Ph. D. (Economics) Entrance Examination 2026 **Time : 2 Hours**

Do not open this Test Booklet until you are asked to do so. **Maximum Marks : 100**

Immediately fill in the particulars on this page of the Question Booklet and the Answer Sheet with Blue/Black Ball Point Pen. Use of pencil is strictly prohibited.

Name of the candidate (In Capital Letters) : _____

Roll Number (In Figure) : | | | | | | | | | | |

(In Words) : _____

Name of Examination Centre (in Capital Letters) : _____

Candidate's Signature : _____ Invigilator's Signature _____

Important Instructions :

This booklet contains 100 objective type questions. First 50 questions of Research Methodology and Second 50 questions of Subject Specific. Each having four options a, b, c, d.

1. Candidates are not allowed to carry textual material printed or written, bits of papers, pages, mobile phone, electronic device or any other material except the Admit Card inside the Examination Hall/Room.
2. The candidates should fill in the required particulars on the Test Booklet and Answer Sheet with Blue/ Black Ball Point Pen.
3. The candidate should not write their Roll Number anywhere else (except in the specified space) on the Test Booklet/Answer Sheet.
4. Out of the four options given for each question, the candidate must mark one correct option as an answer only.
5. There is no negative marking for any wrong answer.
6. Handle the Test Booklet and Answer Sheet with care, as under no circumstances (except for discrepancy in the Test Booklet Code and Answer Sheet Code), will another set be provided.
7. The candidates are not allowed to do any rough work or writing work on the Answer Sheet. All calculations/writing work are to be done in the space available in the Test Booklet itself.
8. Each candidate must show on demand her Admit Card to the Invigilator.
9. No candidate, without special permission of the Superintendent or Invigilator, should leave her seat.
10. The candidate should not leave the Examination Hall without handing over their Answer Sheet and Test Booklet to the invigilator on the duty and signing the Attendance Sheet.
11. No part of the Test Booklet and Answer Sheet shall be detached under circumstances.

NOTE : THIS BOOKLET SHALL BE RETAINED FOR SIX MONTH ONLY.

(Research Methodology)

1. A researcher has 12,000 households and wants a systematic sample of 600 households. The sampling interval should be:

A. 10
B. 15
C. 20
D. 25

2. Spearman's rank correlation is particularly appropriate when:

A. Variables are ranked/ordinal or assumptions for Pearson correlation are unsuitable
B. Both variables must be nominal
C. The researcher is comparing two means
D. The dependent variable is necessarily binary

3. The Kruskal-Wallis test is a non-parametric alternative to:

A. Independent t-test
B. Paired t-test
C. One-way ANOVA
D. Pearson correlation

4. The Mann-Whitney U test is generally used as a non-parametric alternative to:

A. Paired t-test
B. Independent-samples t-test
C. One-way ANOVA
D. Pearson correlation

5. A complete list of all elements from which a sample is actually drawn is called:

A. Population parameter
B. Research universe
C. Sample statistic
D. Sampling frame

6. Which of the following best distinguishes basic research from applied research?

A. Basic research is always quantitative, whereas applied research is qualitative
B. Basic research primarily develops knowledge/theory, whereas applied research addresses practical problems
C. Basic research uses primary data, whereas applied research uses secondary data
D. Basic research does not require hypotheses

7. A researcher obtains a p-value of 0.03 and uses a 5% significance level. What is the appropriate decision?

A. Reject H0 because $0.03 < 0.05$
B. Accept H0 because $0.03 < 0.05$
C. Reject H1 because $0.03 > 0.01$
D. No decision can be made from the p-value

8. Suppose training increases employee motivation, which subsequently increases productivity. Motivation is best described as:

A. Control variable
B. Intervening variable
C. Extraneous variable
D. Sampling-frame variable

9. A researcher changes or selectively manipulates recorded data so that the results support the hypothesis. This is:

A. Fabrication
B. Falsification
C. Peer review
D. Triangulation

10. A sample mean is 80, population standard deviation is 20 and sample size is 100. Using z=1.96, the approximate 95% confidence interval is:

A. 76.08 to 83.92
B. 78.04 to 81.96
C. 60.00 to 100.00
D. 79.60 to 80.40

11. The principal purpose of a pilot study is to:

A. Produce the final findings
B. Test and refine research procedures and instruments before the main study
C. Replace the sampling process
D. Guarantee external validity

12. Which test is most appropriate for comparing the means of two independent groups when the assumptions of a parametric test are reasonably satisfied?

