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Ph.D. ENTRANCE EXAMINATION, August-2026

Name of Candidate	Answer Sheet No.
Roll No. of the Candidate	Signature of the Candidate.....
Date of Examination	Signature of the Invigilator(s)
	1.
	2.

Time: 2 Hours**Maximum Marks: 100****IMPORTANT INSTRUCTIONS**

- i. The question paper is in the form of Test-Booklet containing **100 (Hundred)** questions. Each question may carry maximum four answer marked. (A), (B), (C) and (D) out of which only one is correct.
- ii. There are 100 multiple choice questions, each question carrying 1 mark. The test includes 50 questions of Research Methodology (Part A) and 50 questions of the subject/Domain (Part B).
- iii. On receipt of the Test-Booklet (Question Paper), the candidate should immediately check it and ensure that it contains all the pages, i.e., **100** questions (50 in Part-A+50 in Part-B). Discrepancy, if any, should be reported by the candidate to the invigilator immediately after receiving the Test-Booklet.
- iv. A separate Answer- Sheet is provided with the Test-Booklet/Question Paper. On this sheet there are 100 rows containing four circles each. One row pertains to one question.
- v. The candidate should write his/her roll number at the places provided on the cover page of the Test-Booklet/ Question Paper and on Answer Sheet and NOWHERE ELSE.
- vi. No second test -Booklet /Question Paper and Answer -Sheet will be given to a candidate. The candidates are advised to be careful in handling it and writing the answer on the Answer-Sheet.
- vii. For every correct answer of the question **One (1) mark will be awarded**. For every unattempted question/ wrong answer, zero (0) mark shall be awarded. **There is no Negative Marking**.
- viii. Marking shall be done only on the basis of answers responded on the Answer- Sheet.
- ix. To mark the answer on the Answer- Sheet, candidate should **darken** the appropriate circle in the row of each question with Blue or Black pen.
- x. For each question, only one circle should be darkened as a mark of the answer adopted by the candidate. If more than one circle for the question are found darkened or with one black circle any other circle carries any mark, the question will be treated as cancelled.
- xi. The candidates should not remove any paper from the Test- Booklet/Question Paper. Attempting to remove any paper shall be liable to be punished for use of unfair means.
- xii. Rough work may be done on the blank space provided in the Test- Booklet /Question Paper only.
- xiii. Mobile phones (even in Switch -off mode) and such other communication/ programmable devices are not allowed inside the examination hall.
- xiv. No candidate shall be permitted to leave the examination hall before the expiry of the time.

DO NOT OPEN THIS QUESTION BOOKLET UNTIL ASKED TO DO SO

(PART-A)

1. Which of the following statements is true about the collection of data?
 - a. The data that is collected from the place of origin is known as primary data
 - b. The data that is collected from the place of origin is known as secondary data
 - c. The data that is collected from the place of origin is known as tertiary data
 - d. None of the above
2. Which of the following is the main point of difference between primary data and secondary data?
 - a. The collection of secondary data is costlier and more time consuming when compared to primary data
 - b. The secondary data is always original whereas the primary data is not
 - c. The primary data is much more reliable than secondary data because it is collected directly from respondents
 - d. None of the above
3. Which of the following is an example of qualitative data?
 - a. Temperature readings in Celsius
 - b. Monthly income in dollars
 - c. Transcript of an interview
 - d. Total population count
4. How is qualitative data usually analyzed?
 - a) By using statistical formulas and graphs
 - b) By finding themes, patterns, and categories
 - c) By running computer software for percentages
 - d) By measuring numerical weight or length
5. Which graph is used to show cumulative frequency?
 - a) Bar graph
 - b) Ogive
 - c) Histogram
 - d) Pie chart
6. Which chart is most suitable to show the comparison of parts to a whole?
 - a) Line graph
 - b) Histogram
 - c) Frequency polygon
 - d) Pie chart
7. In a moderately asymmetrical (skewed) distribution, what is the empirical relationship between mean, median, and mode?
 - a. $\text{Mean} - \text{Mode} = 3(\text{Mean} - \text{Median})$
 - b. $\text{Mean} = \text{Median} + \text{Mode}$
 - c. $\text{Mode} = 3\text{Mean} - 2\text{Median}$
 - d. $\text{Median} = \text{Mean} / \text{Mode}$
8. Which measure of central tendency includes the magnitude of scores?
 - a. Mean
 - b. Mode
 - c. Median
 - d. Range
9. What is the mean of the following numbers: 23, 45, 87, 40, 50?
 - a. 59
 - b. 49
 - c. 56
 - d. 39



