(Common for Private Registration to BA History, Political Science, Sociology, & Islamic History Programmes)

- 1. In Economics the central problem is:
- a) money
- b) production
- c) consumption
- d) allocation
- e) scarcity
- 2. Macroeconomics deals with:
- a) the behaviour of firms.
- b) the activities of individual units.
- <mark>c) economic aggregates.</mark>
- d) the behaviour of the electronics industry
- 3. Microeconomics is not concerned with the behaviour of:
- a) firms.
- b) aggregate demand.
- c) consumers.
- d) Industries
- 4. The study of inflation is part of:

## a) macroeconomics.

- b) normative economics.
- c) microeconomics.
- d) descriptive economics
- 5. Aggregate supply is the total amount:

#### a) of goods and services produced in an economy.

- b) produced by the government.
- c) of products produced by a given industry.
- d) of labour supplied by all households
- 6. The total demand for goods and services in an economy is known as:

#### a) aggregate demand.

- b) national demand.
- c) economy-wide demand.
- d) gross national product
- 7. Inflation is:
- a) a decrease in the overall level of economic activity.
- b) a decrease in the overall price level.
- c) an increase in the overall price level.
- d) an increase in the overall level of economic activity
- 8. A recession is:
- a) a period of very rapidly declining prices.
- b) a period of declining prices.

#### c) a period during which aggregate output declines.

- d) a period of declining unemployment
- 9. Indicate below what is NOT a factor of production.
- a) Labour
- b) Land
- c) Capital
- d) A bank loan
- 10. Unemployment means that:
- a) there are some people who will not work at the going wage rate.
- b) there is excess demand in the labour market.
- c) people are not willing to work at the going wage rate.

# d) at the going wage rate, there are people who want to work but cannot find work

- 11. If marginal benefit is greater than marginal cost, a rational choice involves:
- a) no more of the activity.
- b) more or less, depending on the benefits of other activities.
- c) less of the activity.
- d) more of the activity

12. A student chooses to study because the marginal benefit is greater than the \_\_\_\_\_ cost.

- a) total
- b) expected
- c) average
- d) marginal
- 13. The concept of opportunity cost:
- a) would be irrelevant if we eliminated poverty.
- **b)** suggests a major increase in public health-care spending means an expansion in other areas will be harder to achieve.
- c) is relevant only for a capitalist economy like the United States.
- d) suggests all our wants can be achieved.
- 14. Opportunity cost is
- a) the additional benefit of buying an additional unit of a product.
- b) that which we forgo, or give up, when we make a choice or a decision.
- c) the cost incurred in the past before we make a decision about what to do in the future.
- d) a cost that cannot be avoided, regardless of what is done in the future
- 15. A graph showing all the combinations of goods and services that can be produced if all of society's resources are used efficiently is a:
- a) circular-flow diagram.
- b) capital consumption frontier.
- c) production possibility curve.
- d) Lorenz curve
- 16. Periods of less than full employment correspond to:
- a) points on the production possibility curve.
- b) points outside the production possibility curve.
- c) either points inside or outside the production possibility curve.
- d) points inside the production possibility curve

- 17. The circular flow of goods and incomes shows the relationship between:
- a) wages and salaries.
- b) income and money.
- c) goods and services.

## d) firms and households

- 18. In a free market system, the amount of goods and services that any one household gets depends upon its:
- a) income.
- b) wage and interest income.

# <mark>c)</mark>income and wealth.

- d) wealth.
- 19. In a planned or command economy, all the economic decisions are taken by the:
- a) voters.

# <mark>b) g</mark>overnment.

- c) consumers.
- d) Workers
- 20. Which one of the following is a normative statement?
- a) The proportion of people's income paid in taxes is higher under this government than under the previous one.

## b) Inequality in the distribution of income is a more serious problem than unemployment.

- c) The richest 10 per cent of the population has had a bigger percentage increase in incomes over the past 10 years than the poorest 10 per cent.
- d) Inflation is rising.
- 21. The 'law of demand' implies that:
- a) as prices fall, demand increases.
- b) as prices rise, quantity demanded increases.

#### c) as prices fall, quantity demanded increases.

- d) as prices rise, demand decreases.
- 22. The Setrite Corporation produces chairs. An economist working for the firm predicts that 'if people's incomes rise next year, then the demand for our chairs will increase, ceteris paribus.' The accuracy of the economist's prediction depends on whether the chairs Setrite produce:
- a) have many complementary goods.
- b) have few complementary goods.

# <mark>c) are normal goods.</mark>

- d) have few substitutes.
- 23. What effect is working when the price of a good falls and consumers tend to buy it instead of other goods?
- a) The income effect.
- b) The diminishing marginal utility effect.

# c) The substitution effect.

- d) The ceteris paribus effect.
- 24. The quantity demanded of Pepsi has decreased. The best explanation for this is that:
- a) the price of Pepsi increased.

- b) the price of Coca Cola has increased.
- c) Pepsi's advertising is not as effective as in the past.
- d) Pepsi consumers had an increase in income.
- 25. Demand curves are derived while holding constant:
- a) income and tastes.
- b) income, tastes, and the price of the good.
- c) tastes and the price of other goods.

#### d) income, tastes, and the price of other goods.

- 26. When the decrease in the price of one good causes the demand for another good to decrease, the goods are:
- a) normal.

## <mark>b) substitutes.</mark>

- c) complements.
- d) inferior.
- 27. Suppose the demand for good Z goes up when the price of good Y goes down. We can say that goods Z and Y are:
- a) unrelated goods.
- b) perfect substitutes.

# <mark>c) c</mark>omplements.

d) substitutes.

28. If the demand for coffee decreases as income decreases, coffee is:

#### a) a normal good.

- b) a complementary good.
- c) a substitute good.
- d) an inferior good.

29. Which of the following will NOT cause a shift in the demand curve for compact discs?

a) A change in income.

## **b)** A change in the price of compact discs.

- c) A change in wealth.
- d) A change in the price of pre-recorded cassette tapes.

30. Which of the following is consistent with the law of supply?

a) As the price of calculators falls, the supply of calculators increases, ceteris paribus.

