

# Entrance Examination – 2024

Ph.D (Economics)

Time : 2 hours

Max Marks 70

HALL TICKET NUMBER

## INSTRUCTIONS

**Read all instructions carefully before answering**

1. Enter your Hall Ticket Number on this page as well as on the OMR sheet.
2. Answers are to be marked on the OMR answer sheet, following the instructions provided thereon.
3. Handover the OMR sheet at end of the examination.
4. Use of non-programmable calculator is allowed.
5. There are 70 questions on this paper. The question paper has two parts, namely, Part-A and Part-B. Part A contains 35 questions and Part B also contains 35 questions. Marks obtained in the Part A will determine the merit rank in case of a tie in the total marks obtained.
6. Each correct answer carries one mark. There is no negative marking.
7. Answering more than one option would invalidate the answer.
7. The question has 18 pages including the cover page and 2 pages for rough work.

## Part A

1. Type II error in statistical inference refers to
  - A. Rejecting a true hypothesis
  - B. Accepting a false hypothesis
  - C. Accepting a true hypothesis
  - D. Rejecting a false hypothesis
  
2. The methodological approach adopted in Marshall-Jevons-Walras tradition of neoclassical economics is rested on
  - A. Methodological holism
  - B. Methodological individualism
  - C. Methodological nihilism
  - D. Methodological inductivism
  
3. To obtain the slope estimator using the least squares principle, you divide the
  - A. Sample variance of X by the sample variance of Y
  - B. Sample covariance of X and Y by the sample variance of Y
  - C. Sample covariance of X and Y by the sample variance of X
  - D. Sample variance of X by the sample covariance of X and Y
  
4. An *argument* in logic essentially is:
  - A. Any group of propositions of which one is claimed to follow from the others, which are regarded as providing support or grounds for the truth of that one.
  - B. A proposition to which the other propositions in the argument are claimed to give support, or for which they are given as reasons.
  - C. A group of statements of propositions upon which inference is based; the propositions that are claimed to provide grounds or reasons for the conclusion.
  - D. A group of statements of propositions accepted as the assumptions of the theory.
  
5. In a balanced panel data regression model, the choice between a Fixed effect and a Random effect model is determined using which of the following test statistics?
  - A. Blundell-Bond test statistics
  - B. Honda, King-Wu test statistics
  - C. Arellano-Bond test statistics
  - D. Hausman's test statistics

6. \_\_\_\_\_ is an approach to knowledge that is derived from a combination of sense experience, and logic.

- A. Ontology
- B. Epistemology
- C. Axiology
- D. Metaphysics

7. The t-statistic is calculated by dividing

- A. the OLS estimator by its standard deviation
- B. the slope by the standard deviation of the explanatory variable.
- C. the estimator minus its hypothesized value by the standard error of the estimator.
- D. the slope by 1.96

8. Meta-analysis of quantitative studies comes under which of the following subtypes of literature reviews?

- A. Methodological reviews
- B. General reviews
- C. Narrative reviews
- D. Full systematic reviews

9. What is the principle of utility according to Jeremy Bentham in 'An Introduction to the Principles of Morals and Legislation'?

- A. Actions are right if they lead to efficient resource allocation
- B. Actions are right if they maximise happiness and minimize pain
- C. Actions are right if they are approved by the society
- D. Actions are right if they are decided by the intellectuals of the society

10. Resorting to making assumptions like self-interest of individuals as motivational factor, based on general observations, to make theories of utility maximisation in consumption and production is known as:

- A. Economic realism
- B. Apriorism
- C. Operationalism
- D. Constructivism



11. In a lottery there are 200 prizes of ₹5, 20 prizes of ₹25 and 5 prizes of ₹100. Assuming that 10,000 tickets are to be issued and sold what is a fair price to pay for a ticket?

- A. 23
- B. 2.3
- C. 0.2
- D. 0.5

12. Which of the following major theoretical frameworks used in the social sciences refers to the view that social processes can only be understood by their relation to overarching social systems?

- A. Structuralism
- B. Post-structuralism
- C. Operationalism
- D. Symbolic interactionism

13. If we select each seventh day from a calendar, the sample will consist of just one specific day of the week (e.g. only Monday or only Saturday), no matter how many units we include. This is an example of:

- A. Simple random sampling
- B. Systematic sampling
- C. Stratified sampling
- D. Cluster sampling

14. *Definitions* for terms are usually employed in science to avoid \_\_\_\_\_.

