

PAPER CODE	<b>1</b>
SERIES CODE	<b>A</b>

Registration No. : \_\_\_\_\_

Centre of Exam. : \_\_\_\_\_

Name of Candidate : \_\_\_\_\_



**S A U**

**Entrance Test for MA (Development Economics)**

**[ May 21, 2011 ]**

Time : 3 hours

Maximum Marks : 100

**INSTRUCTIONS FOR CANDIDATES**

*Candidates must read carefully the following instructions before attempting the Question Paper :*

- (i) Write your Name and Registration Number in the space provided for the purpose on the top of this Question Paper and in the Answer Sheet.
- (ii) This Question Paper has Two Parts.
- (iii) Part—A has 20 questions of **1** mark each.
- (iv) Part—B has 40 questions of **2** marks each.
- (v) All questions are compulsory for both the Parts.
- (vi) **Please darken the appropriate Circle of Question Paper Series Code on the Answer Sheet in the space provided.**
- (vii) Answer written by the candidates inside the Question Paper will not be evaluated.
- (viii) Calculators and Log Tables may be used.
- (ix) Pages at the end have been provided for Rough Work.
- (x) Return the Question Paper and the Answer Sheet to the invigilator at the end of the Entrance Examination.
- (xi) **DO NOT FOLD THE ANSWER SHEET.**

## INSTRUCTIONS FOR MARKING ANSWERS IN THE OMR SHEET

1. Use only Blue/Black Ballpoint Pen (do not use Pencil) to darken the Circle.
2. Please darken the whole Circle.
3. Darken ONLY ONE CIRCLE for each question as shown below in the example :

Wrong ● (b) (c) ●	Wrong ⊗ (b) (c) (d)	Wrong ⊗ (b) (c) ⊗	Wrong ● (b) (c) ●	Correct (a) (b) (c) ●
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4. Once marked, no change in the answer is allowed.
5. Please do not make any stray marks on the Answer Sheet.
6. Please do not do any rough work on the Answer Sheet.
7. Mark your answer only in the appropriate space against the number corresponding to the question.
8. **Ensure that you have darkened the appropriate Circle of Question Paper Series Code on the Answer Sheet in the space provided.**

**PART—A**

1. Which of the following is a necessary condition for profit maximization?
  - (a) Price should equal marginal cost
  - (b) Price should exceed marginal cost
  - (c) Marginal revenue should equal marginal cost
  - (d) Marginal cost cuts firm's demand curve from below
  
2. If the price of oranges increases by 10 percent and its income elasticity is  $-0.1$ , the quantity demanded of orange would
  - (a) increase
  - (b) decrease
  - (c) remain the same
  - (d) Cannot say
  
3. A good is called a Giffen good when
  - (a) the income effect dominates the substitution effect
  - (b) the substitution effect dominates the income effect
  - (c) both the income and substitution effects are positive
  - (d) income effect is negative but substitution effect is positive
  
4. In a world of fixed exchange rate and restricted capital flows vis-à-vis the rest of the world,
  - (a) monetary policy is ineffective but fiscal policy is effective
  - (b) fiscal policy is ineffective but monetary policy is effective
  - (c) Neither is effective
  - (d) Both are effective
  
5. The point of maxima for a cubic function  $y = x^3$  is
  - (a) at  $x = 0$
  - (b) nonexistent
  - (c) at  $x = \infty$
  - (d) at  $x = -\infty$



6. The fourth derivative of the function  $f(x) = 4x^4 - x^3 + 17x^2 + 3x - 1$  at  $x = 1$  is equal to
- 90
  - 90
  - 96
  - 6
7. In a closed economy, where the central bank fixes the interest rate, an increase in government expenditure on social sectors would lead to
- an increase in the GDP with partial crowding out
  - no increase in the GDP
  - an increase in the interest rates
  - an increase in the GDP with no crowding out
8. Consider a set  $A = x$  such that  $1 < x < 2$ . What is the maximum number that belongs to set  $A$ ?
- 2
  - 1.995
  - There is no maximum number in set  $A$
  - 1.9999
9. The United Nations' headquarters is located in
- Geneva
  - London
  - Washington DC
  - New York
10. Arthur Lewis is best known as a/an
- monetary economist
  - health economist
  - development economist
  - economic historian