A. Independent-samples t-test
B. Chi-square test
C. Wilcoxon signed-rank test
D. Kruskal-Wallis test

13. A theoretical framework primarily:

A. Specifies the computer software to be used
B. Replaces the research design
C. Determines the sample size automatically
D. Connects the research problem with relevant theories and concepts

14. A chi-square goodness-of-fit test has four categories. The degrees of freedom are:

A. 2
B. 3
C. 4
D. 5

15. A researcher invents observations that were never actually collected and enters them into the dataset. This is:

A. Plagiarism

B. Fabrication
C. Falsification
D. Self-citation

16. A population contains four strata with sizes 100, 200, 300 and 400. If a proportional sample of 100 is required, the number selected from the third stratum should be:

A. 20
B. 25
C. 30
D. 40

17. A survey records the following frequencies for four response categories: 20, 35, 25 and 20. What is the cumulative frequency after the third category?

A. 55
B. 60
C. 80
D. 100

18. A questionnaire contains 40 items. A researcher removes 8 poorly performing items. What percentage of the original items has been removed?

A. 15%
B. 20%
C. 25%
D. 32%

19. A one-way ANOVA has three groups and 45 total observations. The within-groups degrees of freedom are:

A. 2
B. 3
C. 42
D. 44

20. The primary purpose of research design is to:

A. Determine only the sample size
B. Provide a logical framework for answering the research questions
C. Eliminate the need for data analysis
D. Ensure that every hypothesis is accepted

21. Which design is strongest for establishing a causal relationship between an independent and dependent variable?

A. Descriptive design
B. Historical design
C. Cross-sectional survey
D. Experimental design

22. A sample has a mean of 50 and standard deviation of 10. If the sample size is 100, the standard error of the mean is:

A. 0.1
B. 1
C. 10

D. 100

23. A researcher observes that several studies have examined employee satisfaction but very few have investigated whether satisfaction differs between remote and hybrid employees. This observation primarily helps the researcher identify:

A. Sampling error
B. Type-I error
C. Measurement scale
D. Research gap

24. A one-way ANOVA compares four groups, each containing 10 observations. The total number of observations is 40. The between-groups degrees of freedom are:

A. 3
B. 4
C. 36
D. 39

25. In a regression equation Y=20+3X, an increase of 4 units in X is associated with a predicted increase in Y of:

A. 4
B. 7
C. 12
D. 80

26. Validity primarily concerns:

A. Consistency only
B. Whether an instrument measures what it is intended to measure
C. Sample size
D. Response rate

27. A researcher studies the reasons for unusually high employee turnover in one organisation and recommends immediate changes in its HR policies. This research is most appropriately classified as:

A. Fundamental research
B. Conceptual research
C. Historical research
D. Action research

28. Which source is generally considered a scholarly source?

A. Anonymous social-media post
B. Peer-reviewed journal article
C. Commercial advertisement
D. Unverified blog post

29. Which of the following best represents a research question?

A. Employee motivation is positively related to productivity.
B. To determine whether training improves productivity.
C. Does training intensity influence employee productivity?
D. Training intensity is the independent variable.

30. Snowball sampling is particularly useful when:

A. A complete sampling frame exists
B. The population is hidden or difficult to reach
C. Equal probability selection is mandatory
D. The population is extremely homogeneous

31. A researcher decides in advance to interview 50 male and 50 female consumers but selects participants through convenience. This is:

A. Stratified random sampling
B. Quota sampling
C. Cluster sampling
D. Systematic sampling

32. Which Boolean search string would most effectively retrieve literature concerning both employee engagement and remote work while allowing either term 'employee engagement' or 'work engagement'?

