Total No. of Printed Pages : 30

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PH.D.-EE-October, 2026 (IHTM)

A

100013

Sr. No. .....

Time : 1¼ Hours **Max. Marks : 100** **Total Questions : 100**

Roll No. _____ (in figure) _____ (in words)

Name _____ Father's Name _____

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(Signature of the Candidate) (Signature of the Invigilator)

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SEAL

1. The transition from traditional lodging to modern hospitality organizations reflects a shift from :

(1) International travel to local travel

(2) Commercial service to religious service

(3) Luxury service to no service

(4) Informal guest care to standardized and professional service

2. Which sequence best represents the guest-room cycle involving Front Office and Housekeeping ?

(1) Reservation → Arrival → Room assignment → Occupancy → Departure → Room cleaning → Ready for sale

(2) Room cleaning → Reservation → Departure → Arrival

(3) Arrival → Departure → Reservation → Room assignment

(4) Reservation → Departure → Arrival → Room cleaning

3. Arrange the following in the most appropriate hierarchy for a large hotel's Front Office :

1. Front Office Manager
2. Reception Supervisor
3. Receptionist
4. Assistant Front Office Manager

(1) 4 → 1 → 3 → 2

(2) 1 → 4 → 2 → 3

(3) 3 → 2 → 4 → 1

(4) 2 → 3 → 1 → 4

4. The published rate for a hotel room without discounts or special concessions is commonly known as :

(1) Rack rate

(2) Net rate

(3) Contract rate

(4) Group rate

5. Which system is used to maintain hotel room availability, rates and bookings electronically ?

(1) Property Management System (PMS)

(2) Payroll system only

(3) Inventory ledger only

(4) Central Reservation System (CRS)

6. Which of the following is commonly associated with foreign guest registration in India ?

(1) Passport details

(2) Visa details

(3) Guest address/contact details

(4) All of the above

7. Which account records transactions for guests who have checked out but have outstanding balances ?

(1) Guest ledger
(2) City ledger
(3) Stores ledger
(4) Payroll ledger

8. Management by Objectives (MBO) is strongly associated with :

(1) Peter Drucker
(2) Frederick Taylor
(3) Elton Mayo
(4) Henri Fayol

9. Which of the following is an important tool of yield management ?

(1) Demand forecasting
(2) Historical data analysis
(3) Inventory control
(4) All of the above

10. A hotel security programme is primarily designed to :

(1) Increase room rates
(2) Protect guests, employees, property and information
(3) Improve food production
(4) Increase advertising

11. Which of the following is an operating department of a hotel ?

(1) Human Resources
(2) Finance
(3) F & B Service
(4) Purchasing

12. Espresso is prepared by :

(1) Forcing hot water through finely ground coffee under pressure
(2) Boiling whole coffee cherries in wine
(3) Infusing tea leaves
(4) Distilling roasted beans

13. Which service method is most strongly associated with the presentation of food from a service dish and guest-side serving by the waiter ?

(1) American service
(2) Russian service
(3) Cafeteria service
(4) Vending service

14. Chardonnay is primarily a :

(1) White grape variety
(2) Red grape variety
(3) Fortified spirit
(4) Beer variety

15. The front bar is primarily :

(1) The guest-facing counter

(2) A storage cellar

(3) A kitchen worktable

(4) A stewarding area

16. A hotel has high beverage sales but unusually high beverage cost. Which combination should management investigate ?

1. Pouring control
2. Pilferage
3. Wastage
4. Inventory reconciliation
5. Standard recipes

(1) 1, 2 and 3 only

(2) 2, 3 and 4 only

(3) 1, 2, 3, 4 and 5

(4) 1 and 5 only

17. Which seating arrangement is particularly suitable for a presentation where guests face a speaker ?

(1) Theatre style
(2) Classroom style only
(3) Hollow square only
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(1) Rôti—Roast
(2) Potage—Dessert
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(4) Fromage—Fish

