

Entrance Examination, February 2013

M.A. (Economics)

Time: 2 Hours

Max. Marks: 100

HALL TICKET NUMBER

INSTRUCTIONS

1. **Read these instructions carefully before answering.**
2. Enter your Hall Ticket Number on this page and also on the OMR answer sheet.
3. Answers are to be marked on the OMR answer sheet following the instructions provided there upon.
4. Hand over the OMR answer sheet at the end of the examination to the Invigilator.
5. Use of non-programmable calculators is allowed.
6. The Question Paper has **two parts** – PART-A and PART-B. There are 100 questions in this paper: 25 questions in PART-A and 75 questions in PART-B. Marks obtained in PART-A will determine the merit rank in case of a tie in the total number of marks obtained.
7. Each correct answer carries one mark.
8. **There is negative marking. Each wrong answer carries -0.33 marks.**
9. This question paper contains 16 pages excluding the cover page. In addition, **two blank pages (pages 17 and 18) for rough work are provided at the end of the question paper marked "ROUGH WORK"**

M A Entrance Examination, February 2013**School of Economics**

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Part A (Answer all 25 Questions)

1. Rosy likes Banana but is neutral about Papaya, so the indifference curves in this case are:
 - A. L-shaped
 - B. straight lines with a negative slope
 - C. straight lines with a positive slope
 - D. vertical lines
2. A firm is using two inputs, labour and capital. What will happen if the price of labour 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 labour
 - D. All of the above
3. A payment that is made and cannot be recovered is known as:
 - A. variable Cost
 - B. quasi-fixed costs
 - C. sunk Cost
 - D. opportunity Cost
4. Student discounts are the best example of:
 - A. first-degree price discrimination
 - B. second-degree price discrimination
 - C. third-degree price discrimination
 - D. None of the Above
5. A Pigouvian Tax:
 - A. moves production to the socially optimal level of output
 - B. is the same thing as the Pigouvian subsidy
 - C. is measured in terms of Pigouvian rupees
 - D. cannot exist with externalities

6. Which of the following is the best example of a free-rider problem?
- A. Mine owners are unable to observe if their workers follow safety guidelines.
 - B. Bee-keepers and orchard growers establish negotiation.
 - C. Property rights to a smoke free workplace are given to non smokers in general instead of a specific group of non-smokers.
 - D. Only about 10% viewers of public television contribute money to pay for its costs.
7. A price floor refers to the:
- A. minimum price fixed by the government
 - B. price which is below the equilibrium
 - C. price below which producers are unable to supply
 - D. price which is agreed by all the consumers
8. An economy can produce either Good X or Good Y. The opportunity cost of producing an extra unit Good X is the:
- A. value of capital and labour used to produce Good X
 - B. no. of units of Good Y that must be given up to produce an extra unit of Good X
 - C. cost of producing Good X less the cost of producing Good Y
 - D. amount of Good X that would have been produced in the following year.
9. Which one of the following will cause the demand curve for a good to shift to the right?
- A. A rise in the price of the substitute
 - B. A fall in the price of the good
 - C. A fall in the cost of producing the good
 - D. A rise in the price of a complementary good
10. If, at all positive quantities, the upward sloping supply curve lies above the downward sloping demand curve, then the
- A. quantity traded will be zero
 - B. quantity traded will be infinite
 - C. market mechanism has failed and the quantity traded must be determined by a central agency
 - D. All the above
11. Good X and Good Y are complements. Good Y and Good Z are substitutes. Therefore,
- A. Good X must be a complement for Good Z
 - B. Good X must be a substitute for Good Z
 - C. if the price of Good Y increases, the demand for Good Z will rise
 - D. if the price of Good X increases, the demand for Good Y will rise

12. If the income elasticity of demand for Good X is 1.5, a 4% increase in consumer income will increase the quantity demanded of Good X by
- A. 2.50%
 - B. 2.67%
 - C. 5.50%
 - D. 6.00%
13. The short-run marginal cost curve will eventually slope upwards because of the law of:
- A. diminishing marginal utility
 - B. diminishing marginal returns
 - C. increasing marginal utility
 - D. increasing marginal returns
14. Imperfect competition is the collective name for:
- A. perfect competition and monopolistic competition
 - B. perfect competition and monopoly
 - C. oligopoly and monopoly
 - D. oligopoly and monopolistic competition
15. The kinked demand curve theory of oligopoly implies that the oligopolist:
- A. will seek to make only satisfactory rather than maximum profits
 - B. has a discontinuity in his marginal revenue curve
 - C. has a discontinuity in his marginal cost curve
 - D. has a discontinuity in his average revenue curve
16. A market in which firms produce differentiated products and enjoy normal profits could be described as:
- A. a monopoly
 - B. an oligopoly
 - C. monopolistically competitive
 - D. perfectly competitive.
17. If the marginal social benefit exceeds the marginal social cost, then:
- A. an increase in output will increase welfare
 - B. a decrease in output will increase welfare
 - C. welfare cannot be increased
 - D. it is difficult to say what will happen to welfare without further information.
18. The potential aim of supply side policy is:
- A. to reduce unemployment and to reduce inflation
 - B. to reduce unemployment and to reduce output
 - C. to reduce unemployment only
 - D. to reduce inflation only

