

Entrance Examinations – 2023
Ph.D. Management Studies

Maximum marks: 70

Time: 2 Hours

Hall ticket Number

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General Instructions:

1. Write your Hall Ticket Number in the OMR Answer Sheet. Also write the Hall Ticket Number in the space provided above.
2. This question paper consists of Two Parts - **Part 'A' and Part 'B'** which carries 70 objective type questions of one mark each for a total of 70 marks.
3. Answers are to be marked on the OMR answer sheet following the instructions provided there upon.
4. Hand over the OMR answer sheet at the end of the examination to the Invigilator.
5. No additional sheets will be provided. Rough work can be done in the question paper itself.
6. **Calculators, mobile phones and any electronic gadgets are not allowed.**

PART A

1. A company wants to know what problems are faced by employees in the night shift duties. The company is intending to undertake
 - A. Pure research
 - B. Applied research
 - C. Basic research
 - D. Causal research
2. An examination of differences across groups lies at the heart of the basic concept of _____.
 - A. regression analysis
 - B. discriminant analysis
 - C. conjoint analysis
 - D. factor analysis
3. Categorical variables like a subject's gender or ethnicity are known as which type of variable in experimental research?
 - A. blocking variables
 - B. covariates
 - C. main variables
 - D. confounds
4. Which type of research is being conducted when a researcher conducts an experiment to answer the question, "Will shareholders respond favourably if we increase executive pay?"
 - A. causal research
 - B. exploratory research
 - C. pilot study research
 - D. descriptive research
5. _____ means that the researcher alters the level of the experimental variable in specific increments.
 - A. Causality
 - B. Testing
 - C. Analysing
 - D. Manipulation
6. At what level do we "experience" reality?
 - A. empirical level
 - B. abstract level
 - C. primary level
 - D. secondary level
7. If the correlation coefficient is - 0.62, the coefficient of determination is approximately:
 - A. + 0.38
 - B. + 0.62
 - C. - 0.38
 - D. - 0.23
8. Researchers measure concepts through a process known as:
 - A. summation
 - B. operationalization
 - C. assessment
 - D. matching

9. When an airline passenger (who is really an employee of the airline) complains loudly about his not being served a vegetarian meal so that he can note the behavior of the flight attendant in this type of situation, this is an example of what type of observation?
- content analysis
 - indirect
 - contrived
 - response latency
10. The tendency for respondents to agree with most questions in a survey is known as:
- auspices bias
 - interviewer bias
 - extremity bias
 - acquiescence bias
11. Which regression estimation technique is based on the logic of how much better a regression line can predict values of Y compared to simply using the mean as a prediction for all observations no matter what the value of X may be?
- visual estimation
 - maximum likelihood
 - coefficient of determination
 - ordinary least squares (OLS)
12. One research firm uses successive samples the week following the Super Bowl each year to compare trends and identify changes in consumers' awareness and attitudes towards Super Bowl advertising. This type of longitudinal study is called a:
- consumer panel
 - progressive study
 - subsequent study
 - tracking study
13. The relationship between Service quality and customer loyalty is transmitted through customer satisfaction. In this relationship the customer satisfaction is a _____ variable.
- dependent
 - control
 - mediating
 - moderating
14. The relationship between job autonomy and job satisfaction is dependent on job resources. In this relationship job resource is a _____ variable?
- dependent
 - control
 - mediating
 - moderating
15. When a respondent's answers to ten Likert-scale items are added up to form a total subset score for these questions, this is an example of:
- data indexing
 - data transformation
 - contingency analysis
 - data indexing