- A. Verbal Disputes
- B. Conjectures
- C. Fallacies
- D. Metaphors

15. The inverse of  $\begin{pmatrix} 3 & 1 \\ 5 & 2 \end{pmatrix}$  is

- A.  $\begin{pmatrix} 2 & -1 \\ -5 & 3 \end{pmatrix}$  B.  $\begin{pmatrix} -2 & 5 \\ 1 & -3 \end{pmatrix}$  C.  $\begin{pmatrix} 3 & -1 \\ -5 & -3 \end{pmatrix}$  D.  $\begin{pmatrix} -3 & 5 \\ 1 & -2 \end{pmatrix}$

16. In an argument, premise indicator usually can be identified by the words or phrases like:

- A. Therefore, hence, so.
- B. Henceforth
- C. Because, since
- D. Pari passu

17. A deductive proposition drawn logically from the set of some false premise statements fulfils:

- A. Validity and Truth of the argument
- B. Truth, but not validity of the argument
- C. Neither validity not truth of the argument
- D. Validity but not the truth of the argument

18. While deriving the formula to estimate logit regression parameters using the maximum likelihood estimation method, which of the following approximation technique is used.

- A. The Lagrange's method
- B. The Kuhn-Tucker method
- C. The Newton-Raphson method
- D. The Gauss-Newton method

19. For a random variable  $X$ , with probability density function  $f(x)$ , if  $M(t) = E(e^{tx})$  exists, then it can be called as:

- A. Population Mean Value of  $X$
- B. Cumulative distribution function
- C. The likelihood function of  $X$
- D. Moment-generating function of  $X$

20. Which of the following principal methodological shift in Neoclassical Economics occurred compared to Classical Economics?

- A. Marginalism
- B. Apriorism
- C. Deductivism
- D. Positivism

21. In case of a distributed lag model  $Y_t = \alpha + \sum_{i=0}^{\infty} \beta_i X_{t-i} + \varepsilon_t$  the parameter  $\beta_0$  is called as:

- A. The short-run or impact multiplier
- B. The cumulated effect or interim multiplier
- C. The long-run multiplier
- D. All the above

22. What became popular as “Marginalist Controversy”, the work of Robert Hall and Charles Hitch, titled *Price Theory and Business Behaviour* in 1939, provided empirical evidence for the hypothesis that firms in general follow :

- A. Average Cost Pricing method
- B. Marginal Cost Pricing method
- C. Skimming price method
- D. Predatory Pricing

23. Which of the following statements are true about the comparison between ARCH(P) and GARCH (1,1) models?

- A. ARCH (P) model is more parsimonious than GARCH (1, 1) model
- B. ARCH (P) model is less parsimonious than GARCH (1, 1) model
- C. ARCH (P) models volatility of a time series more efficiently than GARCH (1, 1)
- D. Both the models could not be used to model volatile series

24. Which correlation is the strongest +0.65 or -0.70

- A. -0.70
- B. +0.65
- C. Depends on N
- D. Cannot say from the information given

25. Formalism in economic theory means:

- A. Making assumptions before theory
- B. Pure mathematical model building
- C. Drawing conclusions strictly from the analysis
- D. Testing a theory with empirical data

26. Which of the following limitations of the range is overcome by the inter-quartile range?

- A. The sum of the range variances is zero
- B. The range is difficult to compute
- C. The range is influenced too much by extreme values
- D. The range is negative

27. Which problem can occur if you include a dummy variable for every level of a categorical variable in a regression model?

- A. Heteroscedasticity
- B. Perfect multicollinearity
- C. Autocorrelation
- D. Homoscedasticity



28. What is Karl Popper's criterion for the scientific status of a theory?

- A. Its empirical accuracy
- B. Its ability to be falsified
- C. Its simplicity
- D. Its coherence with existing theories

29. John speaks the truth 2 out of 3 times and Jill speaks 4 out of 5 times. They agree in the assertion that from a bag containing 6 balls of different colours, a red ball has been drawn. What is the probability that the statement is true?