10. Which of the following are methods under measures of dispersion?
- Standard deviation
 - Mean deviation
 - Range
 - All of the above
11. _____ and _____ are types of measures of dispersion.
- Nominal, Real
 - Nominal, Relative
 - Absolute, Relative
 - Real, Relative
12. The standard deviation of a set of 90 observations is 105. If the value of each observation is decreased by 9, then the new standard deviation of these observations would be _____.
- 96
 - 105
 - 100
 - None of the above
13. The average of squared deviations from the arithmetic mean is known as _____.
- Quartile deviation
 - Standard deviation
 - Variance
 - None of the above
14. If Mohan secures 97 percentiles in an examination, it means that his position is below _____ of the total candidates who had appeared in the exam.
- 97 percent
 - 3 percent
 - 90 percent
 - None of the above
15. Which of the following cannot be calculated for open-ended distributions?
- Standard deviation
 - Mean deviation
 - Range
 - None of the above
16. The interquartile range (IQR) is calculated as:
- $Q3 - Q1$
 - $Q3 + Q1$
 - $Q1 - Q3$
 - $Q1 \times Q3$
17. Which of the following statements is TRUE?
- Standard deviation is less reliable than range.
 - Mean deviation uses all scores.
 - Quartile deviation uses the entire dataset.
 - Range uses all scores.
18. If range is 20 and the smallest value is 5, the largest value is:
- 25
 - 15
 - 30
 - Cannot be determined
19. A distribution with low variability is considered:
- Scattered
 - Skewed
 - Consistent
 - Unreliable

20. Coefficient of variation is helpful in:
- Finding mode
 - Comparing variability between two datasets
 - Identifying mean
 - Finding median
21. If the variance is 16, then the standard deviation is:
- 8
 - 4
 - 2
 - 16
22. Kurtosis is a measure of:
- Central tendency
 - Dispersion
 - Symmetry
 - Skewness
23. Choose the correct option concerning the correlation analysis between 2 sets of data.
- Multiple correlations is a correlational analysis comparing two sets of data.
 - A partial correlation is a correlational analysis comparing two sets of data.
 - A simple correlation is a correlational analysis comparing two sets of data.
 - None of the preceding.
24. Which one of the below statements regarding the regression line is correct?
- The prediction equation is another name for a regression line.
 - A regression line is also referred to as the line of the average relationship.
 - The estimating equation is another name for a regression line.
 - All of the above.
25. Who introduced the term 'regression'?
- Karl Pearson
 - R.A Fischer
 - Croxtan and Cowden
 - Francis Galton.
26. Company A produces 10% defective products, Company B produces 20% defective products and C produces 5% defective products. If choosing a company is an equally likely event, then find the probability that the product chosen is defective.
- 0.12
 - 0.21
 - 0.22
 - 0.11
27. A well-defined research problem helps the researcher most by:
- Determining the exact budget
 - Guiding the selection of the research design and methods
 - Eliminating the need for a literature review
 - Guaranteeing publication in a journal
28. Why is a literature review critical during problem formulation?
- It proves that your bias is correct
 - It helps reveal gaps and inconsistencies in existing knowledge
 - It provides unrelated background facts
 - It replaces the need to state research objectives
29. Which of the following statement is correct?
- Reliability ensures the validity
 - Validity ensures reliability
 - Reliability and validity are independent of each other
 - Reliability does not depend on objectivity



30. The study in which the investigators attempt to trace an effect is known as:
- Survey Research
 - Summative Research
 - Historical Research
 - 'Ex-post Facto' Research
31. Generalized conclusion on the basis of a sample is technically known as:
- Data analysis and interpretation
 - Parameter inference
 - Statistical inference
 - All of the above
32. Authenticity of a research finding is its:
- Originality
 - Validity
 - Objectivity
 - All of the above
33. Which technique is generally followed when the population is finite?
- Area Sampling Technique
 - Purposive Sampling Technique
 - Systematic Sampling Technique
 - None of the above
34. Research problem is selected from the stand point of:
- Researcher's interest
 - Social relevance
 - Financial support
 - Availability of relevant literature
35. The research is always –
- Verifying the old knowledge
 - Exploring new knowledge
 - Filling the gap between knowledge
 - All of these
36. Manipulation of independent variable is always a part of
- Historical research
 - Fundamental research
 - Descriptive research
 - Experimental research
37. The Factorial Analysis is used:
- To know the relationship between two variables
 - To know the difference among the many variables
 - To know the difference between two variables
 - To test the Hypothesis
38. Which of the following is classified in the category of the developmental research?
- Philosophical research
 - Action research
 - Descriptive research
 - All the above
39. What is the name of the conceptual framework in which the research is carried out?
- Research hypothesis
 - Research design
 - Research paradigm
 - Synopsis of Research