11. Disguised unemployment refers to the situation, when
- (a) people seem occupied on a full-time basis even though the services they render require less than full time
  - (b) workers are underpaid despite doing full-time job
  - (c) there is a coexistence of unemployment and inflation
  - (d) the economy experiences underemployment equilibrium
12. Which one of the following is explained by Fei-Ranis model?
- (a) The interrelationship between the agricultural and the industrial sectors
  - (b) Planning methods when labour is in short supply
  - (c) Growth process of the industrial sector
  - (d) A neoclassical framework of growth analysis
13. Which average is most affected by the extreme observations?
- (a) Arithmetic mean
  - (b) Geometric mean
  - (c) Median
  - (d) Mode
14. Probability of a sure event is
- (a) equal to 1
  - (b) equal to 0
  - (c) between 0 and 1
  - (d) greater than 1
15. Theory of linkages is most appropriate for which kind of development models?
- (a) Balanced growth models
  - (b) Unbalanced growth models
  - (c) Population growth models
  - (d) One-sector growth models

16. Time series data show information about
- (a) the same point in time over different places
  - (b) different points in time over the same variable
  - (c) different variables over different places
  - (d) different points in time over different places
17. Economic growth can be shown by
- (a) an inward shift of the production possibility frontier
  - (b) a movement down the production possibility frontier
  - (c) an outward shift of the production possibility frontier
  - (d) a movement up the production possibility frontier
18. South Asian countries that rely heavily on tourism for their economic growth include
- (a) Maldives and Sri Lanka
  - (b) Nepal, Maldives and Bhutan
  - (c) Nepal and Maldives
  - (d) Nepal and India
19. Market failure occurs when
- (a) allocative inefficiency exists
  - (b) monopoly firms produce where price is equal to marginal cost
  - (c) firms are only able to earn zero economic profit
  - (d) small business closes down
20. Firms in perfect competition face a
- (a) perfectly elastic demand curve
  - (b) perfectly inelastic demand curve
  - (c) perfectly elastic supply curve
  - (d) perfectly inelastic supply curve



**PART—B**

21. In the kinked demand curve model, suppose MC curve shifts upward in the discontinuous range of MR curve. Which one of the following is correct?
- (a) At equilibrium, price rises but quantity remains the same
  - (b) At equilibrium, price and quantity both remain the same
  - (c) At equilibrium, quantity rises but price remains the same
  - (d) At equilibrium, price and quantity both rise

22. Suppose there is a diagonal matrix. Which of the following conditions would qualify as sufficient condition for it to be idempotent?
- A. The value of each diagonal element is the same.
  - B. The value of each diagonal element is 0.
  - C. The value of each diagonal element is 1.
  - D. The value of each diagonal element is -1.

- (a) A, B and C
- (b) B only
- (c) B, C and D
- (d) B and C

23. Look at the following series :

72, 76, 73, 77, 74, ..., 75

What number should fill the blank?

- (a) 70
- (b) 71
- (c) 75
- (d) 78

24. Fact 1 : Pictures can tell a story.

Fact 2 : All storybooks have pictures.

Fact 3 : Some storybooks have words.

If the three statements above are facts, which of the following statements must also be a fact?

- A. Pictures can tell a story better than words can.
- B. The stories in storybooks are very simple.
- C. Some storybooks have both words and pictures.

- (a) A only
- (b) B only
- (c) C only
- (d) None of the statements is a known fact

25. (i) Three pencils cost the same as two erasers.  
 (ii) Four erasers cost the same as one ruler.  
 If the two statements above are true, then
- pencils are more expensive than rulers
  - pencils are less expensive than rulers
  - pencil and ruler cost the same
  - Not enough information to say either of above
26. If in a code language SINGER is written as AIBCED, then GINGER will be written in the same code as
- CBIECD
  - CIBCED
  - CBICED
  - CIBECD
27. Big-mac index is based on
- official exchange rate
  - real effective exchange rate
  - nominal effective exchange rate
  - purchasing power parity exchange rate

28. Match List-I (Concept) with List-II (Economist) and select the correct answer using the codes given below the Lists :

<i>List-I</i> (Concept)	<i>List-II</i> (Economist)
A. Liquidity trap	1. M. Friedman
B. Demonstration effect	2. A. C. Pigou
C. Permanent income hypothesis	3. J. Duesenberry
D. Wealth effect	4. J. M. Keynes

Codes :

- |   |   |   |   |
|---|---|---|---|
| A | B | C | D |
| 4 | 3 | 1 | 2 |
- |   |   |   |   |
|---|---|---|---|
| A | B | C | D |
| 1 | 2 | 4 | 3 |
- |   |   |   |   |
|---|---|---|---|
| A | B | C | D |
| 4 | 2 | 1 | 3 |
- |   |   |   |   |
|---|---|---|---|
| A | B | C | D |
| 1 | 3 | 4 | 2 |