16. What is the hexadecimal approximation of the number $(10101101111111)_2$?
- $(2B7F)_{16}$
 - $(B7F2)_{16}$
 - $(2F7B)_{16}$
 - $(7FB2)_{16}$
17. Find the value of 'n' such that ${}^n P_5 = 42 {}^n P_3$, $n > 4$:
- $n = 10$ or -3
 - $n = 10$
 - $n = -3$ or -10
 - $n = -10$ or 3
18. Four letters are randomly selected from the word "SECTIONAL". What is the probability that at least one vowel will be there in the selection (approx.)?
- 90%
 - 93%
 - 96%
 - 99%
19. The system of simultaneous linear equations: $2x + 3y + 4 = 0$, $3x + 4y + 6 = 0$, $4x + 5y + 8 = 0$ is:
- Consistent
 - Inconsistent
 - Partly consistent
 - Can't be determined
20. The employer of a small organization observed that employees often come late to the office. Historically he determined that there is a 40% chance that an employee is late in the office. Given independent arrival, what is the probability that, of the five employees under focus, exactly three of them will come late to the office?
- 17.78%
 - 23.04%
 - 25.92%
 - 34.56%
21. For what values of 'x' will the function $\sqrt{x^2 - 6x - 40}$ be defined in the real domain?
- $-10 < x < 4$
 - $-4 < x < 10$
 - x does not lie in $[-10, 4]$
 - x does not lie in $(-4, 10)$
22. The relative minimum of the function $f(x_1, x_2) = x_1^3 + x_2^3 - 3x_1 - 12x_2 + 25$ is experienced at:
- (1, 2)
 - (-1, -2)
 - (-1, 2)
 - (1, -2)
23. If for the real values of x, $\cos \alpha = x - \frac{1}{x} + \frac{1}{x-1}$, then:
- α is an obtuse angle
 - α is an acute angle
 - α is a right angle
 - No conclusion can be drawn

24. What is the rank of the matrix $A = \begin{bmatrix} 2 & -3 & 5 \\ 3 & 1 & -1 \\ 1 & 4 & -6 \end{bmatrix}$?

- A. 0
- B. 1
- C. 2
- D. 3

25. What are the eigen values of the matrix $A = \begin{bmatrix} 5 & 0 & 1 \\ 0 & -2 & 0 \\ 1 & 0 & 5 \end{bmatrix}$?

- A. 0, 2, 6
- B. 2, 4, 6
- C. -2, 4, 6
- D. 2, -4, 6

26. From the following find the odd one out: Weight, Large, Height, Volume

- A. Weight
- B. Large
- C. Height
- D. Volume

27. Find the next number in the given series of numbers: 0, 2, 6, 12, 20, _____

- A. 30
- B. 35
- C. 40
- D. 45

Directions: Choose the appropriate word relationship from the following to fill in the blanks (Q28 to Q30).

28. Hygrometer is to Humidity as Sphygmomanometer is to -----

- A. Pressure
- B. Blood Pressure
- C. Precipitation
- D. Heart beat

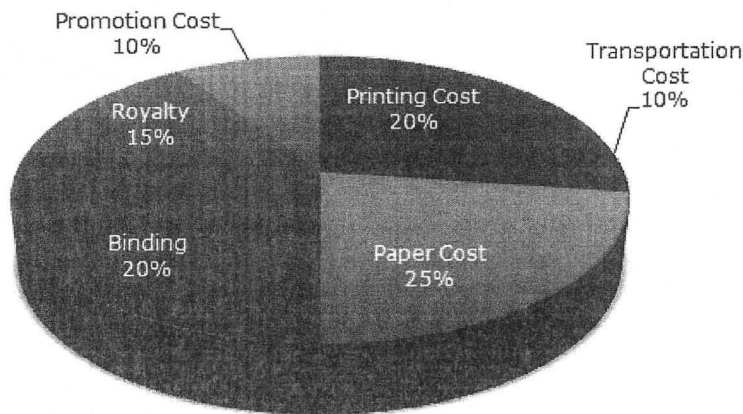
29. Earth is related to Axis in the same way as Wheel is related to -----

- A. Tyre
- B. Car
- C. Road
- D. Hub

30. Indiscreet is related to Imprudent in the same way as Indisposed is related to -----

- A. Concerned
- B. Crucial
- C. Clear
- D. Reluctant

The following pie-chart shows the percentage distribution of the expenditure incurred in publishing a book. Study the pie-chart and the answer the questions based on it. Various Expenditures (in percentage) Incurred in Publishing a Book:



31. If for a certain quantity of books, the publisher has to pay Rs. 30,600 as printing cost, then what will be amount of royalty to be paid for these books?
- Rs. 19,450
 - Rs. 21,200
 - Rs. 22,950
 - Rs. 26,150
32. What is the central angle of the sector corresponding to the expenditure incurred on Royalty?
- 15°
 - 24°
 - 54°
 - 48°
33. The price of the book is marked 20% above the C.P. If the marked price of the book is Rs. 180, then what is the cost of the paper used in a single copy of the book?
- Rs. 36
 - Rs. 37.50
 - Rs. 42
 - Rs. 44.25
34. If 5500 copies are published and the transportation cost on them amounts to Rs. 82500, then what should be the selling price of the book so that the publisher can earn a profit of 25%?
- Rs. 187.50
 - Rs. 191.50
 - Rs. 175
 - Rs. 180
35. Royalty on the book is less than the printing cost by:
- 5%
 - 10 %
 - 20%
 - 25%