A. employee engagement OR remote work
B. employee engagement AND remote work OR work engagement
C. (employee engagement OR work engagement) AND remote work
D. employee engagement NOT remote work

33. The major conceptual difference between stratified and cluster sampling is that:

A. Stratified sampling is always non-probability sampling
B. Strata are usually internally similar, while clusters are ideally miniature representations of the population
C. Clusters are always smaller than strata
D. Stratified sampling never uses random selection

34. Cronbach's alpha is primarily associated with:

A. Sampling error
B. Internal consistency reliability
C. External validity
D. Normality testing

35. A normal distribution has mean 100 and standard deviation 15. What is the z-score for an observation of 130?

A. 1
B. 1.5
C. 2
D. 2.5

36. A researcher uses Generative AI to help draft a literature review. Which practice is most consistent with responsible research?

A. Submit AI-generated text without verification
B. Assume all AI-generated references are genuine
C. Verify sources, maintain transparency about appropriate AI use, protect confidential data and retain human responsibility for the scholarly work
D. List the AI tool as the sole author of the research paper

37. The main purpose of a research proposal is to:

A. Present only the final statistical results
B. Provide a systematic plan and justification for the proposed research
C. Replace the literature review
D. Guarantee that the hypothesis will be supported

38. In a study, 60 respondents belong to Group A, 90 to Group B and 150 to Group C. What percentage of the sample belongs to Group B?

A. 20%
B. 25%
C. 30%
D. 37.5%

39. A researcher divides employees into departments and randomly selects employees from each department. This is:

A. Cluster sampling
B. Stratified sampling
C. Snowball sampling
D. Convenience sampling

40. If the correlation coefficient between advertising expenditure and sales is r=0.80, the coefficient of determination is:

A. 0.16
B. 0.40
C. 0.64
D. 0.80

41. A questionnaire appears, on superficial inspection, to measure employee satisfaction. This is best described as:

A. Face validity
B. Criterion validity
C. Predictive validity
D. Internal consistency

42. A researcher receives 360 usable responses from 450 distributed questionnaires. The response rate is:

A. 70%
B. 75%
C. 80%
D. 85%

43. A newly developed aptitude test is compared with an established test measuring the same construct. This is evidence most closely related to:

A. Construct validity
B. Face validity
C. Sampling validity
D. Internal validity

44. Increasing sample size generally reduces:

A. Non-sampling error automatically
B. Sampling error
C. Response bias automatically
D. Measurement error automatically

45. For the data 5, 8, 12, 17 and 20, the range is:

A. 12
B. 15
C. 17
D. 20

46. Which question is most clearly open-ended?

A. Are you satisfied? Yes/No
B. Rate satisfaction from 1 to 5
C. What factors influenced your decision to leave the organisation?
D. Do you agree? Strongly agree/Agree/Neutral/Disagree/Strongly disagree

47. Which property distinguishes a ratio scale from an interval scale?

A. Ranking
B. Equal intervals
C. Meaningful absolute zero
D. Categorisation

48. If r= -0.70, the relationship between two variables is:

A. Strong positive
B. Moderate/strong negative
C. Perfect negative
D. No relationship

49. Which of the following is an example of primary data?

A. Data obtained from a published government report
B. Data collected directly by the researcher through interviews
C. Data obtained from an existing journal article
D. Data downloaded from an archival database

50. A researcher receives 270 completed questionnaires out of 360 distributed. If 30 questionnaires are rejected because of missing data, what percentage of distributed questionnaires becomes usable?

A. 60%
B. 66.67%
C. 75%
D. 83.33%

Q.51. The strategy of choosing the policy which has the best possible outcome is known as:

A) Dominant strategy
B) Maxi max
C) Mini max
D) Maxi min

Q.52. If income effect for a good is in the opposite direction as the substitution effect but the substitution effect dominates, then the good is:

A) Normal good
B) Inferior but not Giffen
C) Giffen
D) None of the above

Q.53. The concept of "Vicious Circle of Poverty" given by:

A) Kindleberger
B) Schumpeter
C) Ragnar Nurkse
D) Gunnar Myrdal

Q.54. The most popular definition of sustainable development given by:

A) World Development Report
B) Brundtland Report
C) World Bank
D) IMF

Q.55. The value of correlation coefficient lies between:

A) 0 to 1
B) 1 to -1
C) -1 to +1
D) None of the above

Q.56. In consumption, inferior goods have:

A) Negative income effect
B) Positive income effect
C) Zero income effect
D) Infinite income effect

Q.57. Consider the following liquid assets:

I) Demand deposits with the banks
II) Time deposits with the banks
III) Saving deposits with the banks
IV) Currency

The correct sequence of these in the ascending order of liquidity is:

A) IV, III, II, I
B) I, IV, III, II
C) II, III, I, IV
D) IV, I, III, II

Q.58. If with the increase in income, the percentage of income collected as tax remains constant, the tax will be called:

A) Regressive
B) Proportional
B) Progressive
D) Neutral

Q.59. Which production function admits both Harrods-neutral and Hicks-neutral technical progress?