- A. 1/25
- B. 4/45
- C. 40/41
- D. 1/450

30. Which of the following persons is a major methodological critic on economic theory ?

- A. John Pheby
- B. Mark Blaug
- C. Frederik von Hayek
- D. Alfred Marshall

31. The local maximum point of  $f(x) = x^2e^x$  is \_\_\_\_\_.

- A. 2
- B. 0
- C. -1
- D. -2

32. Milton Friedman in his famous book *Methodology of Positive Economics* asserts that :

- A. Positive economics should necessarily have normative economics
- B. Normative economics should ultimately guide positive economics
- C. Positive economics should ultimately guide normative economics
- D. There is no need for normative economics

33. Which of the following assumptions is dropped by New Institutional Economists in their retheorization of market exchanges:

- A. Large number of sellers and buyers
- B. Self-Interest of agents
- C. Homo Economicus
- D. Perfect Rationality

34. Consider two firms (1 and 2) in a Bertrand model, the firms have to decide the price to be charged which here are identified as high, Medium and low. The payoff for the two firms based on the choice of price is given in the below representation:

		Firm 2		
		High	Medium	low
Firm 1	High	6,6	0,10	0, 8
	Medium	10, 0	5,5	0, 8
	Low	8,0	8.0	4,4

The Nash Equilibrium to this game is when

- A. Firm 1 chooses High and firm 2 chooses high
- B. Firm 1 chooses Medium and firm 2 chooses high
- C. Firm 1 chooses Low and firm 2 chooses high
- D. Firm 1 chooses Low and firm 2 chooses low

35. Ethnographers in their studies depend crucially on:

- A. Experimental methods
- B. Administrative Reports
- C. Historical Records
- D. Participatory Observation



## Part B

36. Some economists have described the Indian economy's recovery after Covid19 Pandemic as K-shaped recovery, because

- A. High growth is accompanied by high inflation
- B. High growth is not accompanied by rising FDI
- C. High growth is not accompanied by growth in consumption
- D. High growth is not accompanied by fall in current account deficit

37. A discriminating monopolist has the following demand functions:

$$P_1 = 100 - Q_1, \quad P_2 = 80 - Q_2 \text{ and cost function: } C = 6(Q_1 + Q_2)$$

What is the profit of the monopolist if it becomes illegal to discriminate?

- A. 3578
- B. 3558
- C. 3528
- D. 3518

38. A consumer has a utility function  $u(x_1, x_2) = x_1 x_2$ . Assume that her income is  $M = 18$ , and the prices are  $p_1 = 1$  and  $p_2 = 1$ . What is her utility at the optimal consumption bundle?

- A. 81
- B. 75
- C. 63
- D. 18

39. According to Solow, the cause of Harrodian instability ( $g_w \neq g_n$ ) is due to

- A. Expectations and uncertainties
- B. Fixed Technology Coefficients
- C. Variable Technology Coefficients
- D. Variable growth of Labour force of savings rate

40. In Public Finance, a desirable stance of fiscal policy to smoothen business cycles is:

- A. Cyclical expansion
- B. Secular Expansion
- C. Counter-cyclicality
- D. Zero-Revenue deficit budgeting

41. According to David Ricardo, in his *Principles of Political economy*, commodities such as “rare statues and pictures, scarce books and coins, wines of a peculiar quality... of which there is a very limited quantity”, their value is

- A. Independent of Labour Embodied
- B. Independent of Labour Commanded
- C. Dependent on Labour Embodied
- D. Dependent on Labour Commanded

42. According to the Solow-Swan model, which of the following scenarios (other things being equal) explains progressively smaller increases in per capita GDP?

- A. An increase in population
- B. An increase in the capital stock
- C. An equal increase in both population and the stock of capital
- D. An equal increase in population and output

43. Match the following concepts with the economists:

- |                               |                       |
|-------------------------------|-----------------------|
| i). <i>Tableau Economique</i> | a. James Buchanan     |
| ii). Demonstration Effect     | b. Romer PM           |
| iii). Endogenous Growth       | c. François Quesnay   |
| iv). Ricardian Equivalence    | d. James Duessenberry |

Answers:

- |    |      |       |        |       |
|----|------|-------|--------|-------|
| A. | i)-d | ii)-a | iii)-a | iv)-c |
| B. | i)-c | ii)-d | iii)-a | iv)-b |
| C. | i)-c | ii)-d | iii)-b | iv)-a |
| D. | i)-b | ii)-d | iii)-a | iv)-c |

44. Optimal Taxation theory is propounded by:

- A. AC Pigou
- B. Arthur Laffer
- C. M.C Buchanan
- D. Peter Diamond and James Mirrlees

45. Which of the following is the title of the book written by famous psychologist, Daniel Kahneman, who received Nobel prize in economics?