40. Which of the following features are considered as critical in qualitative research?
- Collecting data with the help of standardized research tools.
 - Design sampling with probability sample techniques.
 - Collecting data with bottom-up empirical evidence.
 - Gathering data with top-down schematic evidence.
41. Tippet table refers to as _____
- Table of random digits
 - The table used in sampling methods
 - The table used in statistical investigations
 - All of the above
42. What are the conditions in which Type-I error occurs?
- The null hypotheses get accepted even if it is false
 - The null hypotheses get rejected even if it is true
 - Both the null hypotheses as well as alternative hypotheses are rejected
 - None of the above
43. Research and Development become the index of development of the country. Which of the following reasons are true with regards to this statement?
- R&D targets human development
 - R&D can enhance people's standard of living in the country
 - R&D reflects the actual economic and social conditions being prevailed in the country
 - All the above
44. What is the main aim of interdisciplinary research?
- To over simplify the problem of research
 - To bring out the holistic approach to research
 - To create a new trend in research methodology
 - To reduce the emphasis on a single subject in the research domain
45. A researcher is interested in studying the prospects of a particular political party in an urban area. So, what tool should he prefer for the study?
- Rating Scale
 - Interview
 - Questionnaire
 - Schedule
46. The conclusions/findings of which type of research cannot be generalized to other situations?
- Casual Comparative Research
 - Historical Research
 - Descriptive Research
 - Experimental Research
47. Which one is called non-probability sampling?
- Quota sampling
 - Cluster sampling
 - Systematic sampling
 - Stratified random sampling
48. What are the core elements of a dissertation?
- Introduction; Data Collection; Data Analysis; Conclusions and Recommendations
 - Executive Summary; Literature Review; Data Gathered; Conclusions; Bibliography
 - Research Plan; Research Data; Analysis; References
 - Introduction; Literature Review; Research Methodology; Results; Discussions and Conclusions
49. The "Sociogram" technique is used to study _____
- Vocational Interest
 - Human Relations
 - Professional Competence
 - Achievement Motivation

50. Action-research can be understood as _____
- a. A longitudinal research
 - b. An applied research
 - c. A kind of research being carried out to solve a specific problem
 - d. All of the above

(PART-B)

51. A manager who coordinates organizational activities by considering the organization as an interconnected whole is primarily applying which approach?
- a. Scientific Management
 - b. Systems Approach
 - c. Bureaucratic Approach
 - d. Human Relations Approach
52. Which managerial skill becomes particularly important for senior managers because they must understand the organization as an integrated system?
- a. Technical skill
 - b. Clerical skill
 - c. Conceptual skill
 - d. . Mechanical skill
53. An employee believes that a colleague is competent because the colleague performed exceptionally well in one particular task. The employee then assumes that the colleague is competent in all other areas. This illustrates:
- a. Halo effect
 - b. Selective perception
 - c. Stereotyping
 - d. Projection
54. A manager allows employees to participate in setting measurable targets and subsequently evaluates their performance against those targets. This is most closely associated with:
- a. Management by Exception
 - b. B. Management by Crisis
 - c. Management by Rules
 - d. Management by Objectives
55. If the percentage change in quantity demanded is greater than the percentage change in price, demand is said to be:
- a. Perfectly inelastic
 - b. Unit elastic
 - c. Elastic
 - d. Inelastic
56. A firm increases production as long as the additional revenue from the last unit exceeds the additional cost. This decision is based on:
- a. Marginal analysis

- b. Average cost analysis
 - c. Historical cost analysis
 - d. Sunk cost analysis
57. When the price of a commodity falls and, as a result, consumers purchase more of it because their purchasing power has effectively increased, this is called:
- a. Substitution effect
 - b. Income effect
 - c. Demonstration effect
 - d. Network effect
58. Which of the following is generally associated with a **long-run production function**?
- a. At least one factor must remain fixed
 - b. All factors of production can be varied
 - c. Output cannot be changed
 - d. Only labour can be varied
59. Which of the following best represents the **external business environment**?
- a. Employee morale
 - b. Organizational culture
 - c. Government policy
 - d. Internal communication
60. A company evaluates the possibility of sudden changes in government policy affecting its operations in another country. This is primarily an assessment of:
- a. Political risk
 - b. Operational risk
 - c. Production risk
 - d. Inventory risk
61. Liberalization primarily involves:
- a. Increasing government ownership of all industries
 - b. Reducing unnecessary government controls and restrictions
 - c. Eliminating private enterprises
 - d. Restricting international trade
62. Disinvestment refers to:
- a. Increasing government expenditure on public enterprises
 - b. Increasing employee ownership automatically
 - c. Replacing domestic firms with foreign firms
 - d. Sale of government ownership in public enterprises