PART B

36. The three types of concentration strategies are
- A. Market Penetration, Market Development, Product Development
 - B. Stability Strategy, Retrenchment strategy, Backward Integration Strategy
 - C. Vertical Integration Strategy, Horizontal Integration strategy, Growth Strategy
 - D. Global Strategy, Transnational Strategy, Stability Strategy
37. If a firm is practicing _____, the firm is training and effectively motivating its customer-contact employees and all of the supporting service people to work as a team to provide customer satisfaction.
- A. International Marketing
 - B. Interactive Marketing
 - C. Internal Marketing
 - D. External Marketing
38. Which one of the following statements by a company chairman BEST reflects the marketing concept?
- A. We believe that marketing department must organize to sell what we produce
 - B. We try to produce only high quality, technically efficient products
 - C. We try to encourage company growth in the market
 - D. We have organized our business to satisfy the customer needs
39. The prime factors which influence pricing
- A. Product Cost
 - B. Purchasing Power
 - C. Demand and Supply
 - D. All of the above
40. A person who by some intentional or unintentional word or action influences the purchase decision
- A. Initiator
 - B. Buyer
 - C. Influencer
 - D. User
41. Assessment centers comprise all the following exercises/simulations except:
- A. Interview Simulations
 - B. Role Plays
 - C. Programmed Instruction
 - D. Case Studies
42. Which among the following leaders have the ability to sustain their energy level under pressure, as well as to cope with disruptive changes and adapt.
- A. Transformational
 - B. Authentic leaders
 - C. Servant Leaders
 - D. Resilient Leaders.
43. Performance can be summarized as a function of all the following except:
- A. Ability
 - B. Motivation
 - C. Environment
 - D. Compensation

44. Which method of performance appraisal requires managers to place a certain percentage of employees into various performance categories?
- A. forced-distribution method
 - B. checklist method
 - C. ranking method
 - D. forced-choice method
45. The phases of a systems approach to training are:
- A. Needs assessment, program design, program implementation, and evaluation.
 - B. Organization analysis, task analysis, person analysis, and performance analysis.
 - C. Needs assessment, person assessment, program implementation, and evaluation.
 - D. Organization assessment, KSA assessment, person assessment, and evaluation.
46. What are the two main dimensions of the Ohio Studies into leadership?
- A. Starting position and end position
 - B. Initial environment and changed environment
 - C. Organisational structure and conditioning
 - D. Initiating structure and considerations
47. Hygiene factors are associated with which writer?
- A. Frederick Herzberg
 - B. D.C. McClelland
 - C. Abraham Maslow
 - D. Douglas McGregor
48. How does lateral communication in an organisation occur?
- A. Information passes upwards.
 - B. Information passes downwards.
 - C. Information is a two-way process.
 - D. Information passes across different departments and functions.
49. What is a virtual organisation?
- A. An organisation that uses information and communications technologies (ICT's) to coordinate activities without physical boundaries between different functions
 - B. An organisation that uses internet technologies to sell products to customers
 - C. An organisation that manages the supply chain using digital technologies
 - D. An organisation that coordinates the workforce via video conferencing
50. The ANOVA test is based on which assumptions?
- I. The data are independent.
 - II. The populations have the same variance.
 - III. The responses for each factor level have a normal population distribution.
 - IV. All the population means are equal.
- A. All I, II, III and IV
 - B. II and III only
 - C. I, II, and III only
 - D. I, and III only