## b) As the price of calculators rise, the supply of calculators increases, ceteris paribus.

- c) As the price of calculators rise, the quantity supplied of calculators decreases, ceteris paribus.
- d) As the price of calculators rise, the quantity supplied of calculators increases, ceteris paribus.
- 31. The price of computer chips used in the manufacture of personal computers has fallen. This will lead to \_\_\_\_\_\_ personal computers.
- a) a decrease in the quantity supplied of

#### b) an increase in the supply of

c) a decrease in the supply of

- d) an increase in the quantity supplied of
- 32. When excess demand occurs in an unregulated market, there is a tendency for:

# a) price to rise.

- b) quantity supplied to decrease.
- c) quantity demanded to increase.
- d) price to fall.
- 33. Market equilibrium exists when \_\_\_\_\_\_ at the prevailing price.

## a) quantity demanded equals quantity supplied

- b) quantity supplied is greater than quantity demanded
- c) quantity demanded is less than quantity supplied
- d) quantity demanded is greater than quantity supplied
- 34. A movement along the demand curve to the left may be caused by:
- a) a rise in income.

## b) a decrease in supply.

- c) a rise in the price of inputs.
- d) a fall in the number of substitute goods.
- 35. The price elasticity of demand is the:
- a) ratio of the change in price to the change in quantity demanded.

## b) ratio of the percentage change in quantity demanded to the percentage change in price.

- c) ratio of the change in quantity demanded to the change in price.
- d) ratio of the percentage change in price to the percentage change in quantity demanded.
- 36. The price of apples falls by 5% and quantity demanded increases by 6%. This means that demand is:

# <mark>a)</mark>elastic.

- b) perfectly elastic.
- c) zero elastic.
- d) inelastic.
- 37. The price of burgers increases by 22% and the quantity of burgers demanded falls by 25%. This indicates that demand for burgers is:
- a) unitarily elastic.

b) elastic.

- c) perfectly elastic.
- d) inelastic.

38. If the cross-price elasticity of demand between two goods is negative, then the two goods are:

- a) substitutes.
- b) unrelated goods.
- c) normal goods.
- d) complements.

- 39. If the quantity demanded of beef increases by 5% when the price of chicken increases by 20%, the cross-price elasticity of demand between beef and chicken is:
- a) -4.
- b) 4.
- c) -0.25.

<mark>d)</mark> 0.25.

40. When the market operates without interference, price increases will distribute what is available to those who are willing and able to pay the most. This process is known as:

a) price rationing.

- b) quantity setting.
- c) price fixing.
- d) quantity adjustment.

41. Macroeconomics distinguishes between the real economy and the...

- a) monetary economy.
- b) virtual economy.
- c) normative economy.
- d) underground economy.

42. During business cycles the opposite of a trough is ...

- a) an inflation
- b) a hyperinflation.
- c) a trend.
- d) a peak.
- 43. According to the analysis of the British economist John Maynard Keynes,...
- a) markets coordinate supply and demand so that a policy of laissez-faire would prevent recessions.
- b) economic fluctuations were the cumulative result of mistakes made by businesses and households in an uncertain world.
- c) government demand could be used to smooth fluctuations in aggregate output and income.
- d) supply creates its own demand through the circular flow of economic activity.

#...markets coord

- 44. In order to influence spending on goods and services in the short-run, monetary policy is directed at directly influencing...
- a) unemployment rates.
- b) inflation rates.
- c) interest rates.
- d) economic growth rates.

#### #...unemployment

- 45. "Inflation is generally procyclical" means...
- a) "higher rates of inflation tend to precede periods of high economic growth."
- b) "the rate of inflation tends to rise in periods of high economic growth and fall in periods of low economic growth".
- c) "prices on average rise in an economic expansion but fall after a business cycle peak."
- d) "more inflation results in less capacity utilization."

46. Constrained choice is relevant for households:

- a) making spending decisions but not labour-supply decisions.
- b) making labour-supply decisions but not spending decisions.

- c) making both spending and labour-supply decisions.
- d) considered to be 'poor', but not for those who are considered to be 'rich.'
- 47. Economists use the term utility to mean:
- a) any characteristic of a good or service which cannot be measured.
- b) the value of a product before it has been advertised.
- c) the contribution a good or service makes to social welfare.
- d) the satisfaction a consumer obtains from a good or service.
- 48. Economists use the term marginal utility to mean:
- a) total satisfaction gained when consuming a given number of units.
- b) the process of comparing marginal units of all goods which could be purchased.
- c) additional satisfaction gained by the consumption of one more unit of a good.
- d) additional satisfaction gained divided by additional cost of the last unit.
- 49. The law of diminishing marginal utility states that:
- a) total satisfaction will decrease as more units of the good are consumed.
- b) the satisfaction from each additional unit of a good consumed will decrease.
- c) total utility will become negative.
- d) both the first and third option.
- 50. By consumer surplus, economists mean:
- a) the difference between the maximum amount a person is willing to pay for a good and its market price.
- b) household saving Y-T-C.
- c) the area inside the budget line.
- d) the area between the average revenue and marginal revenue curves.
- 51. The equation for Anna's demand curve for CDs is Q = 20 .5P. If the price of a CD is £18, consumer surplus will be:
- a) £198.
- b) £11.
- c) £242.
- <mark>d)</mark> £121.
- 52. The price of an ice cream cone is £1.50 and you buy three ice cream cones per week. If the price of an ice cream cone falls to £1.25 and you still buy three ice cream cones per week, which of the following is TRUE?
- a) The total utility of the fourth ice cream cone per week must be worth less than £1.25 to you.
- b) Both the total and marginal utility of the fourth ice cream cone per week must be worth less than £1.25 to you.
- c) The marginal utility of the fourth ice cream cone per week must be worth less than  $\pm 1.25$  to you.
- d) This violates the law of demand because as price falls quantity demanded must increase.
- 53. Economists have used the idea of diminishing marginal utility to explain why:
- a) demand curves slope downwards.
- b) demand curves become flatter at lower prices.
- c) demand curves are inelastic.
- d) both the first and second option.
- 54. A consumer will buy more units of a good if the value of the good's:
- a) total utility is less than price.
- b) total utility is greater than price.

c) marginal utility is less than price.

### d) marginal utility is greater than price.

- 55. The diamond-water paradox can be explained by suggesting that the price of a product is determined by:
- a) consumer surplus.
- b) consumer incomes.
- c) marginal utility.
- d) diminishing marginal utility.
- 56. A utility-maximising consumer changes their spending for goods X and Y so that:
- a) TUX/PX = TUY/PY
- b) MUX = MUY
- c) MUX/MUY = PX/PY
- $\overline{d}$  PX (MUX) = PY(MUY)
- 57. The MUX/MUY is ten and the PX/PY is eight, so the consumer should buy:
- a) less X and more Y.