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(1) Eggs, bacon and sausages as standard components
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(3) Rice, curry and dal only
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(1) Mise-en-place → service → clearing → settlement
(2) Settlement → mise-en-place → service → clearing
(3) Service → purchasing → mise-en-place
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(1) Capital-intensive production

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(1) Job specification

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(1) Combination cooking method

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(1) Dessert

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(4) Sauce

38. The five classical mother sauces include Béchamel, Velouté, Espagnole, Tomato and :

(1) Hollandaise

(2) Pesto

(3) Barbecue

(4) Soy sauce

39. A fillet is generally a :

(1) Skin only

(2) Bone-in cut only

(3) Whole animal

(4) Boneless cut

40. The traditional mirepoix commonly contains :

(1) Potato, tomato and spinach

(2) Onion, carrot and celery

(3) Garlic, ginger and chilli

(4) Rice, wheat and corn

41. Which sequence is correct ?

(1) Wants → Needs → Demands

(2) Needs → Wants → Demands

(3) Demands → Needs → Wants

(4) Products → Needs → Wants

42. Which philosophy places customer satisfaction at the centre of business decisions ?

(1) Production concept

(2) Product concept

(3) Marketing concept

(4) Selling concept

43. An unsold hotel room for a particular night represents :

(1) Inventory that can be sold tomorrow

(2) Perishable service capacity

(3) A tangible product

(4) A durable good

44. The additional 3 Ps in the services marketing mix are :

(1) People, Process, Physical Evidence

(2) Planning, Packaging, Positioning

(3) Publicity, People, Planning

(4) Product, Planning, Personnel

45. The three levels of a product are commonly identified as :

(1) Primary, secondary and tertiary product

(2) Basic, intermediate and final product

(3) Raw, semi-finished and finished product

(4) Core, actual and augmented product

46. Which characteristic of management emphasizes achievement of pre-determined objectives ?

(1) Dynamic

(2) Universal

(3) Goal-oriented

(4) Intangible

47. Supervisory management is also known as :

(1) Top management

(2) Middle management

(3) First-line management

(4) Strategic management

48. The entrepreneur role is classified as :

(1) Interpersonal

(2) Decisional

(3) Informational

(4) Technical

49. Break-even analysis determines the point where :

(1) Total revenue equals total cost

(2) Profit is maximum

(3) Sales are zero

(4) Variable cost is zero

50. Laissez-faire leadership provides :

(1) Constant supervision

(2) Strict centralized control

(3) No employee autonomy

(4) High degree of freedom to subordinates

51. What is the primary purpose of research ?

(1) To entertain readers

(2) To generate systematic knowledge and solve problems

(3) To increase the length of a report

(4) To collect information without analysis

52. Which characteristic distinguishes scientific research from casual inquiry ?

(1) It follows a systematic procedure

(2) It depends entirely on personal opinions

(3) It avoids collecting evidence

(4) It accepts assumptions without verification

53. Research conducted primarily to expand theoretical knowledge is called :

(1) Applied research

(2) Basic research

(3) Market research

(4) Action research

54. Research undertaken to solve a specific practical problem is known as :

(1) Applied research

(2) Historical research

(3) Fundamental research

(4) Philosophical research

95. Which type of research describes the characteristics of a population or phenomenon ?

(1) Experimental research

(2) Descriptive research

(3) Exploratory research

(4) Historical research

96. Exploratory research is particularly useful when :

(1) The research problem is already completely understood

(2) The researcher wants to establish a legal rule

(3) Little is known about the research problem

(4) The population size is already fixed

97. Which of the following is a current research challenge in the digital business ?

(1) Declining relevance of technology

(2) Integration of artificial intelligence and digital technologies

(3) Elimination of customer expectations

(4) Complete disappearance of online systems

58. Which factor is most important when selecting a research problem ?

(1) Personal interest alone

(2) Availability of relevant resources and feasibility

(3) Length of the research title

(4) Number of pages required

59. A good research problem should primarily be :

(1) Vague and extremely broad

(2) Clear, specific and researchable

(3) Based entirely on assumptions

(4) Impossible to investigate

60. Which of the following should be considered before selecting a research problem ?

(1) Feasibility of conducting the study

(2) Font size of the final report

(3) Number of tables in the thesis

(4) Colour of the questionnaire

61. Research methodology refers to :

(1) The physical location of the researcher

(2) The systematic approach used to conduct research

(3) The bibliography of a research report

(4) The title page of a thesis

62. Which of the following normally comes first in the research process ?

(1) Data analysis

(2) Identification of the research problem

(3) Statistical testing

(4) Report publication

63. Research design can best be described as :

(1) A blueprint or plan for conducting research

(2) A list of references

(3) A statistical software package

(4) A questionnaire answer sheet

64. Which research design is most appropriate when the researcher wants to determine whether one variable causes change in another ?