19. Which of the following is not a feature of monopolistic competition?
- A. Non-price competition
 - B. Dependent actions
 - C. Selling costs
 - D. New firms can enter in the industry in the long run
20. A distinguishing characteristic of the long run period is that:
- A. all costs are fixed costs
 - B. all costs are variable costs
 - C. fixed costs tend to be greater than variable costs.
 - D. fixed cost tend to be less than variable costs
21. A transfer payment is defined as a:
- A. payment made by the governments
 - B. payment made to prevent a factor of production moving to another industry
 - C. payment that redistributes wealth from the rich to the poor
 - D. payment made without any service or good being provided in return
22. A merit good:
- A. is provided free of charge by the governments
 - B. provides benefits that are not fully appreciated by the prospective user
 - C. has strong negative externalities
 - D. cannot be supplied by the market
23. The author of 'Principles of Political Economy and Taxation' is:
- A. David Ricardo
 - B. Karl Marx
 - C. Adam Smith
 - D. John Maynard Keynes
24. Heckscher-Ohlin theory of trade states that trade between nations emerges because of differences in:
- A. labour productivity
 - B. factor endowments
 - C. production functions
 - D. None of the above
25. Foodgrains production in India in 2011-12 was about:
- A. 250 mt
 - B. 230 mt
 - C. 200 mt
 - D. 290 mt

Part B (Answer all 75 Questions)

26. Which of the following is called paper-gold?
- A. Dollar
 - B. Pound Sterling
 - C. SDRs
 - D. None of the above
27. Current account of balance of payments comprises of:
- A. visible trade
 - B. invisible trade
 - C. visible and invisible trade
 - D. None of the above
28. In gold-exchange standard, foreign exchange reserves comprise of:
- A. gold
 - B. convertible currencies
 - C. gold + convertible currencies
 - D. None of the above
29. Reciprocal demand schedule indicates:
- A. quantities demanded at different prices
 - B. various quantities of exports offered for various imports at different terms of trade
 - C. quantities supplied at different prices
 - D. None of the above
30. Paul Krugman trade theory emphasizes on:
- A. economies of scale
 - B. technology
 - C. factor productivity
 - D. human capital
31. Leontief Paradox refers to empirical verification of:
- A. H-O theorem
 - B. Theory of unequal exchange
 - C. Classical theory of trade
 - D. Opportunity cost theory of trade
32. Commodity term of trade is defined as the ratio of:
- A. price index of exports to price index of imports
 - B. price index of imports to price index of exports
 - C. volume index of exports to volume index of imports
 - D. None of the above

33. Prohibitive tariff refers to a situation wherein there are:
- A. no imports
 - B. more imports
 - C. less imports
 - D. None of the above.
34. When a country has a comparative advantage in the production of a good, it means that the country:
- A. can produce the good in fewer man hours than other countries
 - B. has the lower opportunity cost in the production of the good than other countries
 - C. can produce a better quality good than other countries
 - D. uses better technology to produce the good than other countries
35. Which of the following is **not** a reason to restrict international trade?
- A. To protect infant industries
 - B. To reduce reliance on goods with little dynamic potential
 - C. To prevent dumping of goods at artificially low prices
 - D. To increase the speed at which outdated industries decline
36. A devaluation would be most effective in curing the BoP deficit when price elasticity of demand for:
- A. exports is high and imports low
 - B. exports is high and imports high
 - C. exports is low and imports low
 - D. exports is low and imports high
37. 'Octroi' is levied and controlled by:
- A. Centre
 - B. State governments
 - C. local bodies
 - D. market yards
38. To obtain a measure of net national income from gross national income, it is necessary to:
- A. deduct any transfer payments made by the government to households
 - B. deduct the value of capital used up in the production of current output
 - C. deduct any indirect taxes paid by firms
 - D. add net incomes from abroad
39. Equilibrium in the Keynesian model occurs when:
- A. planned injections = planned withdrawals
 - B. aggregate demand = GDP
 - C. $C_d + I = Y$
 - D. All the above