29. Given, percentage change in nominal GNP = 1.8, percentage change in population = 0.5, percentage change in price level = 1.3. What is the approximate percentage change in real per capita GNP?
- Zero
  - 0.5
  - 1.0
  - 1.3
30. The average age of a class is 15 years. When a new student aged 16 years comes into the class, the average increases to 15.5 years. The number of students in the original class was
- 5
  - 1
  - 6
  - 10
31. The kurtosis of a normal distribution is
- 1
  - infinity
  - 0
  - +1
32. For what kind of preferences will a consumer be equally well-off facing either a quantity tax or an income tax?
- $U = x + y$
  - $U = \min[x, y]$
  - $U = x^{1/2}y^{1/2}$
  - None of the above
33. In the economy of Myanmar, the value of high-powered money is 200 units and the money multiplier is 5. If the demand for money is given by  $M = 1200 - 50i$ , what would be the equilibrium rate of interest?
- 2.5
  - 4
  - 4.5
  - 6

34. If the production possibility frontier (PPF) for Myanmar is  $x + y = 100$  and for Nepal  $2x + 2y = 200$ , which of the following would be true? [ $x$  and  $y$  are two goods; 100 and 200 are their labour reserves]
- Myanmar has comparative advantage in  $x$  and Nepal in  $y$
  - Myanmar has comparative advantage in both
  - Myanmar has absolute advantage in both
  - None of the above
35. Suppose Afghanistan is a labour ( $L$ )-abundant country and Maldives is a capital ( $K$ )-abundant country. If the production functions of two commodities  $A$  and  $B$  are given by  $A = \min[L, K^2]$  and  $B = \min[L, K]$ , which of the following would be true [assume  $K > 1$ ]?]
- Afghanistan would export  $A$  and import  $B$
  - Maldives would export  $A$  and import  $B$
  - Afghanistan would export both  $A$  and  $B$
  - Commodity  $B$  would not be produced
36. If you integrate the function  $\int_0^1 e^x$ , you get
- $e - 1$
  - $e$
  - 1
  - 0
37. If a consumer has a utility function  $U = xy^4$ , what fraction of her income will she spend on  $y$ ?
- 1/4
  - 3/4
  - 4/5
  - 5/4
38. A firm has a cost function given by  $c(y) = 10y^2 + 1000$ . At what level of output is the average cost minimized?
- 0
  - 15
  - 10
  - Cannot say

39. When prices are  $(p_1, p_2) = (1, 2)$ , a consumer demands  $(x_1, x_2) = (1, 2)$  and when prices are  $(q_1, q_2) = (2, 1)$  she demands  $(y_1, y_2) = (2, 1)$ . Her behaviour shows that
- it is consistent with the model of maximization
  - it is inconsistent with the model of maximization
  - Cannot say
  - She is indifferent between the two bundles
40. A monopolist faces a demand curve given by  $Q = 20/p$ . The marginal revenue curve is given by
- $MR(p) = -10/p^2$
  - $MR(Q) = -10/Q^2$
  - $Q = 0$
  - $p = 0$
41. In a closed economy, if private savings exceed investment by 200, the government is running
- a budget deficit of 200
  - a budget surplus of 200
  - a balanced budget
  - None of the above
42. In a particular year, if the GDP at factor cost is Rs 10,000 crores, net factor income from abroad is Rs 500 crores, current account deficit is Rs 500 crores, then GNP at factor cost is equal to
- Rs 11,000 crores
  - Rs 10,000 crores
  - Rs 10,500 crores
  - Cannot say as there is insufficient data
43. What would be the next number in the following series?
- 25, 18, 50, 43, 75, ...
- 63
  - 73
  - 85
  - 68



44. Pick the odd word from the following
- (a) Basil
  - (b) Oregano
  - (c) Rosemary
  - (d) Beetroot
45. Compared to country A, petrol is cheaper in country B by 20 percent while diesel is dearer by 30 percent.
- Which of the following statements can be logically derived from the above?
- (a) Based on a cost criterion, everybody will use diesel vehicles in country A
  - (b) Based on a cost criterion, everybody will use petrol vehicles in country B
  - (c) Both (a) and (b)
  - (d) Neither (a) nor (b)
46. If the covariance of two variables is equal to the product of the standard deviations of the variables, then the correlation coefficient will be
- (a) -1
  - (b) +1
  - (c) 0
  - (d) between 0 and -1
47. Given,  $f(x) = k_2 x e^{-x}$ , for  $0 < x < \infty$ , is the probability density function of a random variable X. Then the value of constant  $k_2$  should be
- (a) 1/2
  - (b) 1
  - (c) 0
  - (d) -1/2
48. Which of the following is not true?
- (a) The mean of a binomial variable is 100 and its variance is 6
  - (b) The mean of a binomial variable is 100 and its standard deviation is 6
  - (c) The mean of a binomial variable is 10 and its variance is 6
  - (d) The mean of a binomial variable is 10 and its standard deviation is 6

49. Which of the following statements are true?

- A. The sum of squared deviations is the least when taken from the mean.
- B. The mean absolute deviation is the least when taken from the mean.
- C. The sum of squared deviations is the least when taken from the median.
- D. The mean absolute deviation is the least when taken from the median.