(1) Experimental design

(2) Historical design

(3) Descriptive design

(4) Documentary design

65. Primary data are :

(1) Data collected directly by the researcher for the specific study

(2) Information copied from an old textbook

(3) Data published by another researcher

(4) Historical records only

66. Which of the following is an example of secondary data ?

(1) Responses collected through a new questionnaire

(2) Interviews conducted by the researcher

(3) Government tourism statistics

(4) Observations made during fieldwork

67. Which technique involves asking respondents a structured set of questions

(1) Questionnaire survey

(2) Laboratory experiment

(3) Content analysis only

(4) Physical measurement

68. An interview is primarily a method of :

(1) Collecting information through interaction with respondents

(2) Calculating variance

(3) Creating frequency distributions

(4) Measuring correlation automatically

69. Observation as a data collection technique involves :

(1) Watching and systematically recording relevant behaviour or events

(2) Guessing respondents' opinions

(3) Calculating the population mean

(4) Selecting statistical hypotheses

70. A pilot study is generally conducted to :

(1) Publish the final research paper

(2) Test and improve the research instrument and procedure

(3) Replace the main study

(4) Increase the population size

71. A frequency distribution is used to show :

(1) How observations are distributed across categories or values

(2) The personal opinions of researchers

(3) Only the average of a dataset

(4) The researcher's bibliography

72. In a frequency table, frequency represents :

(1) The number of times a value or class occurs

(2) The highest observation

(3) The difference between two variables

(4) The total number of variables

73. Which of the following is important when constructing class intervals ?

(1) Classes should be appropriately defined and non-overlapping

(2) Every class must contain different numbers of observations

(3) Class boundaries should be randomly selected

(4) Intervals should always be unequal

74. In a frequency distribution, the class interval 20–29 represents :

(1) A single observation

(2) A range of values

(3) A correlation coefficient

(4) A probability value

75. The sum of all frequencies in a frequency distribution represents :

(1) The sample or population size represented by the table

(2) The median

(3) The standard deviation

(4) The regression coefficient

76. Which measure of central tendency is obtained by adding all observations and dividing by their number ?

(1) Mode

(2) Median

(3) Arithmetic mean

(4) Range

77. The middle value of an ordered dataset is called the :

(1) Mean

(2) Median

(3) Mode

(4) Variance

78. Which measure represents the most frequently occurring value ?

(1) Mean

(2) Median

(3) Mode

(4) Standard deviation

79. Which measure of central tendency is generally least affected by extreme values ?

(1) Arithmetic mean

(2) Median

(3) Weighted mean

(4) Geometric mean

80. Which measure of variation is calculated as the difference between the largest and smallest observations ?

(1) Variance

(2) Standard deviation

(3) Range

(4) Mean deviation

81. Standard deviation measures :

(1) The central value only

(2) The dispersion of observations around the mean

(3) The number of observations

(4) The most common observation

82. A smaller standard deviation indicates that the observations are :

(1) More widely scattered

(2) More closely clustered around the mean

(3) Always negatively correlated

(4) Always normally distributed

83. Correlation is primarily used to measure :

(1) The strength and direction of association between variables

(2) The frequency of observations

(3) The sample size

(4) The reliability of a questionnaire only

84. The value of Pearson's correlation coefficient generally ranges from :

(1) 0 to 100

(2) – 1 to + 1

(3) – 100 to + 100

(4) 1 to 10

85. A correlation coefficient of + 0.90 indicates :

(1) Strong positive relationship

(2) Strong negative relationship

(3) No relationship

(4) Perfectly random data

86. A correlation coefficient close to zero generally indicates :

(1) Strong positive association

(2) Strong negative association

(3) Little or no linear association

(4) Perfect causation

87. Regression analysis is mainly used for :

(1) Predicting or estimating one variable from another variable or set of variables

(2) Counting respondents

(3) Designing questionnaires only

(4) Arranging data alphabetically

88. In regression analysis, the variable being predicted is commonly called the :

(1) Independent variable

(2) Dependent variable

(3) Control variable

(4) Extraneous variable

89. Probability is a numerical measure of :

(1) The likelihood that an event will occur

(2) The size of a questionnaire

(3) The average score of respondents

(4) The number of research variables

90. The probability of an impossible event is :

(1) 1 (2) 0

(3) 0.5 (4) – 1

91. The probability of a certain event is :

(1) 0 (2) 0.25

(3) 0.50 (4) 1

92. Which probability distribution is commonly used for the number of successes in a fixed number of independent trials ?

(1) Binomial distribution

(2) Normal distribution

(3) Uniform distribution

(4) Exponential distribution

93. The normal distribution is characterised by :

(1) A bell-shaped and symmetric curve

(2) A rectangular graph only

(3) A completely irregular shape

(4) A curve containing only negative values

94. A sample is :

(1) The entire population under study

(2) A subset selected from the population

(3) A research hypothesis

(4) A statistical formula

95. Which sampling method gives every member of the population an equal known chance of selection ?

(1) Convenience sampling

(2) Snowball sampling

(3) Simple random sampling

(4) Judgment sampling

96. Stratified sampling involves :

(1) Dividing the population into relevant subgroups and sampling from them

(2) Selecting only easily accessible participants

(3) Asking participants to recruit their friends

(4) Choosing participants entirely on the researcher's preference

97. A hypothesis test is conducted primarily to :

(1) Determine whether there is sufficient statistical evidence regarding a claim about a population

(2) Increase the number of respondents

(3) Design a questionnaire

(4) Calculate only the median

98. Which test is generally considered parametric ?

(1) Chi-square test

(2) Mann-Whitney U test

(3) Independent-samples t-test

(4) Wilcoxon signed-rank test

99. Which of the following is a non-parametric test ?

(1) One-way ANOVA

(2) Pearson correlation

(3) Mann-Whitney U test

(4) Independent-samples t-test

100. Which test is commonly used to examine the association between two categorical variables ?

(1) Chi-square test of independence

(2) Paired t-test

(3) Pearson correlation

(4) Linear regression

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3. Receptionist
4. Assistant Front Office Manager

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(3) 3 → 2 → 4 → 1

(4) 2 → 3 → 1 → 4

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(2) Red grape variety

(3) Fortified spirit

(4) Beer variety

51. Which research design is most appropriate when the researcher wants to determine whether one variable causes change in another ?

(1) Experimental design

(2) Historical design

(3) Descriptive design

(4) Documentary design

52. Primary data are :

(1) Data collected directly by the researcher for the specific study

(2) Information copied from an old textbook

(3) Data published by another researcher

(4) Historical records only

53. Which of the following is an example of secondary data ?

(1) Responses collected through a new questionnaire

(2) Interviews conducted by the researcher

(3) Government tourism statistics

(4) Observations made during fieldwork

54. Which technique involves asking respondents a structured set of questions ?

(1) Questionnaire survey

(2) Laboratory experiment

(3) Content analysis only

(4) Physical measurement

55. An interview is primarily a method of :

(1) Collecting information through interaction with respondents

(2) Calculating variance

(3) Creating frequency distributions

(4) Measuring correlation automatically

56. Observation as a data collection technique involves :

(1) Watching and systematically recording relevant behaviour or events

(2) Guessing respondents' opinions

(3) Calculating the population mean

(4) Selecting statistical hypotheses

57. A pilot study is generally conducted to :

(1) Publish the final research paper

(2) Test and improve the research instrument and procedure

(3) Replace the main study

(4) Increase the population size

58. A frequency distribution is used to show :

(1) How observations are distributed across categories or values

(2) The personal opinions of researchers

(3) Only the average of a dataset

(4) The researcher's bibliography

59. In a frequency table, frequency represents :

(1) The number of times a value or class occurs

(2) The highest observation

(3) The difference between two variables

(4) The total number of variables

60. Which of the following is important when constructing class intervals ?

(1) Classes should be appropriately defined and non-overlapping

(2) Every class must contain different numbers of observations

(3) Class boundaries should be randomly selected

(4) Intervals should always be unequal

61. In a frequency distribution, the class interval 20–29 represents :

(1) A single observation

(2) A range of values

(3) A correlation coefficient

(4) A probability value

62. The sum of all frequencies in a frequency distribution represents :

(1) The sample or population size represented by the table

(2) The median

(3) The standard deviation

(4) The regression coefficient

63. Which measure of central tendency is obtained by adding all observations and dividing by their number ?

(1) Mode

(2) Median

(3) Arithmetic mean

(4) Range

64. The middle value of an ordered dataset is called the :

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(3) Mode

(4) Variance

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71. The value of Pearson's correlation coefficient generally ranges from :

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(2) – 1 to + 1

(3) – 100 to + 100

(4) 1 to 10

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(1) Independent variable

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76. Probability is a numerical measure of :

(1) The likelihood that an event will occur

(2) The size of a questionnaire

(3) The average score of respondents

(4) The number of research variables

77. The probability of an impossible event is :

(1) 1

(2) 0

(3) 0.5

(4) – 1

78. The probability of a certain event is :

(1) 0

(2) 0.25

(3) 0.50

(4) 1

79. Which probability distribution is commonly used for the number of successes in a fixed number of independent trials ?

(1) Binomial distribution

(2) Normal distribution

(3) Uniform distribution

(4) Exponential distribution

80. The normal distribution is characterised by :

(1) A bell-shaped and symmetric curve

(2) A rectangular graph only

(3) A completely irregular shape

(4) A curve containing only negative values

81. A sample is :

(1) The entire population under study

(2) A subset selected from the population

(3) A research hypothesis

(4) A statistical formula

82. Which sampling method gives every member of the population an equal known chance of selection ?

(1) Convenience sampling

(2) Snowball sampling

(3) Simple random sampling

(4) Judgment sampling

83. Stratified sampling involves :

(1) Dividing the population into relevant subgroups and sampling from them

(2) Selecting only easily accessible participants

(3) Asking participants to recruit their friends

(4) Choosing participants entirely on the researcher's preference

84. A hypothesis test is conducted primarily to :

(1) Determine whether there is sufficient statistical evidence regarding a claim about a population

(2) Increase the number of respondents

(3) Design a questionnaire

(4) Calculate only the median

85. Which test is generally considered parametric ?

(1) Chi-square test

(2) Mann-Whitney U test

(3) Independent-samples t-test

(4) Wilcoxon signed-rank test

86. Which of the following is a non-parametric test ?

(1) One-way ANOVA

(2) Pearson correlation

(3) Mann-Whitney U test

(4) Independent-samples t-test

87. Which test is commonly used to examine the association between two categorical variables ?

(1) Chi-square test of independence

(2) Paired t-test

(3) