

# **RAMAKRISHNA MISSION VIDYAMANDIRA**

(Residential Autonomous College affiliated to University of Calcutta)

**B.A./B.Sc. SIXTH SEMESTER EXAMINATION, MAY 2019**

**THIRD YEAR [BATCH 2016-19]**

**ECONOMICS (Honours)**

**Paper : X**

Date : 04/05/2019

Time : 12 noon – 2 pm

Full Marks : 50

## **Instructions for the candidate**

*Answer all the questions given below. Each answer carries 2 marks. Tick (✓) the correct option.*

Name : .....

Roll No : .....

Signature of the Invigilators : .....

1. In a labor-leisure framework, what is the shape of the labor supply curve if leisure is an inferior good?  
a) Upward sloping      b) Downward sloping      c) Backward bending      d) Indeterminate
2. A trade expert may argue that there are two “technologies” for “producing” coffee in America: one is to grow them in California, and the other is to grow wheat in Iowa and exchange them for Indian coffee. How do you justify the second technology?  
a) Trade due to transportation costs  
b) Trade due to internal economies of scale  
c) Trade due to comparative advantage  
d) Trade due to international relations
3. In the light of empirical results on the Heckscher-Ohlin (HO) model, recent work suggests that the efficiency of factors of production seems to differ internationally. The implication of this observation is the following:  
a) The pattern of goods trade between developed and developing countries does not fit the predictions of the HO model quite well  
b) The assumption that the factor markets are competitive is false  
c) Factor-price equalization does not hold  
d) All of the above
4. Consider the following two statements: I. The leader can get a lower profit in a Stackelberg equilibrium than he would get in the Cournot equilibrium. II. If in a Cournot duopoly, one firm is not producing the Nash equilibrium quantity then the other firm must produce its Nash equilibrium quantity to maximize profit.  
a) Statement I is true      b) Statement II is true  
c) Both statements are true      d) None of the statements is true

5. People's concern about the distribution of welfare can lead them to advocate various forms of policies. It has been argued, for example, that senior citizens should have access to less expensive telephone service, or that small users of electricity should pay lower rates than large users. These are basically attempts to redistribute income through the price system by offering some people lower prices than others. Others argue that it is better to just redistribute the income in a suitable manner. Judging the two policies from the point of view of the Second Welfare Theorem,
- only the first policy is reasonable
  - only the second policy is reasonable
  - both are essentially the same policies
  - none of the above is reasonable
6. What will happen to the optimum output of a monopolist if an output-specific tax of Rs  $t$  per unit is imposed?
- $\frac{dq}{dt} = 0$
  - $\frac{dq}{dt} > 0$
  - $\frac{dq}{dt} < 0$
  - None of these
7. For which pricing rule, do you think, should the government subsidise a monopolist?
- Average cost pricing
  - Marginal cost pricing
  - Monopoly equilibrium pricing
  - None of these
8. Suppose that the total demand for a product is divided into two markets with the demand curves:  $Q_1 = 12 - P_1$  and  $Q_2 = 18 - P_2$ . Let the marginal cost be Rs 4. Starting from the assumption of overall profit maximization, derive the quantities sold in each of the two markets ( $Q_1$  &  $Q_2$ ), assuming a monopolist producer.
- $Q_1 = 10, Q_2 = 20$
  - $Q_1 = 4, Q_2 = 10$
  - $Q_1 = 4, Q_2 = 7$
  - None of these
9. The production function of a commodity is given by  $q = K^2 - 3KL + 4L^2$ . Find the maximum amount of capital that can be employed when 7 units of labor are employed.
- 12
  - 10.5
  - 20
  - 7
10. Find out the elasticity of substitution for the production function :  $q = [aK^{-b} + (1-a)L^{-b}]^{\frac{1}{b}}$ .
- 1
  - 0
  - $-\left(\frac{1}{1+b}\right)$
  - $\left(\frac{1}{1+b}\right)$
11. At present output levels, a firm in a perfectly competitive industry is in the following position: Output = 1000 units, market price = \$3, total cost = \$6000, fixed cost = \$2000, marginal cost = \$3. To achieve optimum output, the firm should:
- reduce output but keep producing
  - increase its selling price
  - leave output unchanged
  - reduce output to zero
12. At present output levels, a perfectly competitive firm is in the following position: output = 4000 units, market price = \$1, fixed costs = \$2000, total variable costs = \$1000, marginal cost = \$1.10. This firm is :