40. One way of reducing the equilibrium (natural) rate of unemployment would be to:
- A. increase taxes
 - B. increase information on job availability
 - C. reduce government expenditure
 - D. reduce interest rates
41. A rise in unemployment caused by a fall in the demand for products of some industries is known as:
- A. frictional unemployment
 - B. structural unemployment
 - C. technological unemployment
 - D. demand deficient unemployment
42. The aggregate supply schedule tells us that an increase in the average price level will encourage firms to:
- A. increase output and employment
 - B. reduce output and employment
 - C. increase output and reduce unemployment
 - D. reduce output and increase employment
43. If the capital-output ratio is 4 and the proportion of national income that is invested is 10%, the country's growth rate is:
- A. 2.5%
 - B. 4.0%
 - C. 25%
 - D. 40%
44. The opportunity cost of holding money is the:
- A. real rate of interest
 - B. inflation rate
 - C. expected inflation rate
 - D. nominal interest rate
45. In the quantity theory of money, which of the following is assumed?
- A. Falling velocity of circulation of money, and constant real output
 - B. Rising real output, and constant velocity of circulation of money
 - C. Constant real output, and constant velocity of circulation of money
 - D. Falling real output, and rising velocity of circulation of money

46. When national income is at less than full employment national income, by how much must aggregate demand be increased to achieve full employment?
- A. The amount by which the equilibrium level of national income falls short of the full employment level
 - B. The amount by which injections exceed withdrawals at the full employment level of output
 - C. The amount by which national income exceeds aggregate demand at full employment level of national income
 - D. The size of BoP deficits at its full employment level of national income
47. The Phillips curve shows:
- A. the influence of fiscal policy on the level of inflation and unemployment
 - B. the influence of monetary policy on the level of inflation and unemployment
 - C. a positive relationship between rate of inflation and rate of unemployment
 - D. an inverse relation between inflation and rate of unemployment
48. The acceleration principle implies that:
- A. investment is increased when interest rates fall
 - B. an increase in consumer demand leads to a more than proportionate increase in the level of investment
 - C. an increase in investment will lead to a more than proportionate increase in output
 - D. the rate of change of investment affects the rate of change of output
49. Which of the following is **not** a 'crowding out' effect resulting from a fiscal expansion?
- A. A fall in investment due to the associated rise in the interest rate
 - B. A fall in consumer demand due to fear of higher future taxes
 - C. Reduced import expenditure due to increased demand for domestically produced goods
 - D. A fall in demand for exports due to an exchange rate appreciation caused by the associated rise in the interest rate
50. The purchase of short term bills from the general public by the central bank will:
- A. decrease bank reserves
 - B. increase the interest rate
 - C. decrease the supply of money
 - D. increase the the supply of money
51. In which year for the first time population census was conducted in India?
- A. 1881
 - B. 1891
 - C. 1901
 - D. 1911

52. Who determines the minimum support price for agricultural products in India?
- A. Association of Indian Farmers
 - B. Government of India
 - C. Planning Commission
 - D. Agricultural Costs and Prices Commission
53. The Chairman of the 14th Finance Commission is:
- A. Dr A M Khusro
 - B. Dr C Rangarajan
 - C. Dr Vijay Kelkar
 - D. Dr Y V Reddy
54. RBI is formed on the recommendation of:
- A. Hilton-Young Commission
 - B. Royal Commission on Indian Banks
 - C. Keynes Commission
 - D. None of the above
55. Who holds 15% of share capital of Regional Rural Banks in India?
- A. Sponsored Banks
 - B. NABARD
 - C. State governments
 - D. Government of India
56. Banks borrow funds from the RBI and pay:
- A. Base rate
 - B. Repo rate
 - C. Bank rate
 - D. Reverse repo rate
57. "Yellow revolution" in India relates to:
- A. pharmaceuticals
 - B. milk
 - C. oil seeds
 - D. None of the above
58. The book "The Price of Inequality" is authored by:
- A. Joseph E Stiglitz
 - B. Jim Yong Kim
 - C. Amartya Sen
 - D. Suresh Tendulkar

