

**Entrance Examinations – 2021**  
**M.A. Economics**

**Hall Ticket Number**

Time: 2 hours  
Max. Marks: 100

Part A: 25 Marks  
Part B: 75 Marks

**INSTRUCTIONS**

1. Please read these instructions carefully before marking your answers on the **OMR** answer sheet.
2. Write your Hall Ticket Number on the **OMR** Answer Sheet given to you. Also write the Hall Ticket Number in the space provided above.
3. Answers are to be marked on the **OMR** answer sheet following the instructions provided thereon.
4. Handover the **OMR** answer sheet after the examination to the Invigilator.
5. There are plain sheets in the booklet for rough work, no additional sheets will be provided.
6. There are a total of 100 questions in this paper: **Part A** (25 questions) and **Part B** (75 questions).
7. **There is negative marking.** For each question, the **correct answer gets 1 (ONE) mark** and a **wrong answer gets – 0.33 marks**. Each question has only one correct option.
8. The appropriate answer should be coloured with either a blue or a black ball point or a sketch pen on the **OMR** sheet. **DO NOT USE A PENCIL.**
9. The question paper contains 22 pages including the cover page and pages for rough work (on pages 20 to 22).
10. The question paper booklet can be taken by the candidates at the end of the examination.

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PART - A

1. If the inverse supply and inverse demand functions of a commodity X are given by  $P_s = 8 + 4X$  and  $P_d = 20 - 5X$  respectively, and if price P and quantity X are determined at the equality of total demand and total supply, then the total surplus = consumer's surplus + producer's surplus is equal to

- A. approximately 4 units.
- B. 8 units.
- C. 18 units.
- D. 72 units.

2. If we have the Leontief production function  $y = \min \{ax_1, bx_2\}$  with two inputs  $x_1$  and  $x_2$ , the associated total cost function will be of the

- A. Leontief function form.
- B. Cobb-Douglas function form.
- C. linear form.
- D. non-linear form.

3. In a simple Keynesian model of a closed economy, the marginal propensity to consume (MPC) is 0.8. If an income tax at 25% of income is introduced than the simple Keynesian expenditure multiplier changes by:

- A. + 25 %
- B. - 25 %
- C. + 50 %
- D. - 50 %

4. Euler's product exhaustion theorem presumes

- A. Increasing returns to scale
- B. Constant returns to scale
- C. Decreasing returns to scale
- D. No stipulation on returns to scale

5. Arrange the following in the increasing order of income elasticity of demand ( $e_Y$ ):

- I. Luxuries
- II. Inferior goods
- III. Necessities

- A. III - II - I
- B. II - I - III
- C. I - II - III
- D. II - III - I

6. If the current rate of interest changes from 5 % to 4 %, the market value of a pre-existing bond changes by:

- A. + 20 %
- B. + 25 %
- C. - 20 %
- D. - 25 %

7. Reservation Price is

- A. Maximum price that is fixed by the producer
- B. Maximum price that a customer is willing to pay for a good
- C. Minimum price that a customer is willing to pay for a good
- D. Minimum Price that is fixed by the producer

8. For a commodity, its demand schedule shifts to the left and its supply schedule also shifts to the left. How do equilibrium price and quantity change?

- A. Price and quantity both remain the same, i.e. no change.
- B. Impact on price is ambiguous but quantity becomes higher after the shift.
- C. Price goes down and impact on quantity is ambiguous.
- D. Impact on price is ambiguous but quantity becomes lower after the shift.

9. If equilibrium price is below price ceiling fixed by the government, then

- A. price ceiling is not binding
- B. price ceiling is binding
- C. need more information
- D. there would be shortages at the price fixed by government

10. Suppose the government proposes a luxury tax on private jets. The demand for private jets is elastic and the supply is inelastic, at least in the short run. The tax burden will fall on:

- A. demanders
- B. supplier
- C. government
- D. need more information

11. If the savings rate in an economy is 36% and the incremental output ratio is 4 then the growth rate of the economy will be

- A. 10%
- B. 9%
- C. 5.5%
- D. 9.5%

12. Which of the following is NOT a theory of term structure of interest rate?

- A. Expectations theory
- B. Quantity theory of money
- C. Segmented markets theory
- D. Liquidity premium theory