- A. Thinking, Fast and Slow
- B. Market for Lemons
- C. Poor Economics
- D. Roaring Nineties

46. Which of the following assumptions when is introduced, the Long run equilibrium becomes indeterminate under perfect competition?

- A. Constant Returns to Scale
- B. Law of Diminishing Returns
- C. Increasing Returns to Scale
- D. Large number of sellers and buyers in the market

47. Marx's own solution to the 'Transformation Problem' results in

- A. Violation of the equilibrium in credit market.
- B. Violation of equilibrium of Simple Reproduction.
- C. Violation of equality of Use values
- D. All of the Above.

48. Which of the following would cause Indian rupees to depreciate against the United States of America (USA) dollar, other things being equal?

- A. A fall in incomes in the USA
- B. News which suggest that prospects for Indian firms are improving
- C. A rise in interest rates in India
- D. An expected rise in the value of rupees

49. Which of the following economists made significant contribution to understanding of financial instability in capitalist economy:

- A. John Maynard Keynes
- B. Karl Menger
- C. Hyman Mynski
- D. Nicholas Kaldor



50. According to the theory of comparative advantage, which of the following is not a reason why countries trade?

- A. Costs are higher in one country than in another
- B. Prices are lower in one country than in another
- C. The productivity of labour differs across countries and industries
- D. Exports give a country a political advantage over other countries that export less

51. Discrimination that segregates qualified women into lower paying jobs is called

- A. Occupational crowding
- B. Wage discrimination
- C. Discrimination in human capital
- D. Employment discrimination

52. What is the Keynesian perspective on the effectiveness of fiscal policy during a recession?

- A. Fiscal policy is ineffective and should be avoided.
- B. Fiscal policy can help stabilize the economy by influencing aggregate demand.
- C. Fiscal policy only works when combined with monetary policy.
- D. Fiscal policy should be used to control inflation rather than stabilize the economy.

53. Which trade theory contends that a country that initially develops and exports a new product may eventually become an importer of it, and may no longer manufacture the product?

- A. Theory of factor endowments
- B. Theory of overlapping demands
- C. Economies of scale theory
- D. Product life cycle theory

54. Which of the following scenarios best illustrates the shock absorber hypothesis?

- A. A country with a fixed exchange rate experiencing a financial crisis due to capital outflows
- B. A country with a floating exchange rate mitigating the impact of a sudden drop in export demand through currency depreciation
- C. A country with a pegged exchange rate maintaining stable economic growth
- D. A country using capital controls to manage currency fluctuations

55. According to the Periodic Labour Force Survey (PLFS) Report 2024, the unemployment rate in urban India has declined to:

- A. 6.7 %
- B. 9.2 %
- C. 4.5 %
- D. 2.1 %

56. In the Lucas-Sargent-Wallace model, what is the main implication of rational expectations for economic policy?

- A. Economic agents can be systematically fooled by policymakers.
- B. Economic agents form their expectations based on past trends alone.
- C. Economic agents use all available information to form expectations, making systematic policy manipulation ineffective.
- D. Economic agents rely only on current policy announcements to form expectations.

57. While China's share of manufacturing sector in its GDP is about 26 %, the same is about \_\_\_\_\_ % in India in 2023:

- A. 46
- B. 25
- C. 13
- D. 8

58. Which of the following sectors received largest share of public investment in the past 10 years in India?

- A. Manufacturing
- B. Agriculture
- C. Infrastructure
- D. Telecommunications

59. Consider the following statement.

“The curvature of the expected utility function describes the consumer's attitudes toward risk and risk behaviour. (i) If it is concave, the consumer is a risk averter; and (ii) if it is convex, the consumer is a risk lover”

Which one of the following is true?

- A. Only (i) is true and (ii) is false.
- B. Both (i) and (ii) are true
- C. Both (i) and (ii) are false
- D. Only (ii) is true and (i) is false

60. Which of the following is the reason for a substantial fall in the share of Centre's transfers to the States in India in the recent years ?

- A. Increase in Direct Taxes
- B. Increase in GST
- C. Increase in Corporate Taxes
- D. Increase in Cesses and Surcharges

61. The term 'Silver economy' is related to which among the following?

- A. Elderly in our society
- B. Production of microchips
- C. The immense growth of egg production
- D. Vaccine manufacturing

62. Which of the following is not the engine of the economic transformation under *PM-GatiShakti*.

- A. Electricity
- B. Mass Transport
- C. Waterways
- D. Logistics Infrastructure

63. Which of the following best describes the monetary policy strategy currently followed by the Reserve Bank of India (RBI)?