## b) more X and less Y.

- c) less X and less Y.
- d) more X and more Y.
- 58. Economists define an indifference curve as the set of points:
- a) where the consumer is in equilibrium as prices change.
- b) where the consumer is in equilibrium as the consumer's income changes.
- c) which yield the same marginal utility.
- d) which yield the same total utility.
- 59. Which of the following is a property of an indifference curve?

#### a) It is convex to the origin.

- b) The marginal rate of substitution is constant as you move along an indifference curve.
- c) Marginal utility is constant as you move along an indifference curve.
- d) Total utility is greatest where the 45 degree line cuts the indifference curve.

60. The limits imposed on household choices by income, wealth, and product prices are the:

- a) choice set.
- b) preference set.

#### c) budget constraint.

- d) assumption of perfect knowledge.
- 61. Jane has £500 a week to spend on food and clothing. The price of food is £10 and the price of clothing is £25. Which of the following pairs of food and clothing are in Jane's choice set?

# a) 10 units of clothing and 25 units of food.

- b) 20 units of clothing and 50 units of food.
- c) 0 units of clothing and 500 units of food.
- d) 50 units of clothing and 50 units of food.
- 62. If a household's money income is doubled:

#### a) the budget constraint will shift out parallel to the old one.

- b) the budget constraint is not affected.
- c) the budget constraint will shift in and parallel to the old one.
- d) the budget constraint will swivel at the Y-intercept.

- 63. The curve that is traced out when we keep indifference curves and the budget line constant and change the price of good X is:
- a) the substitution curve.
- b) the Engel curve.
- c) the demand curve for X.
- d) the price-consumption curve for X.
- 64. The curve that is traced out when we keep indifference curves constant and move the budget line parallel to its original position is:
- a) the Friedman curve.

## **b)** the income-consumption curve.

- c) the income-demand curve.
- d) the Engel curve.
- 65. If the income and substitution effects of a price increase work in the same direction, the good whose price has changed is a:
- a) Giffen good.
- b) inferior good.
- c) superior good.
- d) normal good.
- 66. Profit-maximising firms want to maximize the difference between:

# a) total revenue and total cost.

- b) total revenue and marginal cost.
- c) marginal revenue and average cost.
- d) marginal revenue and marginal cost.

#### 67. Which statement is FALSE?

a) There are no fixed costs in the long run.

# **b)** Fixed costs are zero if the firm is producing nothing.

- c) Fixed costs do not depend on the firm's level of output.
- d) Fixed costs are the difference between total costs and total variable costs.
- 68. Which of the following is most likely to be a variable cost for a firm?

#### a) The payroll taxes that are paid on employee wages.

- b) The franchiser's fee that a restaurant must pay to the national restaurant chain.
- c) The interest payments made on loans.
- d) The monthly rent on office space that it leased for a year.
- 69. The costs that depend on output in the short run are:
- a) total fixed cost only.
- b) total variable costs only.
- c) total costs only.
- d) both total variable costs and total costs.

#### 70.

The short run, as economists use the phrase, is characterised by:

a) all inputs being variable.

#### b) at least one fixed factor of production and firms neither leaving nor entering the industry.

- c) a period where the law of diminishing returns does not hold.
- d) no variable inputs that is, all of the factors of production are fixed.

## 71. Diminishing marginal returns implies:

### a) increasing marginal costs.

- b) decreasing marginal costs.
- c) decreasing average fixed costs.
- d) decreasing average variable costs.
- 72. Which of the following is a correct statement about the relationship between average product (AP) and marginal product (MP)?
- a) If AP exceeds MP, then AP is falling.
- b) If AP is at a maximum, then MP is also.
- c) If TP is declining, then AP is negative.
- d) If AP = MP, then total product is at a maximum.
- 73. If the total product of two workers is 80 and the total product of 3 workers is 90, then the average product of the third worker is \_\_\_\_\_\_ and the marginal product of the third worker is \_\_\_\_\_\_.
- <mark>a)</mark> 30; 10
- b) 10; 30
- c) 10; 3.33
- d) 160; 270
- 74. Engineers for The All-Terrain Bike Company have determined that a 15% increase in all inputs will cause a 15% increase in output. Assuming that input prices remain constant, you correctly deduce that such a change will cause \_\_\_\_\_\_ as output increases.
- a) average costs to increase
- b) average costs to remain constant
- c) marginal costs to increase
- d) average costs to decrease
- 75. Suppose Handel's Ice Cream experiences economies of scale up to a certain point and diseconomies of scale beyond that point. Its long-run average cost curve is most likely to be:
- a) downward sloping to the right.
- b) upward sloping to the right.
- c) horizontal.
- d) U-shaped.

76. Most empirical studies show that firms' cost curves:

# a) slope down to the right and then level off.

- b) slope down to the right.
- c) slope up to the right.
- d) are U-shaped.
- 77. A graph showing all the combinations of capital and labour that can be used to produce a given amount of output is:
- a) a production function.
- b) an isocost line.

<mark>c) an isoquant.</mark>

d) an indifference curve.

78. The rate at which a firm can substitute capital for labour and hold output constant is the:

- a) marginal rate of production.
- b) marginal rate of substitution.
- c) marginal rate of factor substitution.
- d) law of diminishing marginal returns.

79. A graph showing all the combinations of capital and labour available for a given total cost is the:

- a) isoquant.
- b) isocost line.
- c) expenditure set.
- d) budget constraint.
- 80. The formula for average fixed costs is:
- a) Dq/DTFC
- b) TFC/q
- c) q/TFC
- d)  $\overline{TFC} q$
- 81. The formula for average variable cost (AVC) is:
- a) q/TVC
- b) TVC/q
- c) Dq/DTVC
- d) DTVC/Dq
- 82. Marginal revenue is:

# a) the added revenue that a firm takes in when it increases output by one additional unit.

- b) the difference between total revenue and total costs.
- c) the ratio of total revenue to quantity.
- d) the additional profit the firm earns when it sells an additional unit of output.
- 83. A firm in a perfectly competitive industry is producing 50 units, its profit-maximising quantity. Industry price is £2 and total fixed costs and total variable costs are £25 and £40, respectively. The firm's economic profit is:
- <mark>a) £</mark>35.
- b) £15.
- c) £30.
- d) £60.
- 84. Maximum profit can be shown on a diagram using:

# a) the AC and AR curves.

- b) the MR and AR curves.
- c) the MR and MC curves.
- d) the AC and MC curves.
- 85. A firm will shut down in the short run if:
- a) it is suffering a loss.
- b) fixed costs exceed revenues.
- c) variable costs exceed revenues.
- d) total costs exceed revenues.
- 86. As long as the principle of diminishing marginal utility is operating, any increased consumption of a good
- a) lowers total utility.
- b) produces negative total utility.
- c) lowers marginal utility and, therefore, total utility.
- d) lowers marginal utility, but may raise total utility.

