

Test Paper Series Code

**A**

Question Booklet No. :

Test Date: **29 April 2018**

**PG-QP-44**

Time : 09:00 a.m. to 11:00 a.m.

**Entrance Test for the Course(s) :** M.A. (Environmental Economics) [CUTND], (Applied Qualitative Finance) [CUTND], (Financial Economics) [CUTND], (General Economics) [CUTND], (Actuarial Economics) [CUTND], (Economics) [CUTND], [CURAJ], Integrated M.Sc. B.Ed. (Economics Edu) [CURAJ], M.A. (Economics) [CUKAS], [CUHAR], [CUJAM], [CUKER], [CUPUN], [CUKNK], [CUSBR].

Roll Number :

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Test Center Code :

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Name of the Candidate :

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Candidate's Signature: .....

Invigilator's Signature: .....

### **Instructions to Candidates**

1. Do NOT open the Question Booklet until the Hall Superintendent gives the signal for the commencement of the examination.
2. Write your Name, Roll Number and Test Center Code (as given in the Admit Card) and sign in the space provided above.
3. After the commencement of the examination, open the Question Booklet. If the Question Booklet or the OMR Answer Sheet or both are not in good condition, then ask for immediate replacement. No replacement will be made 5 minutes after the commencement of the examination.
4. In the ANSWER SHEET (OMR) fill up/shade the required entries (Roll Number, Test Center Code, Test Paper Code, Question Booklet Number etc. in the space provided) using **black/blue** ball point pen.
5. Part-A of the Question Booklet contains 25 Questions. Part-B of the Question Booklet contains 75 Questions. A candidate is required to answer all the questions.
6. All questions are in MCQ Pattern. There is only **one** most appropriate correct answer for **each** question.
7. **All** questions carry equal marks. **There will be negative marking.** Each correct answer carries **01** mark and for each wrong answer **0.25** mark will be deducted. Question not attempted will not be assessed and hence will not be considered for preparing final merit list.
8. Darken only **one** circle for each question. If you darken more than one circle for the question, it will be deemed as incorrect answer. Any change in the answer once marked is **NOT** allowed.
9. Use the Answer Sheet (OMR) carefully. No spare Answer Sheet will be given.
10. Do not make stray marks on the OMR Sheet.
11. After completion of examination, a candidate will be allowed to take with him Question Booklet and Candidate's copy of OMR answer sheet. However, **each candidate must ensure to handover original copy of OMR sheet to the invigilator.** In case a candidate takes away the original OMR answer sheet, his/her examination will be treated as cancelled.
12. No candidate will be allowed to leave the examination hall before completion of Entrance Test. Total time allowed for the paper is 2 Hours.
13. Calculator, Tables or any other Calculating Devices, Mobiles, Pagers, Booklets, Papers etc. are strictly prohibited for this examination.
14. Rough work should be done on the blank space provided in this Question Booklet. No extra paper will be provided.

P.T.O.