- a) making a positive economic profit
  - b) making a zero economic profit
  - c) losing money, although it could make a profit by decreasing its output
  - d) producing the output where  $AVC = MC$
13. A monopoly firm will produce at minimum ATC:
- a) in long-run equilibrium
  - b) if MR happens to equal MC where ATC is at a minimum
  - c) if price happens to equal ATC at the output where ATC is at its minimum
  - d) whenever price is below the monopolist's ATC, everywhere
14. An indication of the technological inefficiency of a monopolist, when compared to a perfect competitor, is that:
- a) a monopolist's price is set above the marginal cost of the good
  - b) the demand curve facing the monopolist is downward sloping
  - c) in the long-run, a monopolist is not forced to produce at the minimum point of the average total cost curve
  - d) a monopolist earns more economic profit in the long-run than does the competitive firm
15. The short-run shutdown point for the perfectly competitive firm occurs:
- a) where total revenue is just sufficient to cover total cost
  - b) when the demand curve facing the firm is tangent to its average variable cost curve
  - c) where total revenue is just sufficient to cover all explicit cost but not any implicit or imputed costs
  - d) when the firm is able to cover all of its fixed costs and part of its variable costs
16. Consider an economy whose Gross National Product at market prices is Rs 200 billion. The net property income from abroad is Rs 20 billion. Indirect taxes earned are Rs. 20 billion and subsidies are Rs. 10 billion. The Gross Domestic Product at market prices and factor cost are (in billion Rs):
- a) 200,180
  - b) 180,160
  - c) 180,170
  - d) 200,170
17. In a simple Keynesian model, an increase in autonomous expenditure from 100 to 200 increases the value of equilibrium income from 200 to 400. The MPC in this case is —
- a) .25
  - b) .40
  - c) .50
  - d) .75
18. In an economy, a change in the level of aggregate supply fails to change the level of equilibrium income. In this economy:
- a) the IS curve is vertical
  - b) the LM curve is horizontal
  - c) both (a) and (b)
  - d) neither (a) nor (b)

19. Suppose the utility function of a representative individual is  $U(c_t) = \log c_t$ . The individual lives for two periods and hence maximizes her lifetime utility subject to her lifetime budget constraint. Let  $\rho$  denotes the time preference and  $r$  the interest offered. If the consumer prefers more to consume in period 2 than period 1 then —
  - a)  $r > \rho$
  - b)  $r < \rho$
  - c) information is not sufficient
  - d) none of the above
20. Consider two economies A and B. A is a small economy while B is a large economy. Hence external repercussion effect is significant only for economy B. If governments of both the economies increase their government expenditure —
  - a) A will experience larger depreciation of its currency
  - b) B will experience larger depreciation of its currency
  - c) both will experience same depreciation
  - d) both (a) and (b) are possible
21. In the model  $\log y_i = \beta_1 + \beta_2 x_i + u_i$ ,  $u_i$ 
  - a) represents the missing values of  $y$
  - b) acts as a proxy for all omitted variables that may affect  $y$
  - c) acts as a proxy for all important variables that affect  $y$
  - d) represents measurement errors
22. The slope-coefficient for a regression of  $Y_i$  on  $X_i$  is the same as the slope-coefficient for a regression of  $Y_i$  on  $X_i$ , where  $Y_i$  &  $X_i$  are deviations from their mean values. This statement is
  - a) always true
  - b) always false
  - c) sometimes true, sometimes false
  - d) meaningless
23. For used cars, a simple regression describes how price (measured in \$1000's) is related to age (measured in years). The point estimate of intercept is 24 & the point estimate of the slope is 3. If age were measured in months instead of years, what would the least squares line be?
  - a) Price-hat =  $288 - 3 \cdot \text{age}$
  - b) Price-hat =  $288 - 72 \cdot \text{age}$
  - c) Price-hat =  $24 - 0.25 \cdot \text{age}$
  - d) Price-hat =  $24 - 72 \cdot \text{age}$
24. If the estimated  $\hat{\beta}_2$  is equal to the hypothesised  $\beta_2$ , the 't' value will be equal to
  - a) 0
  - b) 1
  - c) 30
  - d) standard error of  $\hat{\beta}_2$
25. In a double log model ( $\log y_i = \beta_1 + \beta_2 \log x_i + u_i$ ), elasticity of  $y$  with respect to  $x$  is given by
  - a)  $\beta_2$
  - b)  $\beta_2 \frac{x}{y}$
  - c)  $\beta_2 x$
  - d)  $\beta_2 \left( \frac{1}{y} \right)$