- 87. Among all the combinations of goods attainable by a consumer, the one that maximizes total utility is the one that
- a) maximizes the marginal utilities per dollar of each good.
- b) maximizes the marginal utilities per pound (or other physical unit) of each good.
- c) equates the marginal utilities per dollar of each good.
- d) equates the marginal utilities per pound (or other physical unit) of each good.
- 88. A utility contour (or indifference curve) shows all the alternative combinations of two consumption goods that
- a) can be produced with a given set of resources and technology.

## b) yield the same total of utility.

- c) can be purchased with a given budget at given prices.
- d) equate the marginal utilities of these goods and, therefore, make the consumer indifferent between them.
- 89. At any given point on an indifference curve, the absolute value of the slope equals
- a) unity--otherwise there would be no indifference.

#### b) the marginal rate of substitution.

- c) the consumer's marginal utility.
- d) none of the above.
- 90. If a consumer's marginal rate of substitution equals 2 eggs for 1 hamburger,
- a) the consumer's indifference curve must be positively sloped.
- b) the consumer's indifference curve must be convex with respect to the origin of the graph.
- c) the ratio of the consumer's marginal utility of 1 egg to that of 1 hamburger must equal <sup>1</sup>/2.
- d) all of the above are true.
- 91. In the presence of declining marginal rates of substitution, consumers who again and again sacrifice a unit of one good cannot remain on their original consumption-indifference curves (that is, they cannot maintain their original levels of welfare) unless they receive as compensation
- a) again and again equal units of another good.
- b) ever smaller units of another good.
- c) ever larger units of another good.
- d) either (a), (b), or (c), depending on the tastes of the consumer involved.
- 92. All points on or below a budget constraint

## a) are attainable with the given income.

- b) are equally desirable.
- c) represent market basket combinations that exhaust the income available.
- d) are described, in part, by a, b, and c above.
- 93. In a preference ordering exercise in which two baskets of goods are being considered, it is assumed by indifference theory that the consumer is able to
- a) measure the amount of pleasure expected from the preferred basket.
- b) say how much more one basket is valued over the other.
- c) calculate only the absolute value of the less desirable basket.
- d) make no absolute measure of the value of any of the market baskets.
- 94. Indifference curves that intersect would be illogical constructs because
- a) more is better than less.
- b) of diminishing marginal utility.
- c) of the transivity property of indifference theory.
- d) of both a and c above.

- e) of none of the above.
- 95. The marginal rate of substitution between food and shelter for a given point on an indifference curve
- a) is equal to the absolute value of the slope of the indifference curve at that point.
- b) is equal to the rate at which the consumer is willing to exchange the two goods in the marketplace.
- c) reflects the relative values the consumer attaches to the two good.
- d) is described, in part, by each of the above statements.
- 96. If a man prefers Budweiser to Schlitz and Schlitz to Pabst, and if he is indifferent between Budweiser and Miller, he must

## a) prefer Miller to Pabst.

- b) prefer Schlitz to Miller.
- c) be indifferent between Schlitz and Miller.
- d) be indifferent between Budweiser and Pabst.
- e) be indifferent between Pabst and Miller.
- 97. If a market basket is changed by adding more to at least one of the goods, then every consumer will

#### a) rank the market basket more highly after the change.

- b) rank the market basket more highly before the change.
- c) rank the market basket just as desirable after the change.
- d) be unable to decide whether he prefers the first market basket to the second or the second to the first.
- e) recognize this as one of the unsolved problems in economics.

98. An indifference curve is.

- a) a collection of market baskets that are equally desirable to the consumer.
- b) a collection of market baskets that the consumer can buy.
- c) a curve whose elasticity is constant for every price.
- d) a curve which passes through the origin and includes all of the market baskets that the consumer regards as being equivalent.
- 99. If A, B, C, and D are any four market baskets, and if the consumer has ranked them so that D is preferred to C, A is not preferred to B, and B is not preferred to C, then
- a) A is preferred to C.
- b) A is preferred to D.
- c) B is preferred to D.
- d) D is preferred to A.
- e) D is not preferred to B.
- 100. Suppose that a market basket of two goods is changed by adding more to one of the goods and subtracting one unit from the other.
  - a) The consumer will rank the market basket more highly after the change.
  - b) The consumer will rank the market basket less highly after the change.
  - c) The consumer will be indifferent between the market baskets.
  - d) Any of the above statements may be true.
- 101. Which of the following is not an assumption of ordinal utility analysis?
  - a) Consumers are consistent in their preference.
  - b) Consumers can measure the total utility received from any given basket of good.
  - c) Consumers are non-satiated with respect to the goods they confront.

- d) All are necessary.
- e) None of the above.
- 102. As long as all prices remain constant, an increase in money income results in
  - a) an increase in the slope of the budget line.
  - b) a decrease in the slope of the budget line.

## c) an increase in the intercept of the budget line.

- d) a decrease in the intercept of the budget line.
- e) both (a) and (c).
- 103. If the prices of both goods increase by the same percent, the budget line willa) shift parallel to the left.
  - b) shift parallel to the right.
  - c) pivot about the x axis.
  - d) pivot about the y axis.
  - e) none of the above.
- 104. Cardinal utility theory assumes that consumers can
  - a) rank baskets of goods as to their preference.
  - b) determine the number of utils that can be derived from consuming all goods.
  - c) determine the marginal rate of substitution between goods.
  - d) avoid the law of diminishing marginal utility.
  - e) all of the above.
- 105. The budget allocation rule states that
  - a) the marginal utility of x equals the marginal utility of y at maximum utility.
  - b) the marginal utility of x divided by its price be equal to marginal utility of all other goods divided by their prices.
  - c) the marginal utility of x equals the marginal rate of substitution of x for y.
  - d) the ratio of prices of x to y be greater than the ratio of marginal utility of x to the marginal utility of y.
  - e) none of the above.
- 106. In spending all his or her income, the consumer chooses the market basket that maximizes his or her utility. Which of the following statements will be correct?
- 1. The marginal utility is the same for each commodity.
- 2. The marginal utility per dollar spent is the same for each commodity.
- 3. The marginal utility of each commodity is proportional to its price.
  - a) 1 only.
  - b) 2 only.
  - c) 1 and 2 only.
  - d) 2 and 3 only.
  - e) 1, 2, and 3.
- 107. A consumer buys only jellybeans and wrinkle remover and the more of any one he buys, the lower the marginal utility of that good. In spending all his income, his marginal utility of a pound of jellybeans is 12 and his marginal utility of a jar of wrinkle remover is 15. The price of jellybeans is \$8 per pound and the price of wrinkle remover is \$11 per jar. For maximum satisfaction, this consumer should
  - a) buy more wrinkle remover and fewer jellybeans.
  - b) by less wrinkle remover and more jellybeans.
  - c) buy more wrinkle remover and the same quantity of jellybeans.
  - d) buy the same quantity of wrinkle remover and more jellybeans.