13. The movement to free international trade is most likely to generate short-term unemployment in which industries?

- A. Industries in which there are neither imports nor exports
- B. Import-competing industries.
- C. Industries that sell to domestic and foreign buyers
- D. Industries that sell to only foreign buyers

14. According to the Heckscher-Ohlin model, the source of comparative advantage is a country's:

- A. technology
- B. advertising
- C. factor endowments
- D. entrepreneurship

15. Under perfect capital mobility and fixed exchange rate

- A. monetary policy is highly effective
- B. monetary policy is effective to some extent
- C. monetary policy completely loses its effectiveness
- D. NONE OF THE ABOVE

16. A bag contains 4 black and 3 white identical balls. Two balls are drawn in succession at random without replacement. Consider the following events: Event A is that both the balls are black; event B is that both the balls are white; event C is that the first ball is black and the second ball is white. Consider statements about probabilities of occurrence of A, B, and C:

- I.  $P[C] = P[A] > P[B]$
- II.  $P[A] = P[B]$
- III.  $P[A] = P[C]$
- IV.  $P[B] = P[C]$

- A. I and III are true
- B. II and IV are true
- C. III and IV are true
- D. II, III and IV are true

17. Consider an economy with 2-goods. The set of all possible positive relative prices is given as:  $P = \{ (p_1, p_2) \mid p_1, p_2 > 0, \text{ and } p_1 + p_2 = 1 \}$ . Identify the correct statements about the properties of set  $P$ :

- I.  $P$  is convex.
- II.  $P$  is bounded.
- III.  $P$  is closed.
- IV.  $P$  is compact.
- V.  $P$  is empty.

- A. III only is true
- B. III and IV are true
- C. I and II are true
- D. V only is true.

18.  $f(x) = \log(x^2 - 3)$ ,  $x > \sqrt{3}$ . Then,  $f(x) = 0$ , when,

- I.  $x = -\sqrt{3}$ ;
- II.  $x = +2$ ;
- III.  $x = +\sqrt{3}$ ;
- IV.  $x = -2$ .

- A. I and III
- B. III
- C. II and IV
- D. II

19. The domain of the real valued function  $f(x) = \sqrt{2x + 4}$  is the interval

- A.  $[2, \infty)$
- B.  $[-2, \infty)$
- C.  $[0, \infty)$
- D. Is not defined

20. Which one of these statistics is unaffected by outliers?

- A. Mean
- B. Standard deviation
- C. Range
- D. Interquartile range

21. A result is called "statistically significant" whenever

- A. The null hypothesis is true
- B. The p-value is less than or equal to the significance level
- C. The alternative hypothesis is true
- D. The p-value is larger than the significance level

22. The GDP deflator is a Price Index that measures

- A. The price level of a basket of consumer goods and services included in GDP
- B. The value of an economy's final output measured at current market prices
- C. The overall price level of goods and services included in GDP
- D. The economy's final output valued in terms of prices in a base year

23. The Phillips curve provides a theoretical link between

- A. the liquidity preference and investment demand schedules.
- B. the goods market and productivity.
- C. the goods market and the labour market.
- D. inflation and the demand for money

24. According to the Neoclassical growth theory, sustained growth can only be explained by

- A. growth in physical capital.
- B. growth in the labour force.
- C. balanced growth of labour and capital.
- D. exogenous technological change

25. Consider the following statements:

- (i) Todaro model explains rural to urban migration.
- (ii) Joan Robinson model of growth has the concept of 'Golden age growth path'.
- (iii) Actual and warranted growth rates are found in the Harrod model of growth.
- (iv) Solow model of economic growth explains the knife-edge equilibrium point.

Then, which of the above statement(s) is/are correct ? Choose your option:

- A. Only (i) is correct
- B. Only (iv) is correct
- C. Only (ii), (iii) and (iv) are correct
- D. Only (i), (ii) and (iii) are correct

**PART-B**

26. In a college, 25% of the students failed in Economics, 15% of the students failed in English and 10% of the students failed in both Economics and English. A student is selected at random. If he failed in English, what is the probability that he failed in Economics?

- A.  $\frac{2}{5}$
- B.  $\frac{2}{3}$
- C.  $\frac{3}{10}$
- D.  $\frac{2}{10}$

27. If the first quartile is 142 and the semi-interquartile range is 18, what is the value of median assuming that the distribution is symmetrical?