59. The wages of a worker were increased by 20% and then reduced by 15%. What was the net change in his wage?
- A. 5% increase
 - B. 2% increase
 - C. 5% decrease
 - D. 2% decrease
60. Which of the following is known as plastic money?
- A. Demand Draft
 - B. Credit card
 - C. Debit card
 - D. B. and C. above
61. Banks in India are required to maintain a portion of their demand and time liabilities with the RBI. This portion is called:
- A. Cash reserve ratio
 - B. Statutory liquidity ratio
 - C. Cash deposit ratio
 - D. Deposit currency ratio
62. Which of the following does **not** come under the 'core' sector?
- A. Crude oil
 - B. Automobiles
 - C. Coal and electricity
 - D. Natural Gas
63. Which of the following is implemented in all the districts of India for providing employment?
- A. Swarna Jayanti Gram Swarozgar Yojana
 - B. Pradhan Mantri Gram Sadak Yojana
 - C. Mahatma Gandhi National Rural Employment Guarantee Act
 - D. Bharat Nirman Programme
64. Which paper currency note in India has the greatest circulation?
- A. Rs 100
 - B. Rs 50
 - C. Rs 10
 - D. Rs 20
65. A bill of exchange drawn in a local language as per the custom of the place is called:
- A. Hundi
 - B. Clot
 - C. Trade credit
 - D. Parole

66. Disinvestment means:
- A. private shareholders purchasing shares in PSUs
 - B. Government permitting the private sector to invest in PSUs
 - C. allowing the foreign banks to buy all the shares in PSUs
 - D. Government withdrawing its share in PSUs
67. Which of the following countries is not a member of the European Union?
- A. Austria
 - B. France
 - C. Belgium
 - D. Switzerland
68. The aim of the Twelfth Five Year Plan (2012-17) is:
- A. development of industries and agriculture
 - B. poverty alleviation
 - C. integrated and sustainable growth of rural areas
 - D. faster, sustainable and more inclusive growth
69. The 'Aam Admi Bhima Yojana' (2008) is administered by:
- A. LIC
 - B. Government of India
 - C. State governments
 - D. State Bank of India
70. Which of the following is **not** a direct tax?
- A. Income Tax
 - B. Corporate Tax
 - C. Sales Tax
 - D. Wealth Tax
71. If interest payment is deducted from the fiscal deficit, then the balance is called:
- A. Primary deficit
 - B. Budgetary deficit
 - C. Revenue deficit
 - D. Monetary deficit
72. Which of the following is the largest significant factor of revenue expenditure of Central Government ?
- A. Defence Expenditure
 - B. Subsidy
 - C. Interest Payments
 - D. Salary

73. In its latest move, CSO has shifted the base year for national income estimates:
- A. from 1990-91 to 1999-2000
 - B. from 1993-94 to 2004-2005
 - C. from 2000-01 to 2004-05
 - D. from 1999-2000 to 2004-05
74. Government has issued an ordinance announcing ULIPs as 'Insurance Product'. The regulations of ULIPs will now be done by:
- A. SEBI only
 - B. IRDA only
 - C. Both SEBI and IRDA
 - D. Government itself
75. Goods and Services Tax (GST) levied at the States' level aims at:
- A. eliminating cascading effect of some taxes
 - B. rationalize the cost structure and to reduce transactions and payment costs
 - C. reduce the effective tax rates on most goods
 - D. All the above
76. According to the Budget estimates for the year 2012-13, which of the following sectors receives the the maximum subsidy from the central government?
- A. Food
 - B. Fertilizer
 - C. Petroleum
 - D. Interest
77. The 'Ratchet Effect' is the situation where households find it:
- A. difficult to adjust to rising incomes than falling incomes
 - B. easier to adjust to rising incomes than falling incomes
 - C. difficult to save due to low incomes.
 - D. None of the above
78. In the standard IS-LM model which of the following is true, if the government raises tax rate and the central bank decides to hold money supply constant?
- A. IS curve shifts to the right
 - B. LM curve shifts to the left
 - C. interest rate falls
 - D. None of the above
79. A sum of money will become Rs 4600 in 5 years and Rs 4960 in 8 years at a certain rate of simple interest. The rate of interest is:
- A. 3%
 - B. 5%
 - C. 8%
 - D. 4%

80. Given observations x, y, z and positive real numbers which are not identical, then the following is true for the corresponding GM (geometric mean) and AM (Arithmetic mean):
- A. GM is greater than or equal to AM
 - B. GM is greater than AM
 - C. GM is less than AM
 - D. GM is equal to AM
81. A pair of dice is thrown. Assuming that all the sides of the dice have equal chance of showing up, what is the probability that the sum of numbers is 9?
- A. $9/12$
 - B. $9/36$
 - C. $1/12$
 - D. $1/9$
82. Draw a card randomly (with replacement) n times from a deck of cards well shuffled before each draw. Let X = number of times an Ace is drawn. Then X follows the following distribution:
- A. Uniform
 - B. Binomial
 - C. Bernouli
 - D. Poisson
83. Number of students who opted for econometrics course or game theory course is equal to 45. It is found that 25 students have taken both the courses and 30 students are doing game theory. How many students are doing econometrics?
- A. 45
 - B. 40
 - C. 35
 - D. 30
84. 4 first year and 3 second year students are to be seated in a row for their respective examinations in a manner that no two students from the same class are together (on adjacent seats). How many distinct seating arrangements are possible?
- A. 5040
 - B. 2520
 - C. 144
 - D. 72
85. Let x, y, z be such that $z = 2x + 5$ and correlation between x and y is 0.36. Further, the mean of x is 25 and the standard deviation of x is 15. Then correlation between y and z is:
- A. 0.18
 - B. 0.36
 - C. 0.72
 - D. 0.80