- e) remain where he is, since his present position is the best attainable one.
- 108. Suppose an individual spends all his income on only two goods, good X and good Y. Moreover, suppose that you were asked to derive his price consumption curve for good Y. Which of the following would be allowed to vary?
  - a. Money income.
  - b. The tastes of the consumer.
  - c. The price of good X.
  - d. The price good Y.
- 109. The "compensated" demand curve is the demand curve that
  - a. shows only the income effect.
  - b. shows only the substitution effect.
  - c. shows both the income and substitution effects.
  - d. shows the Giffen good demand curve.
  - e. none of the above.
- 110. The income effect of a price change
  - a. is always positive.
  - b. is always negative.
  - c. may be positive or negative.
  - d. is associated with a change in nominal income.
  - e. is caused by changes in consumer tastes.
- 111. If the demand curve for a good is downward sloping, then the good must be
  - a. normal.
  - b. inferior.
  - c. Giffen.
  - d. either (a) or (b).
  - e. either (b) or (c).
- 112. When a good is an inferior good, the "non-compensated" demand curve will be
  - a. relatively more elastic than the compensated demand curve.
  - b. relatively more inelastic than the compensated demand curve.
  - c. equally elastic but with a different intercept than the compensated demand curve.
  - d. parallel to the compensated demand curve and to the right.
  - e. either more elastic or more inelastic depending upon the size of the income effect.
- 113. A normal good can be defined as one which consumers purchase more of as
  - a. prices fall.
  - b. prices rise.
  - c. incomes fall.
  - d. incomes increase.
  - e. the prices of other products increase.
- 114. An inferior good
  - a. can be a Giffen good, but a Giffen good is not always inferior.
  - b. must be a Giffen good.
  - c. can be a Giffen good but a Giffen good must always be an inferior good.
  - d. has a positively sloped demand curve.
  - e. all of the above.
- 115. The substitution effect of a price decrease for a good with a normal indifference curve pattern

- a. is always inversely related to the price change.
- b. measures the change in consumption of the good that is due to the consumer's feeling of being richer.
- c. is measured by the horizontal distance between the original and the new indifference curves.
- d. Is sufficient information to plot an ordinary demand curve for the commodity being considered.
- 116. When the substitution effect of a lowered price is counteracted by the income effect, the good in question is
  - a. an inferior good.
  - b. a substitute good.
  - c. an independent good.
  - d. a normal good.
- 117. A price decrease and an increase in income are similar in that
  - a. both force the consumer to achieve a lower level of well-being.
  - b. both force the consumer to reach a lower indifference curve.
  - c. both move the budget line outward.
  - d. They are not similar at all.
- 118. A market demand curve can be derived by adding all the individual demand curves
  - a. vertically.
  - b. horizontally.
  - c. in parallel.
  - d. Any of the above as long as it is consistent.
- 119. Some goods are not closely related to each other and are neither substitutes nor complements. For such goods, the cross-price elasticity of demand would be
  - a. positive.
  - b. negative.
  - <mark>c. zero.</mark>
  - d. Cannot tell without more information.
- 120. The phenomenon of the backward-bending market supply curve for labor
  - a. reflects the policy of labor unions.
  - b. reflects the scarcity of high-priced, highly skilled labor.
  - c. results from workers' preference for leisure over work.
  - d. results from the effect of the decrease in the cost of leisure as wage rates rise.
  - e. indicates an increasing desire for leisure as income rises.
- 121. If leisure is an inferior good, the individual's supply curve for labor is
  - a. backward bending.
  - b. completely inelastic.
  - c. upward sloping.
  - d. perfectly elastic.
  - e. not necessarily any of the above.
- 122. If the income effect resulting from a change in the price of leisure is zero, the individual's supply curve of labor is
  - a. backward bending.
  - b. completely inelastic.
  - c. upward sloping.

- d. perfectly elastic.
- e. not necessarily any of the above.
- 123. The marginal rate of technical substitution is
  - a) the rate at which a producer is able to exchange, without affecting the quantity of output produced, a little bit of one input for a little bit of another input.
  - b) the rate at which a producer is able to exchange, without affecting the total cost of inputs, a little bit of one input for a little bit of another input.
  - c) the rate at which a producer is able to exchange, without affecting the total inputs used, a little bit of one output for a little bit of another output.
  - d) a measure of the ease or difficulty with which a producer can substitute one technique of production for another.
- 124. In the presence of a diminishing marginal rate of technical substitution between labor and capital, output can be kept unchanged only if
  - a) equal successive sacrifices of capital go hand in hand with ever smaller increases of labor.
  - b) equal successive sacrifices of capital go hand in hand with ever smaller sacrifices of labor.
  - c) equal successive increases in labor go hand in hand with ever smaller increases in capital.
  - equal successive increases in labor go hand in hand with ever smaller sacrifices of capital.
- 125. If the capital-labor ratio changes from 100 to 150, while the marginal rate of technical substitution between capital and labor changes from 50 to 100, the elasticity of input substitution
  - a. cannot be calculated.
  - b. remains unchanged.
  - c. equals 2.
  - d. equals 0.5.
- 126. If a simultaneous and equal percentage decrease in the use of all physical inputs leads to a larger percentage decrease in physical output, a firm's production function is said to exhibit
  - a. decreasing returns to scale.
  - b. constant returns to scale.
  - c. increasing returns to scale.
  - d. diseconomies of scale.
- 127. If a firm triples all inputs, and output triples as well, the firm is subject to
  - a. constant returns to scale.
  - b. increasing returns to scale.
  - c. economies of scale.
  - d. both (b) and (c).
- 128. An isocost line identifies
  - a. the least costly combination of inputs needed to produce a given level of output.