A) Cobb-Douglas
C) V.E.S.
B) C.E.S.
D) None of the above

Q.60. In the context of steady state growth in Solow's model, the output growth rate over time will be:

A) Increasing
C) Constant
B) Decreasing
D) Fluctuating

Q.61. Which of the following was a qualitative credit control measure in India?

A) Bank Rate
C) Credit rationing
B) Open market operation
D) Reserve ratio changes

Q.62. The open market operations refer to:

A) The Central Bank lending to Commercial Banks
B) Specifying the margin requirements by the Central Bank
C) The purchase of stocks in the Exchange
D) The sale or purchase of government securities by the Central Bank

Q.63. In Binomial distribution:

A) Mean = Standard deviation
C) Mean > Standard deviation
B) Mean < Standard deviation
D) Standard deviation is zero

Q.64. The amount of output lost when the inflation rate is reduced by one per cent is called:

A) The Sacrifice ratio
C) The Solow residual
B) Planck's constant
D) Okun's law

Q.65. Wagner's law can be tested using the following relationship:

A) Investment = f(Income)
B) Inflation = f(Money supply)
C) Govt. expenditure = f(Gross Domestic Product)
D) Govt. expenditure = f(Money supply)

Q.66. If the value of cross elasticity of demand is +1, the commodities are:

A) Complementary
C) Giffen
B) Substitutes
D) Not related to each other

Q.67. When planned investment is greater than planned savings, the gross domestic product will:

A) Rise
B) Fall
C) Remain the same
D) Be in disequilibrium

Q.68. Quasi-rent may be defined as:

A) Price – MC
B) Price – ATC
B) Price – AVC
D) Price – AFC

Q.69. Who has defined the concept of shadow prices first time?

A) G. Myrdal
B) H. Leibenstein
C) J. Tinbergen
D) R. Rodan

Q.70. In the Keynesian range of economics of LM Curve, an expansionary fiscal policy will have:

A) Full crowding out
B) No crowding out
C) Partial crowding out
D) None of the above

Q.71. If a group of data has only one mode and its value is less than that of mean, it can then be concluded that the graph of distribution is:

A) Symmetrical
B) Skewed to the left
C) Skewed to the right
D) Platykurtic

Q.72. Perfect competition and optimal allocation of factors- general economic efficiency condition is:

A) $MRSXY = MRT_{XY}$
B) $MRSXY = P_x / P_y$
C) $MRTS_{LK} = PL / PK$
D) $MC_x / MC_y = P_x / P_y$

Q.73. Match List-I with List-II and select the correct answer from the codes given below the lists:

List-I (Theory of Profit)	List-II (Name of Economist)
(a) Risk-bearing theory	(i) Frank H. Knight
(b) Dynamic theory	(ii) F. B. Hawley
(c) Theory of uncertainty	(iii) G. L. S. Shackle
(d) Theory of potential surprise	(iv) J. B. Clark

Codes:

A) (a)-iv, (b)-iii, (c)-ii, (d)-i
B) (a)-ii, (b)-iii, (c)-iv, (d)-i
C) (a)-iii, (b)-iv, (c)-i, (d)-ii
D) (a)-ii, (b)-iv, (c)-i, (d)-iii

Q.74. The basic rationale of the theory of "Big Push" is based on:

A) Internal Economies
B) Size of Population
C) External Economies
D) None of these

Q.75. The open market operations refer to:

A) The Central Bank lending to Commercial Banks
B) Specifying the margin requirements by the Central Bank
C) The purchase of stocks in the Exchange
D) The sale or purchase of government securities by the Central Bank

Q.76. Banks are required to maintain SLR under which act?