**PART-A**

1. *Ashish drives his car extremely fast when there is rainfall.*  
The underlined word is an example of  
A) Noun                      B) Adverb                      C) Adjective                      D) Pronoun
2. Which of the following is correctly spelt?  
A) Commodious                      B) Commodius  
C) Commodous                      D) Commodos
3. Which part of the following sentence contains error?  
A) Never I have listened / B) to such beautiful music / C) as the piece we heard / D) on the radio last night.
4. Which of the alternatives is correct, if the following sentence is changed into passive voice?  
*Open your door.*  
A) Your door has opened.                      B) Has your door be opened?  
C) Let your door be opened.                      D) Let's open your door.
5. Which part of the following sentence contains error?  
A) Ganges, one of the most sacred rivers / B) to Hindus, / C) is a trans-boundary river of Asia / D) which flows through the nations of India and Bangladesh
6. He has \_\_\_\_ fear of heights.  
A) A                      B) An                      C) The                      D) None of the above
7. Select the correct plural of 'arch'  
A) Arches                      B) Archs                      C) Archees                      D) Arch
8. Which of the following best expresses the meaning of 'Exasperate'?  
A) Elevate                      B) Irritate  
C) Distrust                      D) Transcend
9. Which of the following is opposite in meaning to the word 'Captive'?  
A) Canvass                      B) Fascinate  
C) Offend                      D) Campaign
10. Which of the alternatives best expresses the meaning of the underlined phrase in the following sentence?  
*Sheetal is in the habit of taking French leave very often.*  
A) Taking sick leave                      B) Taking extra ordinary leave  
C) Taking leave on medical grounds                      D) Taking leave without permission
11. Below are given three statements, such as P, Q, and R, followed by four conclusions. You have to take the given statements to be true even if they appear to be at variance with commonly known facts and then decide which of the conclusions logically follow(s) from the given statements.  
Statements  
P. All books are notes.  
Q. Some notes are watches.  
R. No watch is a pencil.  
Conclusions  
I. Some watches are books.                      II. Some notes are pencils.  
III. No watch is a book.                      IV. Some notes are not pencils.  
A) I and either II or IV follow                      B) I, III and IV follow  
C) I, II and III follow                      D) Either I or III and IV follow

12. At which of the following places is the Indian National Defence University being set up?  
 A) Hyderabad, Telangana  
 B) Bhubaneswar, Odisha  
 C) Gurgaon, Haryana  
 D) Jodhpur, Rajasthan
13. Who was the last Hindu king of North India?  
 A) Pushyabhuti  
 B) Harshavardhana  
 C) Pushyamitra  
 D) Skandagupta
14. Which one of the following travelers visited India during the Gupta period?  
 A) Hiuen-Tsang  
 B) Fa-Hien  
 C) Marco Polo  
 D) Nicolo Conti
15. The 'International Day of Older Persons' is observed every year on  
 A) 1<sup>st</sup> October  
 B) 2<sup>nd</sup> October  
 C) 3<sup>rd</sup> October  
 D) 4<sup>th</sup> October
16. *Santosh Trophy* is related to  
 A) Cricket  
 B) Hockey  
 C) Football  
 D) Badminton
17. What is the full form of HTTP in data communication?  
 A) Hardware Test Trial Protocol  
 B) Hyper Text Transfer Package  
 C) Hyper Text Transfer Protocol  
 D) Hyphenated Text Transfer Protocol
18. Language of the Preamble of the Indian Constitution has been borrowed from  
 A) US  
 B) Canada  
 C) Australia  
 D) Ireland
19. Which of the following terms is used in banking or finance?  
 A) Moral Suasion  
 B) Nelson  
 C) Jacksonian Seizure  
 D) Incarnation
20. The Nawabganj Bird Sanctuary in Uttar Pradesh has been renamed after  
 A) Govind Ballabh Pant  
 B) Ashfaquallah Khan  
 C) Ram Prasad Bismil  
 D) Chandrashekhar Azad
21.  $1^3 + 7^3 + 13^3 = ?$   
 A) 254  
 B) 2541  
 C) 2540  
 D) 25400
22. If a sum of money doubles itself in 6 years, it becomes 5 times in how many years?  
 A) 12 years  
 B) 24 years  
 C) 10 years  
 D) 13 years
23. A mixture of 40 litres of milk and water contains 10% water. How much water should be added to it so that water may be 20% in the new mixture?  
 A) 50  
 B) 150  
 C) 200  
 D) 375
24. Three years ago, the average age of a family of five members was 16 years. A baby having been born, the average age of the family is now the same as before. Find the age of the baby.  
 A) One year  
 B) Two years  
 C) Three years  
 D) Four years
25. The speed of a car is increased by 2 km every one hour. If the distance travelled in the first hour was 35 km, what was the total distance travelled in 12 hours?  
 A) 562 km  
 B) 552 km  
 C) 482 km  
 D) 662 km