# b. the relative prices of inputs.

- c. the technological relationships among inputs.
- d. the rate at which one input can be substituted for another in the production process.
- 129. The expansion path identifies
  - a. the least costly combination of inputs required to produce various levels of output.
  - b. the firm's demand curves for the inputs.
  - c. the various combinations of inputs that can be used to produce a given level of output.

- d. the least-cost combination of outputs.
- 130. A tangency point between an isoquant and an isocost line identifies
  - a) the least costly combination of inputs required to produce various levels of outputs.
  - b) the various levels of output that can be produced using a given level of inputs.
  - c) the various combinations of inputs that can be used to produce a given level of output.
  - d) the least costly combination of inputs required to produce a given level of output.
- 131. Suppose a firm is using two inputs, labor and capital. What will happen if the price of labor falls?
  - a) The firm's average cost curve will shift downward.
  - b) The firm's marginal cost curve will shift downward.
  - c) To produce an unchanged output, the firm would use more labor.
  - d) All of the above.
- 132. A firm operating in a perfect market maximizes its profit by adjusting
  - a. its output price until it exceeds average total cost as much as possible.
  - b. its output price until it exceeds marginal cost as much as possible.
  - c. its output until its marginal cost equals output price.
  - d. its output until its average total cost is minimized.
- 133. In the short run, no firm operates with a loss, unless
  - a. variable cost equals fixed cost.
  - b. variable cost falls short of fixed cost.
  - c. total revenue covers variable costs.
  - d. total revenue covers fixed cost.
- 134. For a firm operating in a perfect market, its short-run supply is identical with the rising arm of
  - a. its marginal-cost curve.
  - b. its average-fixed-cost curve.
  - c. its average-total-cost curve.
  - d. none of the above.
- 135. A good's short-run supply curve is shifted to the right by
  - a. a fall in the good's price.
  - b. a rise in the prices of inputs used to make the good.
  - c. an improvement in the technology of making the good.
  - d. none of the above.
- 136. Being a price taker in a market means that the seller
  - a. charges each consumer the maximum that she will be3 able to pay for the product.
  - b. has no choice but to charge the equilibrium price that results from the market supply and demand curves.
  - c. takes her price from her average total cost curve.
  - d. sells her products at different prices to different customers.
- 137. The statement that marginal cost = marginal revenue leads to profit maximization of loss minimization is true
  - a. all the time.
  - b. only in the long run.
  - c. only if marginal cost is rising at the point of equality.
  - d. only if average total cost is falling at the point of equality.

- 138. In perfect competition, when economic profits exist in the short run, they are very tenuous because
  - a. costs will inevitably increase and eliminate profit.
  - b. price will fall because market supply will increase.
  - c. firms are driven to increase output in the short run to the point where average total cost will equal price.
  - d. firms are driven in the short run to reduce output until average total cost equals price.
- 139. When a profit-maximizing firm is at its short-run optimum point,
  - a. the average cost of the product is at its lowest possible point whether a profit is being made or not.
  - b. the firm will be shut down if its price is less than the average fixed cost.
  - c. the profit per unit of output will be at its maximum possible level.
  - d. all the above will be true.
  - e. none of the above will be true.
- 140. If a firm is producing where its SMC = price and the LMC is less that LAC, then it would do better in the long run by
  - a. increasing output with its existing plant until LMC equals price.
  - b. increasing plant size until LMC and SMC are identical and equal to price.
  - c. decreasing plant size until LAC, SAC, and price are equal.
  - d. doing nothing because it is already at the long-run profit maximizing point.
- 141. The competitive firm maximizes its profit by operating where
  - a. average costs are at a minimum.
  - b. total revenue is at a maximum.
  - c. profit per unit is at a maximum.
  - d. marginal cost equals price.
- 142. For a competitive firm the demand curve
  - a. is horizontal
  - b. coincides with the marginal revenue curve.
  - c. coincides with the average revenue curve.
  - d. all of the above.
- 143. In the short run, if price falls, the firm will respond by
  - a. shutting down.
  - b. equating average variable cost to marginal revenue.
  - c. reducing output along its marginal cost curve as long as marginal revenue exceeds average variable cost.
  - d. none of the above.
- 144. In the short run, a competitive firm's supply curve is
  - a. its average variable cost curve to the right of the marginal cost curve.
  - b. its marginal cost curve above the average variable cost curve.
  - c. its marginal cost curves above its average cost curve.
  - d. the horizontal summation of the marginal cost curves.
- 145. In a constant cost competitive industry if price rises above its long-run equilibrium level, which of the following will not occur as the industry adjusts to a new LR equilibrium?
  - a. New firms will enter the industry.
  - b. Economic profit will be eliminated.
  - c. Input prices will rise.

- d. Existing firms will increase production.
- 146. The term increasing cost industry is used to describe
  - a) a firm with a rising average cost curve.
  - b) an industry subject to decreasing returns to scale.
  - c) an industry with a rising marginal cost curve.
  - d) an industry in which the prices of one or more inputs are bid up as output expands.
- 147. Along the long-run supply curve, all of the following can vary except
  - a. the level of profits.
  - b. the number of firms in the industry.
  - c. input prices.
  - d. the level of input usage.
- 148. The short-run supply curve for a competitive industry is derived by
  - a. horizontally summing the marginal cost curves for each firm in the industry.
  - b. horizontally summing the average variable cost curves for each firm in the industry.
  - c. vertically summing the marginal cost curves for each firm in the industry.
  - d. none of the above.
- 149. Generally, supply is
  - a) more elastic in the long run than in the short run.
  - b) more elastic in the short run than in the long run.
  - c) more elastic the more firms in the industry.
  - d) more elastic the lower the input prices.
- 150. A monopolistically competitive market is characterized by all of the following except
  - a) easy entry.
  - b) differentiated products.
  - c) excess capacity.
  - d) economic profit in the long run.
- 151. An oligopolistic industry can be characterized by all of the following except

#### a) many sellers.

- b) mutual interdependence.
- c) economies of scale.
- d) a homogenous product.
- 152. The kinked demand curve faced by an oligopolist is based on the assumption that
  - a) rivals will follow a price increase but not a price cut.
  - b) rivals will follow a price decrease but not a price increase.
  - c) rivals will follow both a price decrease and a price increase.
  - d) rivals will ignore both a price increase and a price decrease.
- 153. A common criticism of the kinked demand curve model is that
  - a) it does not explain the interdependence of the demand curve.
  - b) it does not explain why costs remain rigid in the face of changing demand.
  - c) it does not explain how price was determined.
  - d) none of the above.
- 154. Which of the following does not characterize monopolistic competition?
  - a) Product differentiation.
  - b) Many producers.