63. In the communication process, the conversion of an idea into symbols, words or gestures is known as:
- Decoding
 - Feedback
 - Encoding
 - Filtering
64. During a business presentation, a manager notices that the audience is confused and immediately changes the explanation. This response demonstrates the importance of:
- Feedback
 - Formalization
 - Grapevine communication
 - Downward communication
65. Which of the following is a **non-verbal** element of communication?
- Report writing
 - Facial expression
 - E-mail
 - Written notice
66. In a negotiation, the most effective approach for maintaining a long-term business relationship is generally to:
- Conceal all relevant information
 - Focus only on winning
 - Avoid listening to the other party
 - Seek mutually beneficial solutions
67. Which accounting tool is primarily concerned with providing information to managers for planning and decision-making?
- Management accounting
 - Financial accounting
 - Tax accounting
 - Government accounting
68. If a company's current assets are ₹6 lakh and current liabilities are ₹3 lakhs, its current ratio is:
- 0.5 : 1
 - 1 : 1
 - 2 : 1
 - 3 : 1

69. Which statement primarily explains the movement of cash and cash equivalents during an accounting period?
- Balance Sheet
 - Cash Flow Statement
 - Income Statement
 - Funds Allocation Statement
70. Zero-base budgeting differs from traditional budgeting because it:
- Assumes every expense is automatically justified
 - Ignores previous expenditure completely
 - Focuses only on capital expenditure
 - Requires activities and expenditures to be justified from a zero base
71. A company divides a market into groups based on age, income, occupation and family size. This is an example of:
- Geographic segmentation
 - Behavioural segmentation
 - Demographic segmentation
 - Psychographic positioning
72. A brand is positioned as “the most affordable premium smartphone.” The statement primarily reflects the firm's:
- Market positioning strategy
 - Distribution strategy
 - Production strategy
 - Recruitment strategy
73. At which stage of the product life cycle is competition generally intense and market growth begins to slow?
- Introduction
 - Growth
 - Decline
 - Maturity
74. Which element of the promotion mix involves direct interaction between a salesperson and a prospective buyer?
- Publicity
 - Personal selling
 - Advertising
 - Sales promotion

75. The systematic study of the duties, responsibilities and requirements of a job is known as:
- Job analysis
 - Job rotation
 - Job enrichment
 - Job enlargement
76. A firm identifies employees who can potentially occupy critical managerial positions in the future. This process is called:
- Manpower forecasting
 - Job evaluation
 - Succession planning
 - Wage administration
77. Which of the following is most directly associated with **performance appraisal**?
- Determining the organization's mission
 - Evaluating employee performance against predetermined criteria
 - Designing the factory layout
 - Estimating market demand
78. An employee formally complains that a supervisor has treated him unfairly. The organization's systematic handling of this complaint is part of:
- Recruitment
 - Induction
 - Job evaluation
 - Grievance management
79. A manufacturing system designed to produce large quantities of standardized products is most likely to use:
- Continuous or mass production
 - Job production
 - Craft production
 - Project production
80. A company attempts to eliminate unnecessary inventory and receive materials only when they are required for production. This approach is known as:
- Total Quality Management
 - Value Engineering
 - Just-In-Time
 - Capacity Cushioning

- 81.** Which of the following is a central objective of Total Quality Management?
- a. Maximizing inventory
 - b. Continuous improvement in quality
 - c. Eliminating customer feedback
 - d. Reducing employee participation
- 82.** The systematic coordination of activities required to plan, execute and control a temporary undertaking with defined objectives is known as:
- a. Operations forecasting
 - b. Material handling
 - c. Facility planning
 - d. Project management
- 83.** A transaction in which one business sells goods or services directly to another business through an electronic platform is classified as:
- a. Business-to-Consumer
 - b. Consumer-to-Consumer
 - c. Business-to-Business
 - d. Consumer-to-Business
- 84.** Which of the following is primarily intended to protect online transactions from unauthorized access?
- a. Encryption
 - b. Market segmentation
 - c. Product diversification
 - d. Price skimming
- 85.** An electronic payment system provides value to e-commerce primarily because it:
- a. Eliminates all business risks
 - b. Facilitates electronic transfer of payment
 - c. Removes the need for internet connectivity
 - d. Prevents all forms of fraud automatically
- 86.** A firm uses customer purchase history to provide personalized online recommendations. This application is most closely related to:
- a. Physical distribution
 - b. Industrial purchasing
 - c. Traditional advertising
 - d. Electronic customer relationship management