**PART-B**

26. Which one of the following is less likely to be affected by extreme values?  
A) Mean                      B) Range                      C) Interquartile range      D) Correlation
27. Which of the following can be described as a categorical variable?  
A) Age                              B) Annual income  
C) Grade point average        D) Religion
28. Suppose a  $n$  value series  $x_1, x_2, x_3, \dots, x_n$  has standard deviation of  $\sigma$ . The standard deviation of  $x_1 + k, x_2 + k, x_3 + k, \dots, x_n + k$  would be:  
A)  $\sigma$                       B)  $\sigma+k$                       C)  $\sigma-k$                       D)  $\sigma k$
29. Let  $x_1, x_2, x_3, \dots, x_n$  be a random sample from  $N(\mu, \sigma^2)$ . What is the sampling distribution of  $\frac{(\bar{x} - \mu)}{s/\sqrt{n}}$ ?  
A) F-distribution                      B) t-distribution  
C) z-distribution                      D) Normal distribution
30. The 'school of economics' found that 60% of its students want to register in Business Economics, 70% want to register in Financial Economics, and 45% want to register in both. What is the probability that a student wants to register in at least one of these?  
A) 0.15                      B) 0.85                      C) 0.10                      D) 0.55
31. A store sells from 0 to 12 mobile phones per day. The amount for daily mobile phone sales in this case is a  
A) Continuous random variable      B) Discrete random variable  
C) Dummy variable                      D) Non-random variable
32. If the mean age and variance of a class of 100 students are 20 and 25 respectively. The coefficient of variation (CV) would be  
A) 45%                      B) 40%                      C) 25%                      D) 80%
33. A numerical description of the outcome of an experiment is called  
A) Descriptive statistics.                      B) Probability function.  
C) Variance.                      D) Sample.
34. The level of significance is the  
A) Same as confidence coefficient.  
B) Same as p-value.  
C) Maximum allowable probability of Type-I error.  
D) Maximum allowable probability of type-II error.
35. In a sample of 300 students in a university 60 students are economics majors. Based on this information, the 'University Weekly' reported that '20 percent of all students are economics majors'. This report is an example of  
A) Sample.                      B) Population.  
C) Statistical inference.                      D) Mean deviation.
36. A bet is said to be a *fair bet* whose  
A) expected winnings is always positive.      B) expected winnings is always negative.  
C) expected winning is equal to zero.      D) expected winning is equal to 1.
37. Suppose that you are playing a game with single die assumed fair. In this game, you win Rs. 20 if a 3 turns up; Rs.40 if a 5 turns up; lose Rs. 30 if a 6 turns up. You neither win nor lose if any other faces turn up. What is the expected sum of money you win?  
A) Rs. 30                      B) Rs. 10                      C) Rs. 5                      D) Rs. 20

38. Suppose that the mean and median salaries of workers are Rs. 60 and Rs. 45 respectively. The sample standard deviation is assumed to be Rs. 5. The coefficient of Skewness would be
- A) 9  
C) -9
- B) 3  
D) -3
39. The coefficient of correlation ( $\rho$ ) should be
- A)  $0 \leq \rho \leq 1$   
C)  $-1 \leq \rho \leq 1$
- B)  $-1 < \rho < 1$   
D)  $-1 \leq \rho \leq 0$
40. The fitted regression is given by  $Y = -15 + 0.75X$ . What is the value of residual at the point  $X = 30$ ,  $Y = 50$ ?
- A) 42.5  
C) 0
- B) 27.5  
D) 7.5
41. Suppose that the standard deviation of X and Y are given as 2.5 and 1.25 respectively. If the covariance between X and Y is 0.80, then the correlation coefficient of the variables would be
- A) 0.25  
C) 0.64
- B) 0.21  
D) 0.80
42. If the quantity demand of a product increases from 40000 to 48000 per year, when per capita income increases from Rs. 30000 to Rs. 33000 per year, then what is the income elasticity of demand?
- A) 1  
C) 2
- B) 0  
D) Cannot be found
43.  $f(x) = 4x^3 - 5x^2 + 10$  implies
- A)  $f(1) = 10$   
C)  $f''(x) = 24x - 10$
- B)  $f'(2) = 20$   
D)  $f'(x) = 12x^2 - 10x + 10$
44. The sum of diagonal elements of a square matrix is known as
- A) Determinants of the matrix  
C) Cofactor of the matrix
- B) Trace of the matrix  
D) Adjoint matrix
45. Let  $y = x^4 - 6x^3 + 4x^2 - 13$ . At  $x=4$ , the function is
- A) Increasing  
C) Stationary
- B) Decreasing  
D) None of them are correct.
46. Evaluating  $\lim_{x \rightarrow 0} \frac{\sqrt{1+x} - \sqrt{1-x}}{x}$  yields
- A) 0  
C)  $\sqrt{2}$
- B) 1  
D) Cannot be determined.
47. Differentiate the function  $y = \sqrt{x^2 + 1}$
- A)  $\frac{1}{2}[x^2 + 1]^{-1/2}$   
B)  $\frac{x}{\sqrt{x^2 + 1}}$
- C)  $\frac{1}{2}(2x + 1)^{-1/2}$   
D)  $\frac{1}{\sqrt{x^2 + 1}}$
48. Let a function f be defined by  $f(x) = \frac{x - |x|}{x}$ ,  $x \neq 0$  and  $f(0)=2$ , then f is:
- A) Continuous everywhere  
C) Continuous for all x except x = 0
- B) Continuous nowhere  
D) Continuous for all x except x = 1