51. What is the formula to compute the number of classes in frequency distribution?
- A. $3.322 \log_{10} N$
 - B. $1 + 3.322 \log_{10} N$
 - C. $1 + 0.3322 \log_{10} N$
 - D. $0.3322 \log_{10} N$
52. What is the Harmonic Mean of 40 and 60?
- A. 50
 - B. 100
 - C. 48
 - D. $\sqrt{2400}$
53. What is the standard deviation of 1,2, 3, 4, 5,6,7,8,9 and 10?
- A. 2.87
 - B. 3.00
 - C. 2.53
 - D. 2.46
54. At a company, machine A produces 5,000 and machine B produces 3,000 bolts. 1,000 bolts produced by machine A are rated as defective and 1,000 bolts produced by machine B are rated as defective. What is the probability that the bolt selected at random was manufactured by machine B, if it is found defective?
- A. 0.25
 - B. 0.30
 - C. 0.33
 - D. 0.50
55. A lawnmower assembly plant uses a variety of nuts, bolts, screws, and other fasteners in their operation. Their supplier delivers these items directly to the point of use on the assembly line and ensures that there are always enough fasteners to maintain the production schedule. This is an example of
- A. vendor-managed inventory
 - B. postponement.
 - C. e-procurement
 - D. single stage control of replenishment.
56. Which area of the SCOR model includes the activities that are necessary to handle warranty repairs and exchanges or shipments more than what is needed at a retail location?
- A. Planning
 - B. Source
 - C. Delivery
 - D. Return
57. The concept of total quality control, i.e. that quality must be attended to at all stages of the industrial cycle and throughout the organisation, is the creation of which of the following pioneers?
- A. Genichi Taguchi
 - B. Armand Feigenbaum
 - C. W Edwards Deming
 - D. Joseph M Juran

58. If all the observations within a series are multiplied by eight, then _____.
- A. The new standard deviation would be decreased by eight.
 - B. The new standard deviation would be increased by eight.
 - C. The new standard deviation would be half of the previous standard deviation.
 - D. The new standard deviation would be multiplied by eight.
59. A house of quality would depict the strength of relationship between which two items?
- A. The stitching used in your company's new product and the stitching used in a competitor's wallet.
 - B. The customer's need for a sealable change pocket and the customer's need for plastic inserts to display pictures.
 - C. The customer's desire for a durable wallet and the company's choice of material for the wallet.
 - D. The design team's choice of material for a wallet and the materials that were considered but rejected by the design team.
60. In machine learning, labelled training data is used in
- A. General learning
 - B. Un Supervised learning
 - C. Supervised learning
 - D. Reinforcement learning
61. RFM Analysis includes analysis of
- A. Recovery, functionality, monetary
 - B. Recency, frequency, measurement
 - C. Recency, frequency, monetary value
 - D. Recency, functionanlity, measurement
62. Which of the following is used for classification
- A. Linear Regression
 - B. Logistic Regression
 - C. Correlation
 - D. Conjoint Analysis
63. The World Health Day is celebrated in the world on the occasion of Establishment of World Health Organization on which date of the year _____
- A. 10th Arpil
 - B. 7th April
 - C. 7th November
 - D. 20th November
64. What is the most commonly used model of care in the Intensive Care Units of (ICU) of hospitals
- A. Functional nursing
 - B. Team building nursing care
 - C. Primary care nursing services
 - D. Total patient care
65. Which of the following virus rarely show show flu-like symptoms in humans unlike others?
- A. Coronavirus
 - B. Rhinovirus
 - C. Rotavirus
 - D. Influenza virus

66. The following are given as assumptions of Technical Analysis: I) Market discounts everything II) Prices move in trends III) History repeats itself IV) Asymmetry of information
- A. Only I and II are correct
 - B. Only III is correct
 - C. Only I, II and III are correct
 - D. All I, II, IV are correct
67. Who has developed the Modern Portfolio Theory?
- A. Peter Drucker
 - B. Harry Markowitz
 - C. Warren Buffet
 - D. None of them
68. Indian income tax law recognizes the following depreciation method(s)
- A. Straight Line
 - B. Written Down Value
 - C. Either Straight Line and Written Down Value
 - D. Sum of digits method
69. Activities covered by Cash flow statement: I) Operating II) Investing III) Financing. Which statements are correct?
- A. Only I and II are correct
 - B. Only II and III are correct
 - C. All I, II and III are correct
 - D. All I, II, III are NOT correct
70. Which of the following theory emphasizes that the overall cost of capital keeps on decreasing as the debt-equity ratio increases:
- A. Net income Approach
 - B. Net operating income Approach
 - C. Traditional Approach
 - D. M-M approach

University of Hyderabad
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School/Department/Centre: Management Studies
Course : Ph.D. Subject : Management Studies

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

Note/Remarks :


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