Ph. D. (Management) 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%

(Management)

51. Which of the following best represents the contingency approach to management?

A. There is one universally applicable method of managing organisations.

B. Management practices should depend upon the situation and environmental conditions.

C. Organisational performance depends exclusively on managerial skills.

D. Organisational structures should remain stable regardless of environmental changes.

52. If the price elasticity of demand for a product is -2.5, a 10% increase in price will approximately result in:

A. 4% decrease in quantity demanded

B. 25% increase in quantity demanded

C. 10% decrease in quantity demanded

D. 25% decrease in quantity demanded

53. In an organisation with a very high degree of decentralisation, which of the following is most likely?

A. Decisions are concentrated at top management.

B. Lower-level managers have greater decision-making authority

C. Span of control is necessarily narrow

D. Formalisation is necessarily high

54. Corporate governance primarily seeks to:

A. Eliminate managerial decision-making

B. Ensure accountability, transparency and responsible management

C. Maximise employee satisfaction irrespective of shareholders

D. Replace government regulation acorn plant

55. Suppose the Consumer Price Index (CPI) increases from 150 to 165 over a period. The approximate inflation rate during this period is:

A. 15%

B. 17%

C. 10%

D. 25%

56. According to Herzberg's two- factor theory, which of the following is a motivator?

A. Achievement

B. Working conditions

C. Salary

D. Company policy

57. A manager believes that an employee is highly competent and consequently interprets all of the employee's subsequent behaviours positively. This is an example of:

A. Stereotyping

B. Horn effect

C. Halo effect

D. Projection

58. Which leadership theory argues that effective leadership depends on matching leadership style with situational characteristics?

A. Behavioural theory

B. Contingency Theory

C. Trait theory

D. Great Man theory

59. Which sequence correctly represents the basic HR recruitment and selection process?

A. Selection- Recruitment- Job analysis- Placement

B. Job analysis- Recruitment- Selection- Placement

C. Recruitment- Job analysis- Training- Selection

D. Training- Recruitment- Selection- Job Analysis

60. Which of the following is the best example of fundamental attribution error?

A. A manager attributes an employee's poor performance entirely to laziness while ignoring difficult working conditions.

B. An employee attributes their own failure to difficult circumstances.

C. A manager uses objective performance indicators.

D. An employee evaluates themselves positively.

61. A competency mapping exercise primarily attempts to identify:

A. Only future vacancies

B. Only employee compensation levels

C. Only the educational qualifications of employees

D. Knowledge, skills, abilities and other characteristics required for effective performance

62. Which of the following is most closely associated with developmental performance appraisal?

A. Eliminating employee feedback

B. Determining only annual salary

C. Identifying training and development needs

D. Reducing organisational communication

63. Which of the following one of the traditional four perspectives of the Balanced Scorecard?

A. Political environment

B. Financial

C. Customer

D. Internal business processes

64. Which performance appraisal method attempts to obtain feedback from supervisors, peers, subordinates and sometimes customers?

A. Ranking method

B. 360-degree feedback

C. Critical incident method

D. Paired comparison

65. Which of the following is an example of an OD intervention?

A. Team building

B. Financial auditing

C. Inventory valuation

D. Tax computation

66. Under marginal costing, fixed costs are generally treated as:

A. Product costs only

B. Variable costs

C. Period costs

D. Prime costs

67. A company has fixed costs of Rs 4,00,000 and a contribution per unit of Rs 100. The break even point in units is:

A. 2,000

B. 6,000

C. 4,00,000

D. 40,000

68. Financial leverage is primarily associated with:

A. Use of fixed operating costs

B. Variable production costs

C. Inventory turnover

D. Use of fixed financial charges

69. If EBIT is Rs. 10,00,000 and interest expense is Rs. 2,00,000, the degree of financial leverage, ignoring taxes, is:

A. 0.80

B. 2.00

C. 1.25

D. 5.00

70. The present value of RS 1,21,000 receivable after two years at a discount rate of 10% is:

A. Rs. 90,000

B. Rs. 95,000

C. Rs. 1,10,000

D.Rs. 1,00,000

71. Which capital budgeting technique explicitly considers the time value of money?

A. Payback period

B. Accounting rate of return

C. Net present value

D. Simple average return

72. According to the capital asset pricing model, expected return depends primarily on:

A. Accounting profit and dividend payout

B. Risk-free rate, systematic risk and market risk premium

C. Total production and sales

D. Current ratio and quick ratio

73. A portfolio consists of two securities. Diversification primarily reduces:

A. All forms of risk

B. Systematic risk only

C. Unsystematic risk

D. Inflation risk only

74. A call option gives the holder the right, but not the obligation, to:

A. Sell the underlying asset at the strike price

B. Buy the underlying asset at the strike price

C. Borrow money at the strike price

D. Receive guaranteed dividends

75. Which dividend theory argues that dividend policy is irrelevant under certain idealized assumptions?

A. Walter model

B. Gordon model

C. Bird in the hand theory

D. Modigliani-Miller approach

76. A company possesses a valuable technological capability that is difficult for competitors to imitate and is supported by organisational processes. According to the resource-based view, this capability can potentially provide:

A. Sustainable competitive advantage

B. Temporary operational inefficiency

C. Guaranteed monopoly

D. Lower market demand

77. A firm entering a completely new market with a completely new product is following which Ansoff strategy?

A. Market penetration

B. Market development

C. Product development

D. Diversification

78. A company has a high market share in a low-growth industry and generates substantial cash flows. According to the BCG matrix, this business is a:

A. Star

B. Question mark

C. Cash cow

D. Dog

79. In the McKinsey 7S framework, which of the following is considered a hard element?

A. Shared values

B. Strategy

C. Staff

D. Style

80. A firm divides its customers into groups based on age, income and occupation. This is an example of:

A. Demographic segmentation

B. Behavioural segmentation

C. Psychographic segmentation

D. Geographic segmentation

81. A consumer purchases a premium smartphone because owning it communicates social status. This motivation is most closely associated with:

A. Functional utility only

B. Symbolic consumption

C. Random purchasing

D. Production orientation

82. Brand equity refers broadly to:

A. The physical value of production equipment

B. The firm's total inventory

C. The value added to a product by its brand name and associated associations

D. The cost of advertising only

83. The inseparability characteristics of services means that:

A. Services cannot be priced

B. Services are always intangible

C. Services can always be stored

D. Production and consumption of many services occur simultaneously

84. Which of the following represents relationship marketing most directly?

A. Maximising every single transaction regardless of future consequences

B. Eliminating customer feedback

C. Focusing exclusively on mass advertising

D. Developing long term mutually beneficial customer relationships

85. The consumer purchases a familiar brand repeatedly without actively comparing alternatives because the perceived risk is low. This behaviour is most closely associated with:

A. Complex buying behaviour

B. Habitual buying behaviour

C. Dissonance-reducing buying behaviour

D. Variety-seeking buying behaviour

86. A consumer who has had a positive experience with Brand A detergent begins assuming that Brand A's newly launched fabric conditioner will also perform well. This illustrates:

A. Stimulus generalisation

B. Stimulus discrimination

C. Operant extinction

D. Positive reinforcement

87. A company enters a foreign market by allowing an overseas firm to use its brand, technology and business format in return for fees and ongoing payments. This arrangement most closely resembles:

A. Exporting

B. Wholly owned subsidiary

C. Contract manufacturing

D. Franchising

88. Which statistical test is generally appropriate for examining whether to categorical variables are associated?

A. Chi-square test

B. Paired t-test

C. F-Test

D. Pearson correlation

89. Six Sigma primarily aims at:

A. Increasing process variation

B. Eliminating statistical analysis

C. Reducing defects and process variation

D. Increasing inventory levels

90. In PERT, the expected activity time is calculated using:

A. (a+m+b)/3

B. (a+4m+b)/6

C. (a+2m+b)/4

D.(4a+m+b)/6

91. The data set is highly positively skewed. Which relationship is most likely?

A. Mode< Median< Mean

B. Mean< Median< Mode

C. Mean= Median= Mode

D. Mean< Mode< Median

92. A researcher rejects the null hypothesis even though it is actually true. This is:

A. Sampling error

B. Measurement error

C. Type II error

D. Type I error

93. Which transaction would generally be recorded as a credit in the current account of a country's balance of payments?

A. Import of machinery

B. Payment for foreign consulting services

C. Export of software services

D. Purchase of foreign securities

94. A manufacturing manager receives a periodic report showing monthly production, inventory levels and variance from targets. This is most characteristic of:

A. Management information system

B. Transaction processing system

C. Expert system

D. Knowledge repository

95. Which combination best represents the commonly discussed characteristics of big data?

A. Value, Vision, Verification

B. Validity, Visibility, Variance

C. Volume, Velocity, Variety

D. Volume, Vacancy, Valuation

96. Which situation represents incremental innovation rather than radical innovation?

A. Creating an entirely new technological industry

B. Making a substantial improvement to an existing product

C. Replacing the entire business system with a fundamentally different one

D. Developing a completely new scientific paradigm

97. An entrepreneur introduces a new production method and creates a new market, thereby disturbing an existing market equilibrium. Which theoretical perspective most directly explains this role?

A. Classical administrative theory

B. Bureaucratic theory

C. Scientific management theory

D. Schumpeter's innovation theory

98. An entrepreneur can estimate probabilities of different market outcomes using reliable historical data. This situation is more appropriately described as:

A. Uncertainty

B. Risk

C. Ignorance

D. Certainty

99. An entrepreneur wants to establish a food processing unit. She investigates whether appropriate machinery, technology, production capacity and technical expertise are available. This is primarily:

A. Technical feasibility

B. Market feasibility

C. Financial feasibility

D. Social feasibility

100. A group of members jointly establishes the financial institution in which members participate in ownership and decision-making. This arrangement is most consistent with:

A. Venture Capital

B. Foreign direct investment

C. Cooperative finance

D. Corporate bond financing