49. The transpose of a square matrix is a
- A) Row matrix  
B) Column matrix  
C) Null matrix  
D) Square matrix
50. Matrix A has order  $5 \times 3$  and matrix B has order  $3 \times 2$ , then the product matrix AB has order
- A)  $2 \times 5$   
B)  $5 \times 2$   
C)  $3 \times 3$   
D) Matrix multiplication not possible
51. Find the consumer surplus at  $Q = 5$  for the demand function  $P = 30 - 4Q$ .
- A) 10  
B) 50  
C) 30  
D) 40
52. Which of the following is NOT a property of linear programming
- A) A linear objective function that is to be minimized or maximized.  
B) Linear structural constraint.  
C) Non-negativity constraints.  
D) Alternative optimal solution.
53. A graph showing all the combinations of goods and services that can be produced if all of society's resources are used efficiently is a
- A) demand curve.  
B) supply curve  
C) production possibility frontier.  
D) circular-flow diagram.
54. Suppose the demand for good Z goes up when the price of good Y goes down. We can say that goods Z and Y are
- A) perfect substitutes.  
B) unrelated goods.  
C) complements.  
D) substitutes.
55. A shift in the demand curve (drawn in the traditional Price-Quantity space) to the left may be caused by (Assume that the good is normal)
- A) a decrease in supply.  
B) a fall in income.  
C) a fall in the price of a complementary good.  
D) a fall in the number of substitute goods.
56. All of the following can be classified as positive economics except:
- A) In times of depression, unemployment rises.  
B) Rise in tax rates increases the revenue of the government.  
C) Sharp decline in industrial output may hurt the GDP growth rate.  
D) Increase in petrol prices leads to increase in demand for CNG vehicles.
57. Given that the market for shirts is in equilibrium. If the price of cotton decreases, the equilibrium price and quantity (respectively) of shirts will:
- A) increase, increase  
B) decrease, decrease  
C) increase, decrease  
D) decrease, increase
58. Which of the following is not a macroeconomic issue?
- A) The study of the relationship between the unemployment rate and the inflation rate  
B) The forces determining the price level in an individual market  
C) The determination of total output in the economy  
D) The aggregate behavior of all decision-making units in the economy
59. France experiences an improvement in productivity due to the introduction of improved technology. In terms of France's production possibility frontier, we would show this change as
- A) a movement along the frontier.  
B) a shift from a point outside the frontier to a point inside the frontier.  
C) a shift from a point on the frontier to a point outside the frontier.  
D) a shift outwards by the entire frontier.