86. There are two batteries in a UPS and both must be working for the battery to function. Probability that a battery will fail on a given day is 0.1 and the battery failures are independent events. What is the probability that the UPS will work without failure on a given day?
- A. 0.99
 - B. 0.9
 - C. 0.8
 - D. 0.81
87. Which of the following distributions is appropriate for modelling the frequency of rare events in a large number of trials?
- A. Normal
 - B. Uniform
 - C. Binomial
 - D. Poisson
88. If a matrix P has m rows and n columns, then the rank of the matrix is generally defined as:
- A. Rank (P) < m
 - B. Rank (P) < n
 - C. Rank (P) \leq minimum of {m, n}
 - D. Rank (P) = m^2
89. Given the function $f(x) = x^3 - 22x^2 + 55x + 9$, the value of the first derivative of the function at $x = 0$ is equal to:
- A. 22
 - B. zero
 - C. 55
 - D. 9
90. At what level of output q, the average cost (AC) will be minimum when the AC function is given by $AC = q^2 - 5q + 8$? (Hint: Apply mathematical method of minimization)
- A. 8 units
 - B. 2.50 units
 - C. $2q - 5$ units
 - D. None of the above
91. Given the function $f(x_1, x_2) = x_1^3 - 6x_1x_2 - x_2^2$, the second order own partial derivative (f_{22}) is equal to:
- A. +2
 - B. -2
 - C. $6x_1$
 - D. $6x_1 - 2x_2$

92. Given the function $y = 9x^8$, integration of y with respect to x is:
- A. $x^9 + \text{constant}$
 - B. $x^8 + \text{constant}$
 - C. $8x + \text{constant}$
 - D. $72x$
93. If $MC = 2 - 0.4q + 3q^2$ is the marginal cost (MC) function of a firm where q is the level of output, the total variable cost (TVC) at $q = 10$ units will be (Hint: Apply integration method):
- A. 1000 units
 - B. zero
 - C. 100
 - D. Difficult to calculate from the given data
94. The inverse demand function is given as $P = 35 - 2x - x^2$ where x is the amount of commodity demanded. Calculate consumer's surplus amount at $x = 3$ units. (Hint: Apply integration method)
- A. 60
 - B. 9
 - C. 35
 - D. 27
95. Total revenue (TR) and total cost (TC) functions of a simple monopolist are assumed to be $TR = 100q - 3q^2$ and $TC = 4q^2 + 10q$ respectively. At what level of output q , the total profit of the monopolist will be maximum? (Hint: Apply mathematical method of maximization)
- A. 6.4
 - B. 289
 - C. 14
 - D. 100
96. If the total utility function $U(x_1, x_2) = x_1 x_2$ is maximized subject to the budget constraint $x_1 + x_2 = 6$, the total utility will be maximum when $x_1 = ?$ and $x_2 = ?$ units are consumed (Hint: Apply mathematical method of maximization)
- A. $x_1 = x_2 = 3$ units
 - B. $x_1 = 3$ and $x_2 = 9$ units
 - C. $x_1 = 6$ and $x_2 = 9$ units
 - D. $x_1 = x_2 = 9$ units
97. Which one is the correct solution for x in the quadratic equation $2x^2 + 8x = 10$?
- A. 1 and 5
 - B. 5 and 3
 - C. 2 and 7
 - D. 1 and -5

98. If the inverse of a matrix N is M , then,
- A. the matrix N is a square matrix
 - B. the matrix N is a non-singular matrix
 - C. $NM = MN = I$ where I is the identity matrix
 - D. All of the above
99. Interchanging of rows and columns of a given determinant Q
- A. will change the value of the determinant Q
 - B. will not change the value of the determinant Q
 - C. will change the sign, value of the determinant Q remaining the same
 - D. will change both the sign and value of the determinant Q
100. If M is a matrix such that $M = PQ'R + RP'$ where P , Q and R are conformable matrices, then the transpose of M is equal to
- A. $P'QR + RP$
 - B. $RQP + PR$
 - C. $QRP' + RP'$
 - D. None of the above