## c) Absence of advertising.

- d) Some control over price.
- e) All of the above characterize monopolistic competition.
- 155. Product differentiation gives each seller a small amount of monopoly power because
  - a. little or nothing can be said concerning the social desirability or undesirability of product differentiation.
  - b. there can be little substitution between product groups.
  - c. the products of other firms are not perfect substitutes.
  - d. the presence of excess capacity greatly reduces monopoly power.
  - e. the monopolistic competitor faces a downward sloping demand curve.
- 156. A monopolistically competitive firm differs from a perfectly competitive firm in that, unlike the perfectly competitive firm, it
  - a) faces a downward sloping demand curve.
  - b) can change the characteristics of its product.
  - c) can vary the price of its product.
  - d) tends to operate with excess capacity.
  - e) all of the above.
- 157. One of the differences between a perfectly competitive firm's long-run equilibrium and the longrun equilibrium of a monopolistically competitive firm is that
  - a) LMS = MR under perfect competition, but not under monopolistic competition.
  - b) SAC = LAC under perfect competition, but not under monopolistic competition.
  - c) SMC = LMC under perfect competition, but not under monopolistic competition.
  - d) LAC = LMC under perfect competition, but not under monopolistic competition.
  - e) economic profits are zero under perfect competition, but not under monopolistic competition.
- 158. In the neighborhood of the long-run equilibrium of a monopolistically competitive firm, average cost will be
  - a) decreasing.
  - b) constant.
  - c) increasing.
  - d) at a minimum.
  - e) either (a) or (c).
- 159. A conclusion that monopolistic competition will be characterized by excess capacity
  - a) means that the firm produces less than the profit-maximizing level of output.
  - b) means that the firm produces more than the profit-maximizing level of output.
  - c) means that the firm does not operate its plant at the minimum point of the long-run average cost curve.
  - d) means that the firm does not operate its plant at the minimum point of the long-run marginal cost curve.
  - e) means that there are too many firms in the industry.
- 160. The long-run equilibrium price charged by the monopolistic competitor is
  - a) likely to be lower than the perfect competitor's price.
  - b) likely to equal long-run marginal cost.
  - c) likely to exceed long-run average cost so that all firms are earning positive economic profits.
  - d) likely to exceed the monopolist's price.

- e) likely to lie somewhere between the perfect competitor's price and the monopolist's price.
- 161. The firm under monopolistic competition is likely to produce less and set a higher price than under perfect competition because
  - a) the firm faces decreasing returns to scale.
  - b) the firm faces increasing costs.
  - c) the firm must incur selling expenses, including advertising.
  - d) the firm operates where marginal revenue equals marginal cost.
  - e) the firm faces a downward sloping demand curve.
- 162. In order to constitute an oligopolistic market structure
  - a) there must be a few firms in a given relevant market.
  - b) there must be a few firms selling in a national market.
  - c) there must be more than 20 firms selling in the international market.
  - d) there must be fewer than 15 firms in any given market.
- 163. The key feature of oligopoly is
  - a) excess capacity.
  - b) high profitability.
  - c) product differentiation.
  - d) interdependence of firms.
  - e) the impersonal nature of the market.
- 164. The kinked demand curve is used to
  - a. illustrate the difference between pure and differentiated oligopoly.
  - b. explain the stability of oligopolistic prices.
  - c. illustrate the nature of zero-sum games.
  - d. explain the prevalence of oligopoly in American industry.
  - e. illustrate the linear programming problem faced by the firm.
- 165. A typical Cournot solution is defined as
  - a) one in which the solution is identical to the purely competitive market.
  - b) one in which the solution is identical to the monopoly solution.
  - c) one in which the output is above the monopoly and below the purely competitive result.
  - d) none of the above
- 166. If the firms in a monopolistically competitive "industry" made economic profit,
  - a) they might earn this profit permanently.
  - b) new firms would enter their "industry" until the profit was eliminated.
  - c) the price elasticity of demand would have to be less than one in absolute value.
  - d) both (b) and (c) would be true.
- 167. In long-run equilibrium, a monopolistically competitive firm will find
  - a) marginal cost below average total cost.
  - b) marginal cost equal to minimum average total cost.
  - c) both (a) and (b).
  - d) neither (a) nor (b).
- 168. In the long run, a profit-maximizing monopoly produces an output volume that
  - a. equates long-run marginal cost with marginal revenue.
  - b. equates long-run average total cost with average revenue.

- c. assures permanent positive profit.
- d. is correctly described by both (a) and (c).
- 169. With respect to price elasticity, it is true that
  - a. monopoly market demand need not be less elastic than market demand in a competitive industry.
  - b. monopoly firms face less elastic demand than do competitive firms.
  - c. a monopolist should not produce where demand is inelastic.
  - d. all the above are correct statements.
- 170. A monopolist will maximize profit
  - a) where total revenue is maximized.
  - b) where the slope of the total revenue function equals the slope of the total cost function.
  - c) where average cost is at a minimum.
  - d) where all the above are true.
  - e) somewhere other than the solutions listed because none of them is true.
- 171. All of the following are true about a monopolist except
  - a. average and marginal revenue are not the same.
  - b. marginal revenue is greater than price.
  - c. marginal revenue is zero if price elasticity of demand equals 1.
  - d. marginal revenue decreases with increases in output.
  - e. marginal revenue can be negative.
- 172. Which of the following is *not* true?
  - a) A monopolist typically seeks to maximize profits.
  - b) A monopolist sets price as high as possible.
  - c) A monopolist may engage in advertising.
  - d) Monopolists price on the elastic portion of their demand curves.
  - e) Profits are not guaranteed even if the firm is a monopolist.
- 173. Since entry is barred in a monopoly, in the long run the monopolist will
  - a. do nothing since entry will not force an adjustment.
  - b. adjust output but leave the price at the short run profit maximizing level.
  - c. adjust price but leave the output at the short run profit maximizing level.
  - d. adjust both price and output levels to reflect long run scale of plant adjustments.
  - e. set price equal to long run average costs.
- 174. The cost curves associated with monopolists are
  - a) always different from those faced by perfectly competitive firms.
  - b) always lower than those faced by competitive firms.
  - c) always higher than those faced by competitive firms.
  - d) always L-shaped rather than U-shaped.
  - e) typically have no relationship to the selling side of the market.
- 175. If a monopolist had no costs, the best possible price would be where demand is
  - a. infinitely elastic.
  - b. relatively (but not perfectly) elastic.
  - c. unit elastic.
  - d. relatively (but not completely) inelastic.
  - e. completely inelastic.