60. Energizer batteries and Duracell's batteries are substitutes. The Energizer cuts supply and increases the price of its batteries. For Duracell, equilibrium price will and equilibrium quantity will in the market.  
 A) rise; rise                      B) fall; rise                      C) fall; fall                      D) rise; fall
61. The demand for JIF peanut butter will decrease, if there is an increase in \_\_\_\_\_.  
 A) the price of JIF peanut butter.                      B) the price of Peter Pan peanut butter (a substitute).  
 C) the demand for jelly (a complement).                      D) the price of bread (a complement).
62. A 10% increase in the price of video games results in a 5% decrease in the quantity of video games demanded. The price elasticity of demand is and demand is and total revenue will \_\_\_\_\_.  
 A)  $-0.5$ ; inelastic, decrease                      B)  $-2.0$ ; elastic, decrease  
 C)  $-0.5$ ; inelastic, increase                      D)  $-2.0$ ; elastic, increase
63. When an economy uses all its resources fully in production then;  
 A) It will always lie on the PPF                      B) It will lie outside the PPF  
 C) It may not lie on the PPF                      D) It will lie on the mid-point of the PPF
64. Chicken and fish are substitutes. If the price of chicken increases, the demand for fish will;  
 A) increase or decrease but the demand curve for chicken will not change.  
 B) increase and the demand curve for fish will shift rightward.  
 C) not change but there will be a movement along the demand curve for fish.  
 D) decrease and the demand curve for fish will shift leftward
65. The price of a bus rides decreases, but the total revenue of the bus company decreases. The demand for bus rides is \_\_\_\_\_.  
 A) unit elastic                      B) elastic                      C) inelastic                      D) perfectly inelastic
66. The simple Keynesian model  
 A) overstated the effect of an increase in government spending by neglecting the necessary increase in the interest rate and consequent decline in investment that accompany an increase in government spending.  
 B) understated the effect of an increase in government spending by neglecting the necessary increase in the interest rate and consequent decline in investment that accompany an increase in government spending.  
 C) overstated the effect of an increase in government spending by neglecting the necessary decrease in the interest rate and consequent increase in investment that accompany a decrease in government spending.  
 D) understated the effect of an increase in government spending by neglecting the necessary decrease in the interest rate and consequent decrease in investment that accompany an increase in government spending.
67. When moving from gross domestic product to gross national product, one has to  
 A) subtract earnings by foreign residents and firms in India.  
 B) subtract foreign earnings of Indian residents and firms.  
 C) add foreign earnings of Indian residents and firms.  
 D) Both A) and C)
68. In the simple Keynesian model, if the equilibrium level of income is Rs. 300 billion, the MPC is 0.75, and government expenditures increase by 20 billion. What is the new equilibrium level of income?  
 A) Rs. 320 billion                      B) Rs. 380 billion                      C) Rs. 220 billion                      D) Rs. 520 billion
69. In the liquidity trap case where the LM schedule is nearly horizontal,  
 A) both monetary and fiscal policy are highly effective.  
 B) monetary and fiscal policy are ineffective.  
 C) monetary policy is ineffective and fiscal policy is effective.  
 D) fiscal policy is ineffective and monetary policy is effective.