- (a) A and B above
- (b) B and C above
- (c) A and D above
- (d) B and D above

50. Fill in the blank :

The two-sigma rule states that usually the number of observations with a difference of more than twice the standard deviation from the mean is less than — of the total number of observations.

- (a) 2 percent
- (b) 5 percent
- (c) 95 percent
- (d) 1 percent

51. In the theory of kinked demand curve, the lower segment of the demand curve is

- (a) perfectly inelastic
- (b) perfectly elastic
- (c) highly elastic
- (d) less elastic

52. Given,  $A = \begin{bmatrix} 1 & -3 \\ -2 & 7 \end{bmatrix}$ . Then

(a)  $A^{-1} = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$

(b)  $A^{-1} = \begin{bmatrix} 1 & 3 \\ 2 & 7 \end{bmatrix}$

~~(c)  $A^{-1} = \begin{bmatrix} 7 & 3 \\ 2 & 1 \end{bmatrix}$~~

(d)  $A^{-1} = \begin{bmatrix} 7 & -2 \\ -3 & 1 \end{bmatrix}$

53. Consider Sri Lanka as a closed economy described as follows in terms of standard notations :

$$C = 250 + 0.75(Y - T)$$

$$G = 1000$$

$$T = 1000$$

$$I = 1000 - 50i$$

$$M^d = 0.25Y - 50i$$

$$M/P = 500$$

What would be the equilibrium level of income and interest rate?

(a)  $Y = 7000, i = 5$

(b)  $Y = 1500, i = 5$

~~(c)  $Y = 2000, i = 5$~~

(d)  $Y = 4000, i = 10$

For Question Nos. 54 and 55, consider the following :

In a two-good economy where  $y$  acts as a numeraire

$$U(x, y) = x + 2y$$

$$px + y = 100$$

54. If  $p = 2$ , what is the optimum consumption bundle?

(a)  $(33\frac{1}{3}, 33\frac{1}{3})$

~~(b)  $(0, 100)$~~

(c)  $(50, 0)$

(d) Indeterminate



55. If a sales tax of 100% is levied on good  $y$ , the optimum bundle would be

- (a) (50, 25)
- (b) (0, 100)
- (c) (25, 50)
- (d) (0, 50)

For Question Nos. 56–58, consider the following :

The core of the trade problem for the bulk of the developing countries is that they cannot expand their exports rapidly enough to pay for their essential imports. These imports are themselves often the key to greater export capability and higher foreign exchange earnings, and thus the dilemma of trade imbalances in these countries tends to become self-perpetuating. The problem is compounded by the delay of the wealthy nations in dismantling discriminatory trade barriers against the poor countries. Our studies indicate, for example, that if the affluent nations were gradually to reduce their present protectionist trade restrictions against agricultural imports from the developing world, the poorer nations could, by 1980, increase their annual export earnings by at least 4 billion dollars.

56. Which of the following is a conclusion that can be deduced from the above paragraph?

- (a) Exports are required for imports
- (b) Imports are required for exports
- (c) Both (a) and (b)
- (d) Neither (a) nor (b)

57. If affluent nations reduce trade restrictions as suggested by the author

- (a) imports will increase for affluent countries
- (b) imports will increase for developing countries
- (c) exports will increase for affluent countries
- (d) None of the above

58. According to the information in the above paragraph, if the trade restrictions against commodities from the developing countries continued, the total annual value of exports from the developing countries will be
- 4 billion dollars
  - less than 4 billion dollars
  - more than 4 billion dollars
  - Cannot be ascertained from the given information

For Question Nos. 59 and 60, consider the following :

Assume that Nepal has a closed economy. There are two classes in the economy—workers and capitalists. Workers consume their entire wages ( $W$ ) but capitalists save ( $S_p$ ) a portion of their profits ( $P$ ) and  $I$  is investment. Nepalese economy is given by the following :

$$W = 500$$

$$S_p = 0.5P$$

$$I = 500$$

59. What would be the level of income if capitalists start saving their entire profits?
- 500
  - 1500
  - 750
  - 1000
60. Government has the option of financing an expenditure of 200 either by taxes on wages or on profits. The increase in income as a result of either would be
- the same
  - 200 more in case it is financed by taxes on profits
  - zero
  - Not clear

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SPACE FOR ROUGH WORK

/1-A

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