- A. 140
- B. 150
- C. 160
- D. 170

28. According to the advance estimates given in the Economic Survey 2020-21, India, the real Gross National Income for the year 2020-21 is projected

- A. to contract by 4.2 percent.
- B. to grow by 7.9 percent.
- C. to contract by 7.9 percent.
- D. to grow by 10.4 percent.

29. According to the Mahatma Gandhi National Rural Employment Guarantee Act 2005

- A. Every rural labourer is entitled for 100 days of employment
- B. Every applicant to which employment is not shown in 15 days, is entitled for unemployment allowance
- C. Every worker under the Act should be paid at least market wage
- D. Every worker should be paid wages in kind

30. PM CARES fund is created by Government of India with an objective to fight:

- A. Poverty
- B. Corruption
- C. Black money
- D. Covid19

31. Let  $V$  and  $W$  be random variables such that the correlation between these two variables is positive but less than 1 ( $0 < \text{Corr}(V, W) < 1$ ). Let  $X = 2(V - 4)$  and  $Y = -0.5W + 2$ . Arrange the following in increasing order of magnitude of correlation:

- I.  $\text{Corr}(X, W)$
- II.  $\text{Corr}(Y, V)$
- III.  $\text{Corr}(X, V)$
- IV.  $\text{Corr}(Y, W)$

- A. I - II - IV - III
- B. II - I - III - IV
- C. III - IV - I - II
- D. IV - II - I - III

32. Consider rolling of two fair dice (one White and one Blue), all outcomes being equally likely. Let  $n_1$  be number that came up on the White die and let  $n_2$  be the number that came up on the Blue die. Define the random variables:  $Y = (n_2 - n_1)$ ;  $Z = (|n_2 - n_1|)$ . Let  $\mu_Y, \mu_Z$  be means and  $\sigma_Y^2, \sigma_Z^2$  be variances respectively of random variables  $Y$  and  $Z$ . Then,

- A.  $\mu_Y > \mu_Z$  and  $\sigma_Y^2 > \sigma_Z^2$ .
- B.  $\mu_Y > \mu_Z$  and  $\sigma_Y^2 < \sigma_Z^2$ .
- C.  $\mu_Y < \mu_Z$  and  $\sigma_Y^2 < \sigma_Z^2$ .
- D.  $\mu_Y < \mu_Z$  and  $\sigma_Y^2 > \sigma_Z^2$ .

33. Identify the correct statement about the function given below:

$$f(x) = \begin{cases} x^2 & x \leq 0 \\ 0, & 0 < x < 5 \\ (5-x)^2 & x \geq 5 \end{cases}$$

- A. The function is continuous as well as differentiable everywhere.
- B. The function is neither continuous everywhere nor differentiable everywhere.
- C. The function is continuous everywhere but is not differentiable everywhere.
- D. The function is not continuous everywhere but is differentiable everywhere.

34. For an  $m$  by  $n$  matrix  $S$  having full column rank,  $m > n$ , let  $X = S^T \cdot S$ ; and  $Y = S \cdot S^T$ . Then, which of the following are true?

- I.  $X$  and  $Y$  are both of the same order.
- II.  $X$  and  $Y$  are both of the same rank.
- III.  $X$  and  $Y$  are both symmetric matrices.
- IV.  $X$  and  $Y$  are both non-singular.

- A. I and II are true
- B. II and III are true
- C. III and IV are true
- D. I and IV are true



35. Given  $x=2$  is a root of the equation:  $x^3 - 3x - 2 = 0$ , then the other two roots are:
- $x = -1$ , these two roots being identical real roots.
  - $x = +1$ ; and  $x = -1$ .
  - two complex roots.
  - $x = +1$ ; and  $x = -2$ .
36. What is the difference, from a Marxian point of view, between the modes of exchange of 'Traditional Economic system' and 'Capitalist economic system'?
- The transmission process noted as C-M-C in the traditional economy and as M-C-M in the capitalist economy
  - The transmission process noted as C-M-C in the traditional economy and as M-C-M' in the capitalist economy
  - The transmission process noted as C-M-C' in the traditional economy and as M-C-M' in the capitalist economy
  - The transmission process noted as C-M'-C in the traditional economy and as M-C'-M in the capitalist economy
37. Which of the following best captures the basic idea of the Mercantilist school?
- Accumulation of wealth in terms of bullion or precious metals
  - Generation of surplus
  - Growth of wealth in terms of output
  - Growth of productive labour
38. The book, *Asian Drama: An Inquiry into Poverty of Nations* is authored by which of the following scholars?
- Amartya Sen
  - Thomas Piketty
  - Gunnar Myrdal
  - Joseph Stiglitz
39. According to W. W. Rostow, a student of underdeveloped areas is more likely to be concerned with the economics of which two stages of growth?
- Economics of High Mass Production and Consumption stages
  - Economics of Take-off and High Mass Consumption Stages
  - Economics of Sustained Economic Growth and High Mass Consumption Stages
  - Economics of Preconditions and the Take-off Stages
40. The Gross Fixed Capital Formation in India during 2012-21, according to the Economic Survey,
- Has fallen from 34.31 % to 27.59%
  - Has fallen from 27.59 % to 21.34 %
  - Has fallen from 21.34 % to 17.8 %
  - Increased from 21.34 % to 27.59 %

