

## MA (ECONOMICS) SAMPLE ENTRANCE QUESTION PAPER

### INSTRUCTIONS:

- There are five sections
- Each section has 4 multiple choice questions.
- Each multiple choice question has one correct answer.
- Each correct answer will get you 4 (FOUR) points.
- Each incorrect answer will get you a NEGATIVE mark of 1

### SECTION 1 (ECONOMETRICS/STATISTICS)

1. Suppose you have an estimated regression equation:  $\ln Y = 2.2 + 0.4X$ . Which of the following is the correct interpretation of the estimated relationship between X and Y?

- (a) A unit change in X is associated with a 40 percent change in Y
- (b) A percent change in X is associated with a 40 unit change in Y
- (c) A unit change in X is associated with a 0.4 percent change in Y**
- (d) A unit change in X is associated with a 0.4 unit change in Y

2. If real numbers  $l$  and  $m$  satisfy  $0 < m < l$ , then the following is true for the numbers  $l$ ,  $m$ ,  $l + m$  and  $m - l$ :

- (a) their mean equals their median
- (b) their mean is less than their median**
- (c) their mean is greater than their median
- (d) there is insufficient information to compare their mean and their median

3. One reason why the sample median is used as an estimator of the population mean is that

- (a) The average of all sample medians equals the population mean
- (b) The sample median equals the population mean
- (c) The sample median is unaffected by extreme values**
- (d) The sample median occurs more often than the mode or the mean

4. Arithmetic mean and standard deviation of a binomial distribution are respectively 4 and  $\sqrt{8/3}$ . The values of  $(1-p)$  and  $p$  are:

- (a)  $\frac{2}{3}$  and  $\frac{1}{3}$**
- (b)  $\frac{3}{4}$  and  $\frac{1}{4}$
- (c)  $\frac{1}{3}$  and  $\frac{2}{3}$
- (d)  $\frac{2}{5}$  and  $\frac{3}{5}$

## **SECTION 2 (MACROECONOMICS)**

5. Both classicals and Keynesians agree that policymakers
- (a) can exploit the Phillips curve in the short run.
  - (b) cannot exploit the Phillips curve in the short run.
  - (c) cannot keep the unemployment rate permanently below the natural rate by permanently running a high rate of inflation.**
  - (d) can keep the unemployment rate permanently below the natural rate by permanently running a high rate of inflation.
6. The primary reason that short-lived shocks can have long-run effects is
- (a) the presence of propagation mechanisms.**
  - (b) the non-neutrality of money.
  - (c) misperceptions by the public over the actual price level and the expected price level.
  - (d) the presence of rational expectations among the public.
7. In the Keynesian model, suppose the RBI sets a target for the money supply. If the IS curve shifts to the left, and the RBI wants to keep output unchanged, what should the RBI do?
- (a) Reduce taxes.
  - (b) Reduce the money supply.
  - (c) Increase taxes.
  - (d) Increase the money supply.**
8. The fact that business cycles are recurrent but not periodic means that
- (a) business cycles occur at predictable intervals, but do not last a predetermined length of time.
  - (b) business cycles last a predetermined length of time, but do not all follow a standard contraction– trough–expansion–peak pattern.
  - (c) business cycles occur at predictable intervals, but do not all follow a standard contraction–trough– expansion–peak pattern.
  - (d) the business cycle's standard contraction–trough–expansion–peak pattern has been observed to occur over and over again, but not at predictable intervals.**

## **SECTION 3 (MICROECONOMICS)**

9. In a monopolist's market where the demand is given by  $p(y) = 100 - 2y$  and the marginal cost is given by  $MC = y/2$ , the profit-maximizing price and quantity is

- (a) 500/11, 200/11
- (b) 500/9, 200/9**
- (c) 200/9, 500/9
- (d) 200/11, 500/11

10. An increase in the price causes the quantity demanded to fall but the total expenditure to rise. The demand curve is

- (a) Elastic
- (b) Unit elastic
- (c) Perfectly elastic
- (d) Inelastic**

11. Mathew runs the only restaurant in town. He wants to maximize the revenue. The equilibrium price and quantity in such a case is determined by:

- (a)  $MR=MC$
- (b)  $P=MC$
- (c)  $MR=0$**
- (d)  $MC=0$

12. Suppose the government imposes a lumpsum tax on the producers. What would be its impact on the equilibrium price?

- (a) It will increase the equilibrium price paid by the buyer
- (b) It will decrease the equilibrium price received by the seller
- (c) Both a and b
- (d) It will not have any effect on equilibrium price**

#### **SECTION 4 (GROWTH AND DEVELOPMENT)**

13. Fiscal deficit in the budget means:

- (a) Revenue deficit plus the net borrowings of the government
- (b) Capital deficit plus revenue deficit
- (c) Budgetary deficit plus the net borrowings of the government**
- (d) Primary deficit minus capital deficit

14. Which of the following is not part of the Human Development Index?

- (a) infant mortality**
- (b) life expectancy
- (c) educational attainment
- (d) GDP per capita

15. The Lewis Model of migration led development assumes
- a. **marginal product of labour in the agriculture sector close to zero**
  - b. low wage rate in the modern sector
  - c. agriculture sector wages are determined by marginal product of workers.
  - d. none of the above.

16. Sen's Capability approach includes
- a. **freedom of functioning**
  - b. growth rates of the economy
  - c. more export than import
  - d. higher expenditure in capital good sector

## SECTION 5 (MATHEMATICS)

17.  $\frac{x^{\frac{2}{3}}x^{\frac{1}{4}}x^{\frac{3}{5}}}{x^{\frac{1}{6}}}$  is equal to

- (a)  $x^{\frac{27}{20}}$
- (b)  $x^{\frac{17}{20}}$
- (c)  $x^{\frac{27}{60}}$
- (d)  $x^{\frac{37}{15}}$

18. If A and B are matrices, then which is not correct (Hint:  $A'$  stands for transpose)
- (a)  $(A')' = A$
  - (a)  $(A + B)' = A' + B'$
  - (b)  $(AB)' = B' + A'$
  - (c)  $(ABB)' = B'A'B'$

19. Assume function  $y = -x^2$ . If domain of the functions is set of all negative real numbers, the range of the function
- (a) Set of all real numbers.
  - (b) Set of all non-positive numbers.**
  - (c) Set of all natural numbers
  - (d) It is undefined.

20. Roots of the polynomial,  $x^3 - x^2 - 4x + 4 = 0$  are
- (a) -3, 2, 1
  - (b) -2, 3, 4
  - (c) -1, 1, 2
  - (d) -2, 1, 2**