70. Monetary policy will be
- less effective the higher the interest elasticity of investment, and thus the steeper the IS schedule.
  - more effective the higher the interest elasticity of investment, and thus the flatter the IS schedule.
  - equally effective regardless of whether or not the interest elasticity of investment is higher or lower, or the IS curve is flatter or steeper.
  - more effective with a vertical IS curve.
71. The main decision for a profit maximizing perfectly competitive firm is not what \_\_\_\_\_ but what \_\_\_\_\_
- level of output to produce; price to charge
  - price to charge; level of output to produce
  - level of output to produce; total revenue to achieve
  - price to charge; total cost to achieve
72. Molly the Monopolist faces an elastic demand curve. If she decreases price, marginal revenue will be \_\_\_\_\_ and total revenue will \_\_\_\_\_.
- positive; rise
  - positive; fall
  - negative; rise
  - negative; fall
73. Consumer surplus is:
- equal to price minus marginal cost
  - less in the case of single price monopoly than in the case of a perfectly competitive industry
  - zero for a single-price monopolist
  - positive in the case of a monopolist practicing perfect price discrimination
74. Compared to a competitive industry, a monopoly transfers:
- consumer surplus to producers
  - producer surplus to consumers
  - deadweight loss away from producers to consumers
  - deadweight loss away from consumers to producers
75. Firms in an oligopoly:
- are independent of each other's actions
  - can each influence the market price
  - charge a price equal to marginal revenue
- i only
  - ii only
  - i and iii only
  - i and ii only
76. Opportunity cost, most broadly define, is
- the additional cost of producing an additional unit of output.
  - what we forgo, or give up, when we make a choice or a decision.
  - a cost that cannot be avoided, regardless of what is done in the future.
  - the additional cost of buying an additional unit of a product.
77. The accelerator theory of investment says that induced investment is determined by
- the rate of change of national income.
  - expectations.
  - the level of national income.
  - the level of aggregate demand.
78. As the MPS increases, the multiplier will
- increase.
  - either increase or decrease depending on the size of the change in investment.
  - remain constant.
  - decrease.
79. For which of the following market structures is it assumed that there are barriers to entry?
- Perfect competition
  - Monopolistic competition
  - Monopoly
  - All of the above



89. Reserve money is the sum of
- Currency + Demand Deposits + Total Reserves
  - Currency + Time Deposits + Required Reserves
  - Currency + Total Reserves
  - Currency + Required Reserves
90. Which of the following statement is not true with reference to RBI's Sixth bi-monthly Monetary Policy Statement for 2017-18 announced on 7<sup>th</sup> February, 2018.
- Cash Reserve Ratio (CRR) 4 %
  - Repo Rate 6 %
  - Bank Rate at 6.25%
  - Reverse Repo Rate 7.25 %
91. The process by which RBI or any Central bank protects the economy against adverse economic shocks is known as
- Protection
  - Liberalization
  - Stabilization
  - Sterilization
92. Which of the following is not an asset held by commercial bank?
- Bills of exchange
  - Current account deposits
  - Money lent at short notice
  - Credit balances with central bank
93. Which among the following Industrial Policy was based upon the Mahalanobis Model of growth?
- Industrial Policy Resolution – 1956
  - Industry Policy Statement 1973
  - Industrial Policy Statement 1977
  - None of them
94. The Mahatma Gandhi National Rural Employment Guarantee Act mandates at least what fraction of the beneficiaries to be women?
- 25%
  - 30%
  - 45%
  - 50%
95. India's first operational special economic zone (SEZ) is located at?
- Ahamadabad
  - Surat
  - Indore
  - Jaipur
96. India had a plan holiday
- After the China-India war of 1962
  - After the India-Pakistan war of 1965
  - After the Drought of 1966
  - None of the above
97. Rolling plan was designed for the period
- 1966-69
  - 1978-83
  - 1975-80
  - 1982-86
98. National Food for Work Programme, was launched in 150 districts of India in 2004. Later this programme was subsumed in which among the following programmes?
- Sampoorna Grameen Rozgar Yojna
  - Mahatma Gandhi NREGA
  - Pradhan Mantri Rozgar Yojna
  - None of them
99. Indian Green revolution is the most successful in
- Wheat and Potato
  - Jwar and Oil seeds
  - Tea and coffee
  - Wheat and Rice
100. Match the following pairs
- |                                 |                           |
|---------------------------------|---------------------------|
| 1. Labour theory of value       | I. Hechscher-Ohlin theory |
| 2. Concept of opportunity cost  | II. Offer Curve           |
| 3. Differences in factor prices | III. Ricardian theory     |
| 4. Community Indifference Curve | IV. Modren theory         |
- 1-III, 2-IV, 3-I, 4-II
  - 1-IV, 2-I, 3-III, 4-II
  - 1-IV, 2-III, 3-II, 4-I
  - 1-I, 2-IV, 3-III, 4-II