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QUESTION PAPER  
SERIES CODE

A

Registration No. :

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Centre of Exam. :

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Name of Candidate :

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Signature of Invigilator

**ENTRANCE EXAMINATION, 2014**

M.A. ECONOMICS (with specialisation in the World Economy)

[ Field of Study Code : EILM (202) ]

Time Allowed : 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) Please darken the appropriate Circle of Question Paper Series Code on the Answer Sheet.
- (iii) All questions are compulsory.
- (iv) Answer all 25 questions in the Answer Sheet provided for the purpose by darkening the correct choice, i.e., (a) or (b) or (c) or (d) with BALLPOINT PEN only against the corresponding circle. Any overwriting or alteration will be treated as wrong answer.
- (v) Each correct answer carries 4 marks. There will be negative marking and 1 mark will be deducted for each wrong answer.
- (vi) Answer written by the candidates inside the Question Paper will not be evaluated.
- (vii) Calculators may be used.
- (viii) Please use the space provided for Rough Work.
- (ix) Return the Question Paper and Answer Sheet to the Invigilator at the end of the Entrance Examination. **DO NOT FOLD THE ANSWER SHEET.**

**INSTRUCTIONS FOR MARKING ANSWERS**

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

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.**

1. If  $\lim_{x \rightarrow 3} f(x) = 7$ , then

- (a)  $f(x)$  is continuous at  $x = 3$
- (b)  $f(x)$  is differentiable at  $x = 3$
- (c)  $f(3) = 7$
- (d) None of the above

2. Suppose  $A$  is a  $5 \times 2$  matrix,  $B$  is an  $r \times s$  matrix and  $C$  is a  $p \times 3$  matrix. If  $A * B * C'$  is defined, which of the following is true?

- (a)  $r = 2, s = 5$
- (b)  $r = 3, s = 4$
- (c)  $r = 5, s = 3$
- (d)  $r = 3, s = 5$

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SPACE FOR ROUGH WORK

3. If the matrix  $\begin{pmatrix} 1 & 2 & 1 \\ 2 & 0 & \alpha \\ 1 & \alpha & 1 \end{pmatrix}$  is singular, the value of  $\alpha$  must be

(a) 1

(b) 2

(c) 3

(d) 4

4. The real valued function  $f(c) = (c+2)^3 - 8$  has a point of inflexion

(a) at -2

(b) at 2

(c) at 8

(d) nowhere on the real line

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**SPACE FOR ROUGH WORK**

5. Suppose that in a particular market, the supply curve is highly elastic and the demand curve is highly inelastic. If a tax is imposed in this market, then

- (a) the buyers will bear a greater burden of the tax than the sellers
- (b) the sellers will bear a greater burden of the tax than the buyers
- (c) the buyers and sellers are likely to share the burden of the tax equally
- (d) the buyers and sellers will not share the burden equally, but it is impossible to determine who will bear the greater burden of the tax without more information

6. A firm faces the following long-run cost function :

$$TC = q^3 - 40q^2 + 450q$$

The average cost (AC) will be at its minimum, when

- (a)  $q = 10$  and  $AC = 20$
- (b)  $q = 40$  and  $AC = 60$
- (c)  $q = 40$  and  $AC = 10$
- (d)  $q = 20$  and  $AC = 50$

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**SPACE FOR ROUGH WORK**

7. A firm is employing 100 units of labour and 50 units of capital to produce 200 pens. Labour costs ₹ 10 per unit and capital ₹ 5 per unit. For the quantities of inputs employed,  $MP_L = 2$  and  $MP_K = 5$ . In this situation, the firm
- (a) is producing the maximum output possible given the prices and relative productivities of the inputs
  - (b) could lower its production costs by using more labour and less capital
  - (c) could increase its output at no extra cost by using more capital and less labour
  - (d) should use more of both inputs in equal proportions
8. Which of the following is correct?
- (a) In the long run, a firm in monopolistic competition earns zero economic profit and its price is equal to the minimum average total cost
  - (b) In the long run, a firm in monopolistic competition can earn an economic profit because of product differentiation
  - (c) In the long run, a firm in perfect competition operates at maximum average total cost
  - (d) In the long run, a firm in monopolistic competition maximizes its profit at a point where price is equal to average total cost but the average total cost is not minimized