A) Section 24 of RBI Act
B) Section 49 of the Banking Regulation Act
B) Section 24 of the Banking Regulation Act
D) Mercantile Law

Q.77. In which year, SEBI Act was passed by the Indian Parliament?

A) 1 988
B) 1 991
C) 1 992
D) 1 998

Q.78. The cost incurred by the firm in hiring labor is called:

A) Implicit cost
B) Explicit cost
C) Marginal cost
D) Total cost

Q.79. Cumulative frequency curve used to find the value of:

A) Median
B) Mean deviation
C) Mode
D) Kurtosis

Q.80. The displacement effect hypothesis was formulated by:

A) Dalton
B) Peacock and Wiseman
C) Musgrave
D) Pigou

Q.81. Which one is a random sampling?

A) Quota Sampling
B) Purposive Sampling
C) Systematic Sampling
D) Cluster Sampling

Q.82. The change in income due to change in investment is known as:

A) Consumption
B) Multiplier
C) Accelerator
D) Production

Q.83. After independence, who present the first budget ?

A) Pt. Jawahar Lal Nehru
B) Morarji Desai
C) Shanmukham Chetty
D) James Wilson

Q.84. Which one is a qualitative instrument of credit control used by RBI?

A) Bank rate
B) Repo rate
C) Rationing of credit
D) CRR

Q.85. In which Five-Year Plan Indian economy crossed the barrier of the Hindu rate of growth?

A) Third Five-Year Plan
B) Seventh Five-Year Plan
C) Ninth Five-Year Plan
D) Fifth Five-Year Plan

Q.86. "Profit is legalized robbery" – who said?

A) Karl Marx
B) Robinson
C) Adam Smith
D) Amartya Sen

Q.87. For which category of demand for goods is Engel's law applicable?

A) Fuel and power
B) Clothing
B) Transport
D) Foodstuff

Q.88. The Agricultural Year in India is:

A) 1 July – 30 June
B) 1 April – 31 March
C) 1 January – 31 December
D) 1 June – 31 May

Q.89. Match the following:

List I	List II
a. Infant industry argument	1) Raul Prebisch
b. Circular deterioration of terms of trade	2) Kravis
c. Immiserizing growth	3) Friedrich List
d. Theory of availability of international trade	4) Jagdish Bhagwati

Codes:

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

Q.90. The main objectives of Statutory Liquidity Ratio and Cash Reserve Ratio is to ensure:

(i) Liquidity position of bank (ii) Financial position of bank (iii) Profit position of bank

Codes:

A) Only (i) is correct
B) (i) and (ii) are correct
C) All of the above
D) Only (ii) and (iii) are correct

Q.91. The kinked demand curve is reflected by:

A) Total revenue curve
B) Marginal cost curve
C) Average revenue curve
D) Marginal revenue curve

Q.92. A tariff of 10% per unit on imported cheese would be an example of:

A) Compound tariff
B) Effective tariff
C) Ad valorem tariff
D) Specific tariff

Q.93. The cost difference method of separating the income and substitution effect of a price effect was developed by:

A) E. Slutsky
B) J. R. Hicks
C) P. A. Samuelson
D) R. G. Edgeworth

Q.94. The equilibrium is unstable and indeterminate under:

A) Edgeworth's duopoly model
B) Bertrand's model
C) Chamberlin's oligopoly model
D) Pareto model

Q.95. The Regional Rural Development Banks have been established on the recommendations of the:

A) Narasimham Committee
B) Swaminathan Committee
C) Saraiya Committee
D) Malhotra Committee

Q.96. When was the "Base Rate System" implemented by RBI?

A) July, 2009
B) July, 201 0
C) June, 201 0
D) July, 201 1

Q.97. Which bank has given the slogan — "Pure Banking, Nothing Else"?

A) Bank of Canara
B) Bank of India
C) Punjab National Bank
D) State Bank of India

Q.98. Who propounded the Permanent Income Hypothesis of consumer behaviour?

A) J. M. Keynes
B) Milton Friedman
C) Duesenberry
D) James Tobin

Q.99. "What is" is related to:

A) Normative Economic Analysis
B) Positive Economic Analysis
C) Static Economic Analysis
D) Dynamic Economic Analysis

Q.100. Cross price elasticity of demand for substitute goods is always:

A) Non-negative
B) Non-positive
C) Negative
D) Positive