- 176. If a monopolist has only fixed costs and chooses that output at which marginal cost equals price, it will
  - a. earn positive economic profits.
  - b. earn zero economic profits.
  - c. incur a loss equal to its variable costs.
  - d. incur a loss equal to its fixed costs.
  - e. cannot tell from the information given.
- 177. If the monopolist maximizes profits when marginal revenue equals marginal cost equals average cost, economic profits must be
  - a) negative.
  - b) positive.
  - c) zero.
  - d) either (a) or (c).
  - e) cannot tell from the information given.
- 178. A monopolist will discontinue production if
  - a) marginal revenue is less than marginal cost.
  - b) marginal revenue is less than average total cost.
  - c) marginal revenue is less than average fixed cost.
  - d) price is less than average total cost.
  - e) price is less than average variable cost.
- 179. The supply curve for a monopolist
  - a) is equal to the marginal cost curve above the average variable cost curve.
  - b) is equal to the marginal cost curve above the average cost curve.
  - c) cannot be uniquely determined.
  - d) is equal to the average variable cost curve above the marginal cost curve.
  - e) is typically perfectly inelastic.
- 180. If a monopoly is unable to cover its short-run variable costs, it should
  - a) shut down.
  - b) raise price.
  - c) lower price.
  - d) increase output.
  - e) reduce output.
- 181. If the product demand curve and the industry's cost curves were the same whether the industry operated under conditions of perfect competition or monopoly, what could be said about the price and output under monopoly vis-a-vis the competitive price and output?
  - a) price would be the same; output would be lower under monopoly.
  - b) Output would be the same; price would be higher under monopoly.
  - c) Price would be the same; output would be lower under perfect competition.
  - d) Price would be higher and output would be lower under monopoly.
  - e) Both price and output would be lower under perfect competition.
- 182. The conditions necessary for a firm to be able to price discriminate include
  - a) segmentable markets.
  - b) differences in price elasticity of demand among the segments.
  - c) the inability of customers to transfer products.
  - d) all of the above.
  - e) none of the above.

- 183. Price discrimination is
  - a. illegal.
  - b. a technique that can improve the firm's revenue and profit performance.
  - c. immoral in most cases.
  - d. impossible if consumers have perfect information.
  - e. difficult to administer.
- 184. A competitive firm will hire inputs up to the point where
  - a) the price of the input equals its marginal physical product of the input.
  - b) the marginal product of the input reaches a maximum.
  - c) the price of the input equals the value of the marginal product of the input.
  - d) the price of the input equals the price of the output.
- 185. The demand curve for labor for a monopolist when other inputs are fixed is equal to its
  - a) marginal value product curve.
  - b) marginal revenue product curve.
  - c) horizontal summation of the firm's demand curve at different output prices.
  - d) marginal physical product curve.
- 186. Because a monopoly hires workers up to the point where their marginal revenue product equals the wage rate, the monopoly will
  - a) pay less than the going wage rate.
  - b) pay a wage equal to the value of the marginal product of labor.
  - c) pay less than the value of the marginal product of labor.
  - d) pay workers what they are worth to society.
- 187. A monopsony is
  - a) the sole supplier of an input.
  - b) the sole supplier of an output.
  - c) the sole buyer of some type of input.
  - d) a unionized industry.
- 188. That the perfectly competitive firm will pick a combination of inputs where the ratio of each input's marginal product to its price is equal follows from
  - a) the need to use inputs in fixed proportions.
  - b) the backward bending supply curve of labor.
  - c) cost minimization.
  - d) the attempt to achieve a target rate of return.
  - e) the interaction of demand and supply.
- 189. The profit-maximizing, perfectly competitive firm will employ each input in an amount such that
  - a) the marginal product of each input is equal.
  - b) the marginal product of each input is zero.
  - c) the input price equals the input's marginal product divided by the product price.
  - d) the marginal product of the input equals the input price multiplied by the firm's marginal revenue.
  - e) the input price equals the input's marginal product multiplied by the product price.
- 190. Which of the following would cause the demand curve for an input to shift?
  - a) A change in technology.
  - b) A change in demand for the product being produced.
  - c) An increase in the number of firms in the industry.
  - d) All of the above.

- 191. The imposition by government of a minimum wage (above the existing wage level) will
  - a) reduce employment in a competitive labor market.
  - b) reduce, raise, or leave unchanged employment in a monopsonistic labor market.
  - c) result in (a) and (b).
  - d) reduce employment in any labor market.
  - 192. The word that comes from the Greek word for "one who manages a household" is a. market.
    - b. consumer.
    - c. producer.
    - d. economy.
  - 193. The word economy comes from the Greek word for
    - a. "environment."
    - b. "one who manages a household."
    - c. "one who participates in a market."
    - d. "conservation."
  - 194. Households and economies have each of the following in common EXCEPT both a. must allocate scarce resources.
    - h face many decisions
    - b. face many decisions.
    - c. must allocate the goods and services they produce.
    - d. must have a central decision-maker.
  - 195. Economics deals primarily with the concept of
    - a. scarcity.
    - b. poverty.
    - c. change.
    - d. power.
  - 196. Which of the following is NOT included in the decisions that every society must make? a. what goods will be produced
    - b. who will produce goods

c. what determines consumer preferences

- d. who will consume the goods
- 197. Both households and societies face many decisions because a. resources are scarce.
  - b. populations may increase or decrease over time.
  - c. wages for households and therefore society fluctuate with business cycles.
  - d. people, by nature, tend to disagree.
- 198. Who has given the concept of "Wage fund theory"
  - a) J S Mill
  - b) Marshall
  - c) Ricardion
  - d) Jevons
- 199. Which of the relationship is correct
  - a) Waiting theory of interest- John Rae
  - b) Austrin theory of interest- John Rae
  - c) Time preference theory of interest- John Rae

- d) None of these
- 200. "The true national income is that part of the annual net produce which is directly consumed during that year" who said this :a) FISHER
  b) PIGOU

- c) SIMON
- d) ROBBINS