41. The argument that market failures may be an endemic feature and therefore requires government intervention is due to
- A. New classical macroeconomics
  - B. New Keynesian macroeconomics
  - C. Rational Expectations school
  - D. Milton Friedman
42. De-industrialisation in colonial India stands for
- A. Discouragement of modern industry
  - B. Acquisition of Indian companies by British companies
  - C. Exclusive focus on railways, banking and plantations
  - D. Destruction of traditional craft industries
43. Political economy is primarily a study of
- A. Socialism
  - B. Feudalism
  - C. Capitalism
  - D. Mercantilism
44. Which among the following eminent Indian economists put forward the “drain of wealth theory” with respect to the British rule in India?
- A. Dada Bhai Naoroji
  - B. Gopal Krishna Gokhale
  - C. Radhakamal Mukherjee
  - D. Mahadev Govind Ranade
45. Consider a society of a finite number of individuals  $(1, 2, \dots, n)$  facing a finite number of states (i.e. alternatives),  $Z_1, Z_2, \dots, Z_t$  ( $t \geq 3$ ). Every individual in this society is always able to unambiguously rank all these states with each other. We say that an alternatives  $Z_k$  is Pareto optimal, *iff*,
- A. Every individual in the society considers  $Z_k$  to be superior to any other state
  - B. Every individual in the society considers  $Z_k$  to be at least as good as any other state
  - C. There is no other state which is considered at least as good as  $Z_k$  by everyone and strictly better than  $Z_k$  by at least one individual.
  - D. Every individual in the society considers  $Z_k$  to be at least as good as any other state and with respect to every other state,  $Z_i$  ( $i \neq k$ ), there is at least one individual who strictly prefers  $Z_k$  to this state  $Z_i$ .

46. Preferences of an individual are represented by the utility function:

$$u(x,y) = 1000(10+(x-15)^2 + (y-20)^2)^{-1/2}, x \geq 0, y \geq 0. \text{ Then this utility function,}$$

- A. is strictly quasi-concave
- B. satisfies non-satiation condition
- C. is monotonous increasing
- D. is continuous

47. When firms get together and attempt to set prices and outputs so as to maximize total industry profits, they are known as a

- A. Nash equilibrium collusion
- B. model of price and output leadership
- C. Cartel
- D. Stackelberg model

48. A person purchased 8 units of sugar when his income was Rs. 2000. As his income has risen to Rs 2500, he has purchased 12 units of sugar. Then, the income elasticity of demand will be

- A. 8
- B. 2
- C. 5
- D. 20

49. Given the matrix  $E = \begin{bmatrix} 2 & 5 & 1 \end{bmatrix}$ , let matrix  $B = E^T E$ . The determinant value of B is

- A. Zero
- B. 8
- C. 30
- D. 16

50. Based on the following paragraph, answer the question that follows it.

"In this model, one person, M, wants to induce another person, N to take some action which is costly to N. It is given that M may be unable to directly observe the action of N, but instead observes some output, x, that is determined, at least in part, by actions of N."

Which of the following statements best describes the model given in the paragraph above?

- A. M is the worker and N is the manager
- B. M is the principal and N is the agent
- C. It is a price leadership problem where M is the price leader and N is a follower.
- D. It is a resource allocation model where M is the government and N is the family.

51. An increase in money supply and a drop in the consumer confidence will lead to

- A. A decrease in output and an increase in the interest rate.
- B. An increase in output and a decrease in the interest rate.
- C. An ambiguous effect on output and a decrease in the interest rate.
- D. An ambiguous effect on output and an increase in the interest rate.