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SPACE FOR ROUGH WORK

9. Total revenue from the sale of a commodity is given by  $R = 100x - 2x^2$ , where  $x$  is the quantity of the commodity. Hence, the point elasticity of demand, when marginal revenue is 20, is
- (a)  $-0.5$
  - (b)  $-1$
  - (c)  $-1.5$
  - (d)  $-2$
10. In a model with two goods,  $x$  and  $y$ , with  $x$  plotted on the horizontal axis, the price consumption curve generated by changing the price of  $x$  is parallel to the  $x$ -axis. This implies that
- (a) the demand for  $x$  is infinitely elastic
  - (b) the demand for  $y$  has zero elasticity
  - (c) the demand for  $x$  has elasticity  $= -1$
  - (d) the demand for  $y$  has elasticity  $= -1$

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**SPACE FOR ROUGH WORK**

11. The probabilities that  $A$  and  $B$  speak the truth independently are  $0.6$  and  $0.8$  respectively. If they make the same statement,  $S$ , then the probability that the statement  $S$  is indeed true is
- (a)  $2/7$
  - (b)  $12/25$
  - (c)  $6/7$
  - (d)  $6/25$
12. A random variable  $X$  has a uniform (rectangular) distribution over the range  $0 < x < 10$ . Then the probabilities  $P(x = 5)$  and  $P(|x| < 5)$  are
- (a)  $0$  and  $0.5$
  - (b)  $0.5$  and  $0.5$
  - (c)  $0.5$  and  $0$
  - (d)  $0.1$  and  $0.5$

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SPACE FOR ROUGH WORK

13. An unbiased die is tossed twice. The probability of obtaining 6 at least once is

- (a)  $7/36$
- (b)  $1/6$
- (c)  $10/36$
- (d)  $11/36$

14. Twelve persons are seated in a circle. The probability that there are exactly three persons seated between  $A$  and  $B$  is

- (a)  $3/11$
- (b)  $9/11$
- (c)  $2/11$
- (d)  $5/11$

15. The probability mass function of a random variable is given to be  $f(x) = x/15$  for  $x = 1, 2, 3, 4, 5$ ; and zero elsewhere. Then the mean of the distribution is

- (a) 3
- (b)  $5/2$
- (c)  $11/3$
- (d)  $15/2$

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SPACE FOR ROUGH WORK



16. In deriving the aggregate demand curve, a — in the price level leads to a/an — in the real money supply, because the nominal quantity of rupees can purchase — goods and services.
- (a) decline; increase; more  
 (b) decline; decrease; more  
 (c) rise; increase; fewer  
 (d) rise; decrease; more

17. Let the following represent the structure of a small open economy with a fixed exchange rate :

$$C = 40 - 6*r + 0.8(Y - T)$$

$$T = 25 + 0.2Y$$

$$I_p = 60 - 4*r$$

$$G = 50$$

$$NX = 110 - 0.04*Y - 20*e$$

$$(M/P)^D = 0.2*Y - 5*r$$

$$M^S / P = 60$$

$$e = 2$$

where  $C$  is consumption,  $Y$  is output,  $T$  is taxes,  $G$  is government expenditure,  $I_p$  is planned investment,  $r$  is rate of interest,  $NX$  is net exports,  $(M/P)^D$  is demand for real balances,  $M^S/P$  is real money supply.