87. A company's statement describing why it exists and the fundamental purpose it seeks to fulfil is its:
- Mission
 - Budget
 - Policy manual
 - Operating schedule
88. Which of the following is primarily an **external environmental analysis** tool?
- Value chain analysis
 - Resource audit
 - PESTLE analysis
 - Core competency analysis
89. A firm possesses a capability that is valuable, difficult for competitors to imitate and capable of supporting superior performance. This capability is most closely associated with:
- Competitive disadvantage
 - Competitive advantage
 - Environmental uncertainty
 - Strategic drift
90. The value chain concept is mainly used to understand:
- How political institutions function
 - How employee grievances are resolved
 - How financial markets are regulated
 - How organizational activities create value and competitive advantage
91. Which characteristic is most strongly associated with an entrepreneurial orientation?
- Avoidance of all uncertainty
 - Dependence on established procedures
 - Willingness to take calculated risks
 - to innovation
92. person starts a new venture after identifying an unmet customer need and developing a solution for it. This best demonstrates:
- Entrepreneurial opportunity recognition
 - Organizational downsizing
 - Financial restructuring
 - Administrative control

- 93.** A new business experiences failure because the entrepreneur underestimated market demand and lacked adequate financial planning. These are examples of:
- External economies
 - Internal business problems
 - Achievement motivation
 - Entrepreneurial incentives
- 94.** According to the concept of achievement motivation, an entrepreneur with a strong need for achievement is more likely to:
- Avoid challenging goals
 - Depend entirely on others for decisions
 - Prefer clearly defined and challenging goals
 - Avoid feedback about performance
- 95.** The concept of time value of money implies that:
- Money has the same value regardless of time
 - A rupee received today is generally worth more than a rupee received in the future
 - Future cash flows have no relevance to investment decisions
 - Inflation has no impact on financial decisions
- 96.** Which of the following is a capital budgeting technique?
- Net Present Value
 - Current Ratio
 - Gross Profit Ratio
 - Inventory Turnover Ratio
- 97.** The weighted average cost of the different sources of long-term finance used by a company is known as:
- Marginal cost of production
 - Opportunity cost of labour
 - Weighted Average Cost of Capital
 - Historical cost of assets
- 98.** Which of the following is primarily concerned with ensuring that a firm has sufficient funds to meet its short-term obligations?
- Capital structure management
 - Dividend management
 - Capital budgeting
 - Working capital management

99. Which institution is primarily responsible for regulating the securities market in India?

- a. Reserve Bank of India
- b. Securities and Exchange Board of India
- c. Insurance Regulatory and Development Authority of India
- d. National Bank for Agriculture and Rural Development

100. Which of the following best distinguishes the **money market** from the **capital market**?

- a. Money market deals primarily in short-term funds, while capital market deals primarily in long-term funds
- b. Money market deals only with shares, while capital market deals only with currencies
- c. Money market is unregulated, while capital market is regulated
- d. Money market is exclusively for government institutions

=== END OF PAPER ===

Answer Key of Research Methodology

- 1. a**
- 2. c**
- 3. c**
- 4. b**
- 5. b**
- 6. d**
- 7. a**
- 8. a**
- 9. b**
- 10. d**
- 11. c**
- 12. b**
- 13. c**
- 14. b**
- 15. b**
- 16. a**
- 17. b**
- 18. a**
- 19. c**
- 20. b**
- 21. b**
- 22. d**
- 23. c**
- 24. d**
- 25. d**

- 26. a**
- 27. b**
- 28. b**
- 29. c**
- 30. d**
- 31. a**
- 32. c**
- 33. c**
- 34. b**
- 35. d**
- 36. d**
- 37. b**
- 38. d**
- 39. b**
- 40. c**
- 41. d**
- 42. b**
- 43. d**
- 44. b**
- 45. c**
- 46. b**
- 47. a**
- 48. d**
- 49. b**
- 50. c**

ANSWER KEY (Skill Faculty of Management Studies and Research)

Q. No.	Answer	Q. No.	Answer	Q. No.	Answer	Q. No.	Answer
51	B	64	A	77	B	90	D
52	C	65	B	78	D	91	C
53	A	66	D	79	A	92	A
54	D	67	A	80	C	93	B
55	C	68	C	81	B	94	C
56	A	69	B	82	D	95	B
57	B	70	D	83	C	96	A
58	B	71	C	84	A	97	C
59	C	72	A	85	B	98	D
60	A	73	D	86	D	99	B
61	B	74	B	87	A	100	A
62	D	75	A	88	C		
63	C	76	C	89	B		