52. The investment trap is a situation where investment demand is
- Perfectly interest inelastic
  - Perfectly interest elastic
  - Highly interest elastic
  - Unitary interest elastic
53. The market demand curve for a public good
- Is the horizontal sum of all individual demand curves
  - Is the vertical sum of all individual demand curves
  - Is upward sloping
  - Is always horizontal
54. Given  $r$  = domestic interest rate,  $r^*$  = foreign interest rate,  $d$  = forward discount on the home currency, which of the following expression represents the Covered Interest Parity?
- $r = r^*$
  - $r = r^* + d$
  - $r = (r^* + d)^2$
  - $r = r^* / d$
55. Assume  $B$  is social benefit,  $C$  is social cost,  $r$  is the social discount rate,  $t$  is the time and  $T$  is the life of an investment project. The Net Present Value (NPV) of this project is:
- $NPV = \sum_{t=0}^T \frac{B_t - C_t}{(1+r)^t}$
  - $NPV = \sum_{t=0}^T \frac{C_t - B_t}{(1+r)^t}$
  - $NPV = \sum_{t=0}^T \frac{(1+r)^t}{B_t - C_t}$
  - $NPV = \sum_{t=0}^T \frac{B_t - C_t}{(C_t)^t}$
56. The policy corridor in monetary policy conducted by the RBI in present day consists of the following
- Repo rate and bank rate
  - Repo and reverse repo rate
  - Repo rate, reverse repo rate, and Marginal standing facility
  - repo rate and call money rate
57. Which of the following is true, if the *Tobin's q* is greater than one?
- It is profitable for firms to create additional capital.
  - Investment in the economy falls.
  - For firms, the value of additional capital falls short of acquiring it.
  - Expansionary monetary policy is ineffective.

58. If a project costs Rs. 100 at  $t=0$ , yields Rs. 60 at  $t=1$ , and Rs. 80 at  $t=2$ , and the compound rate of interest is 10% per period, then the NPV equals

- A. 20.7
- B. 25
- C. 10
- D. 10.7

59. The "iron law of wages" is

- A. The wage-fund theory
- B. The marginal productivity theory of wages
- C. Collective bargaining
- D. The subsistence theory of wages

60. Malthusian theory of population explored the relationship between:

- A. food supply growth and population growth
- B. food supply growth and technology
- C. population growth and development
- D. optimum growth and resources

61. Arrange the following commodities according their all India production in million tonnes in recent years (say, in years 2017-18 onwards) from highest production to the lowest:

I. Wheat;                      II. Rice;                      III. Potato;                      IV. Milk.

- A. II - I - IV - III
- B. IV - II - I - III
- C. II - III - I - IV
- D. I - II - IV - III

62. Due to a negative shock in the external sector, the demand forecast has become more pessimistic. How does this influence the marginal efficiency of capital (MEC)?

- A. No change in MEC
- B. An increase in MEC
- C. A decrease in MEC
- D. Cannot say due to insufficient information

63. Leontief's results were considered paradoxical because the United States of America was believed to be

- A. technologically efficient relative to the rest of the world
- B. capital abundant relative to the rest of the world
- C. labour abundant relative to the rest of the world
- D. all of the above

64. Nontariff trade barriers could include all of the following *except*
- A. domestic content laws
  - B. government procurement policies
  - C. health, safety, and environmental standards
  - D. antidumping/countervailing duties applied to imports
65. Import substitution is an example of
- A. the principle of comparative advantage
  - B. the principle of absolute advantage
  - C. an outward-looking growth strategy
  - D. an inward-looking growth strategy.
66. The NAFTA is a:
- A. monetary union
  - B. free trade area
  - C. common market
  - D. customs union
67. The current account includes
- A. the value of trade in merchandise
  - B. services
  - C. unilateral transfers
  - D. all of the above
68. If a farmer sells wheat to the miller for Rs.500 and the miller sells flour to the baker for Rs.700 and finally, the baker sells bread to the consumer for Rs.1000, then total value added by miller and baker is:
- A. Rs. 500
  - B. Rs. 300
  - C. Rs. 1700
  - D. Rs. 1200
69. The crawling peg is
- A. An automatic system for revising the exchange rate
  - B. Relatively long periods of constant rates punctuated by sharp devaluations
  - C. When the Central Bank uses quantitative measures to adjust exchange rates
  - D. When the Central Bank uses qualitative measures to adjust exchange rates
70. Which of the following tax has 'announcement effect'?
- A. Income Tax
  - B. Property Tax
  - C. Excise Duty
  - D. Capital Gains Tax