Initially, assume that the foreign and domestic interest rates are equal, or that  $r = r^f$ . The  $IS$  and  $LM$  equations in terms of the domestic interest rate  $r$  can be expressed as

- (a)  $IS: Y = 500 - 50*r$  and  $LM: Y = 300 + 50*r$   
 (b)  $IS: Y = 300 - 5*r$  and  $LM: Y = 500 + 5*r$   
 (c)  $IS: Y = 500 - 25*r$  and  $LM: Y = 300 + 25*r$   
 (d)  $IS: Y = 800 - 15*r$  and  $LM: Y = 1000 + 15*r$

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**SPACE FOR ROUGH WORK**

18. Which of the following is true of the relationship between the *IS* curve and the *AD* curve?
- (a) The commodity market must be in equilibrium along the *IS* curve but it may not be in equilibrium along the *AD* curve
  - (b) An increase in government spending will shift the *IS* curve but it will not shift the *AD* curve
  - (c) The steeper the *IS* curve, the steeper the *AD* curve
  - (d) A horizontal shift of the *AD* curve is typically greater than the horizontal shift in the *IS* curve due to crowding out
19. Which among the following two effects can stabilize the economy (by raising aggregate demand) when prices fall?
- (a) Keynes effect and Pigou effect
  - (b) Keynes effect and Expectations effect
  - (c) Expectations effect and Redistribution effect
  - (d) Redistribution effect and Pigou effect
20. Consider two economies that are identical with the exception that one has a high marginal propensity to consume (MPC) and the other has a low MPC. If the money supply is increased by the same amount in each economy, the high MPC economy will experience
- (a) a larger increase in output and a smaller decrease in interest rate
  - (b) a smaller increase in output and a smaller decrease in interest rate
  - (c) a larger increase in output and a larger decrease in interest rate
  - (d) a smaller increase in output and a larger decrease in interest rate

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**SPACE FOR ROUGH WORK**

21. A devaluation of a currency under the fixed exchange rate regime is likely to have no impact on the balance of trade, if
- (a) home and foreign offer curves are elastic
  - (b) home and foreign offer curves are inelastic
  - (c) home and foreign elasticity of the offer curves sum to unity
  - (d) All of the above
22. The Stolper-Samuelson theorem states that an imposition of a tariff by the home country on its imports, which is capital-intensive, gives rise to
- (a) an increase in the nominal reward of labour
  - (b) a fall in the nominal reward of capital
  - (c) an increase in the real reward of capital
  - (d) an increase in the real reward of labour
23. If an economy produces two goods,  $X$  and  $Y$ , with two factors of production,  $K$  and  $L$ , where  $X$  is labour-intensive good and  $Y$  is capital-intensive good and if the factor intensities of production of the goods are different at any factor price range and are nonreversible, then under the assumption of constant returns to scale, an increase in the supply of labour at constant commodity prices gives rise to
- (a) an absolute increase in the production of  $X$  and an absolute decrease in the production of  $Y$
  - (b) an absolute increase in the production of both  $X$  and  $Y$
  - (c) an absolute increase in the production of  $Y$  and an absolute decrease in the production of  $X$
  - (d) an equiproportionate increase in the production of  $X$  and  $Y$

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SPACE FOR ROUGH WORK

24. Free trade is the optimal trading policy for

- (a) small country
- (b) large country
- (c) both small and large countries
- (d) Cannot say anything

25. Consider a Ricardian world of two countries, Germany and Italy, capable of producing two goods, steel and shoes. The labour availability and labour requirements to produce one ton of steel and a pair of shoes respectively in Germany and Italy are given below :

Country	Total Labour Available	Labour Needed to Produce	
		Pair of Shoes	Ton of Steel
Germany	160	10	5
Italy	60	15	3

Then the pre-trade relative prices are

- (a) determined by the demand behaviour of the economy
- (b) determined by the composition of production of the economy
- (c) independent of the demand behaviour of the economy
- (d) dependent on the social utility function

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**SPACE FOR ROUGH WORK**

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