- A. The RBI follows the fixed monetary targeting framework
- B. The RBI follows the flexible inflation targeting framework
- C. The RBI follows the multiple indicator approach framework
- D. The RBI follows a hybrid strategy with elements of both monetary and inflation targeting

64. Suppose that Taylor Rule is not followed and the nominal interest rates are increased by less than inflation rate, then real interest rate will \_\_\_\_\_ and the monetary policy will be too \_\_\_\_\_.

- A. rise; tight
- B. rise; loose
- C. fall; loose
- D. fall; tight

65. A contract that states the lender's rights and privileges and the borrower's obligations are called

- A. Bond Indenture
- B. Registered bond
- C. Junk bond
- D. Debentures



66. In the following Diagram-1 and Diagram-2, Isoquants for a producer with two inputs denoted by  $x_1$  and  $x_2$  are shown.

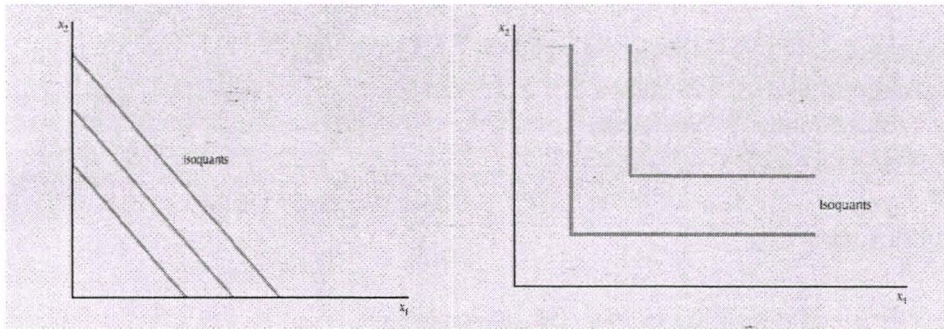


Diagram 1

Diagram 2

For the above two diagrams, which one of the following statements is true?

- A. Inputs of production in Diagram-1 are complements to each other.
- B. Diagram-2 shows isoquants for two inputs which are perfect substitutes of each other.
- C. Inputs of production in Diagram-1 are perfect substitutes of each other but inputs used in Diagram-2 are fixed proportions
- D. Cobb-Douglas production functions are shown in Diagram-1 and linear production curves are shown in Diagram-2.

67. The patent fee that an operating producer has to pay to a patent holder is an example of:

- A. Differential Rent
- B. Absolute Rent
- C. Quasi-Rent
- D. Operational Rent

68. In the Cambridge capital controversies debate, if interest rate falls, the capitalist may re-switch the techniques of production. This is known as

- A. Capital Reversing
- B. Capital Inversing
- C. Capital Deepening
- D. Capital Widening

69. The inverse supply and inverse demand functions of a commodity X are given by  $P_s = 8 + 4X$  and  $P_d = 20 - 5X$  respectively. If price P and quantity X are determined at the equality of total demand and total supply, then the consumer's surplus (CS) and producer's surplus (PS) are ..... and ....., respectively.

- A. Approximately CS= 4.44 units and PS = 3.55 units
- B. Approximately CS = 8.00 and PS = 1.33 units
- C. CS = 16 units and PS = 40 units
- D. CS = 8 units and PS = 20 units

70. Super multiplier refers to:

- A. Interaction of the Multiplier and the Accelerator
  - B. Reciprocal of the marginal propensity to consume
  - C. Capital output ratio
  - D. Budget multiplier
-

**Key to the Entrance Exam Ph.D Economics 2024**  
**School of Economics, University of Hyderabad**

Q. No	Answer	Q No	Answer
1	B	36	C
2	B	37	C
3	C	38	A
4	A	39	B
5	D	40	C
6	B	41	A
7	C	42	B
8	D	43	C
9	B	44	D
10	B	45	A
11	C	46	C
12	A	47	B
13	B	48	A
14	A	49	C
15	A	50	D
16	C	51	A
17	D	52	B
18	C	53	D
19	D	54	B
20	A	55	A
21	A	56	C
22	A	57	C
23	B	58	C
24	A	59	B
25	B	60	D
26	C	61	A
27	B	62	A
28	B	63	B
29	C	64	C
30	B	65	A
31	D	66	C
32	C	67	C
33	D	68	A
34	D	69	A
35	D	70	A

*My answer*