71. Efficiency requires that the production of pure public goods be undertaken to the point where,
- A. The sum of marginal private benefits is equal to the marginal social cost of production.
  - B. The marginal private benefit is equal to the marginal social cost of production.
  - C. The marginal social cost exceeds the sum of the marginal private benefits.
  - D. None of the above
72. The equilibrium level of output and price
- A. in monopoly is greater than that in perfectly competitive market
  - B. is less in monopoly when compared to perfectly competitive market
  - C. equilibrium output is lower and price higher in monopoly when compared to perfectly competitive market
  - D. equilibrium output is higher and price lower in monopoly when compared to perfectly competitive market
73. Degree of monopoly power,  $L$ , is given by
- A.  $L = (P-MC)/P$
  - B.  $L = (MC-P)/P$
  - C.  $L = (P-MC)/MC$
  - D.  $L = (P-MC)^2/P$
74. Consider a duopoly with the following market demand function:  $P = 30 - Q$ . Each firm is having a zero marginal cost. Then, in the Cournot equilibrium, the firm outputs and the market price are:
- A. output produced 10 by each firm and  $P$  is 10
  - B. output produced 9 by each firm and  $P$  is 12
  - C. output produced 11 by each firm and  $P$  is 8
  - D. output produced 12 by both firm and  $P$  is 6
75. The demand and supply functions for a commodity are given by  $p = 120 - 5q_d$  and  $p = 24 + \frac{q_s}{3}$ , where  $p$  is price,  $q_d$  is quantity demanded and  $q_s$  is quantity supplied. Find the equilibrium quantity and price.
- A.  $q = 18$  and  $p = 5$
  - B.  $q = \frac{5}{3}$  and  $p = 30$
  - C.  $q = 18$  and  $p = 30$
  - D.  $q = 120$  and  $p = 24$

76. If the demand function for the product of a firm is  $p = \sqrt{1350 - 6q}$ , find the output level that maximizes total revenue.

- A.  $q = 1350$
- B.  $q = 150$
- C.  $q = 225$
- D.  $q = 36.74$

77. Suppose the demand functions for goods 1, 2, and 3 have the following functional forms, where  $Q$  denotes quantity demanded,  $P$  denotes price, and  $H$  denotes income:

- (i).  $Q_1 = 120 - 3.5P_1 - 6P_2 + 14H$
- (ii).  $Q_2 = 100 - 2P_2 + 3P_3 + 1.1H$
- (iii).  $Q_3 = 1500 - 0.5P_3 - 30H$

Based on these demand functions, which of the following goods are known to be normal goods?

- A. (i), (ii) and (iii).
- B. only (i)
- C. only (iii).
- D. (i) and (ii) only

78. Which of the following economists proposed the idea of *Balanced Growth* in development theory?

- A. Rosenstein Rodan
- B. Ragnar Nurkse
- C. Arthur Lewis
- D. Harvey Liebenstein

79. Amartya Sen argues in his work on *Commodities and Capabilities* that 'in judging the well-being of the person, it would be premature to limit the analysis to the characteristics of goods possessed. We have to consider .....'. Choose the correct option.

- A. 'Functionings' of Persons
- B. 'Entitlements' of Persons
- C. 'Endowments' of Persons
- D. 'Lackings' of Persons

80. According to Thomas Piketty, in the post-1970s and 80s the factor which to much greater extent determines who owns property, to what extent and who does not is:

- A. Intellectual Property Rights;
- B. Information Technology
- C. Digital Money
- D. Inheritance



81. Given the function  $W(x_1, x_2) = \log(x_1^2 - x_2^2) - \log(x_1^2 + x_2^2)$ , the value of the function,  $Y = x_1 W_1 + x_2 W_2$  (where,  $W_1$  and  $W_2$  are first order partial derivatives w.r.t.  $x_1$  and  $x_2$  respectively), is:

- A. Zero
- B. 25
- C. +1 or -1
- D. can not be determined

82. If the utility function  $U(x, y) = \sqrt{x^2 + y^2}$ , for  $x$  and  $y \geq 0$ , then the indifference curves are

- A. Convex
- B. Concave
- C. Quasi-concave
- D. Not enough information

83. For an industry with 11 firms, one with 50% market share and the other ten firms with 5% market share each, the Herfindahl index is equal to:

- A. 2,750
- B. 2,550
- C. 650
- D. 550

84. A common fishing ground is:

- A. Exclusive and Rival
- B. Nonexclusive and Nonrival
- C. Exclusive and Nonrival
- D. Rival and Nonexclusive

85. Chi-square test is used for

- A. Association between attributes
- B. Significance of correlation co-efficient
- C. Slope of regression line
- D. Equality between two means

86. Estimator is defined as

- A. Sampling mean of a distribution
- B. A specific observed value
- C. Sample statistic to estimate a population parameter
- D. None of the above

87. Bilateral Monopoly is

- A. Market with only one seller and two buyers
- B. Market with two buyers only
- C. Market with one seller and one buyer
- D. Market with two sellers only

88. An increase in real interest rate causes desired investment to fall. Why?

- A. The user cost increases which reduces desired capital stock
- B. The tax-adjusted user cost increases, which increases desired capital stock
- C. The user cost decreases which increases desired capital stock
- D. The desired capital stock increases

89. The difference between the actual unemployment rate and the natural rate of unemployment is called

- A. Structural Unemployment
- B. Seasonal Unemployment
- C. Frictional Unemployment
- D. Cyclical Unemployment

90. The type of monetary policy that is used in India, New Zealand, and the United Kingdom is:

- A. monetary targeting.
- B. inflation targeting.
- C. GDP growth targeting.
- D. interest-rate targeting.

91. Universal Basic Income Transfer, a concept much discussed in the literature, aims to rectify

- A. Exclusion of precarious labour under unemployment
- B. Exclusion of housewives, old people and differently-abled people from the market
- C. Social exclusion of minorities
- D. All of the above

92. In fiscal year 2018, the aggregate public health expenditure as percentage of GDP was:

- A. 0.78 percent
- B. 4.61 percent
- C. 1.28 percent
- D. 8.23 percent

93. Suppose the probabilities of two independent events A and B are equal to 0.2 and 0.4. Then the conditional probability,  $P(A|B)$  is:

- A. 0.2
- B. 0.5
- C. 0.08
- D. 0.02

94. Consider two samples. Sample A has the following observations: -6, -6, -1, 0, 1, 6, 6; and sample B has the following observations: 521, 524, 526, 527, 528, 530, 533. Then,

- A. Range of A is greater than range of B
- B. Variance of A is greater than variance of B
- C. Range of A is smaller than range of B
- D. Variance of A is smaller than variance of B

95. Unemployment resulting from a mismatch of workers' skills and job requirements is called

- A. frictional unemployment.
- B. structural unemployment.
- C. seasonal unemployment.
- D. cyclical unemployment.

96. If the aggregate price level at time  $t$  is denoted by  $CPI_t$ , the inflation rate from time  $t - 1$  to  $t$  is defined as:

- A.  $\pi_t = (CPI_t - CPI_{t-1}) / CPI_{t-1}$ .
- B.  $\pi_t = (CPI_{t+1} - CPI_{t-1}) / CPI_{t-1}$ .
- C.  $\pi_t = (CPI_{t+1} - CPI_t) / CPI_{t+1}$ .
- D.  $\pi_t = (CPI_t - CPI_{t-1}) / CPI_t$ .

97. What is the interest rate at which the Reserve Bank of India lends money to commercial banks?

- A. repo rate
- B. reverse repo
- C. call money rate
- D. prime rate

98. A rise in the price level causes the demand for money to \_\_\_\_\_ and the interest rate to \_\_\_\_\_, everything else held constant.

- A. decrease; decrease
- B. decrease; increase
- C. increase; decrease
- D. increase; increase

99. As per the India's union budget 2021-22, the Fiscal Deficit is estimated to be:

- A. 7.4 percent of GDP
- B. 8.5 percent of GDP
- C. 9.1 percent of GDP
- D. 9.5 percent of GDP

100. What is the disinvestment target for financial year 2021-22 for India?

- A. 1.60 LAKH CR
- B. 1.70 LAKH CR
- C. 1.75 LAKH CR
- D. 2.00 LAKH CR

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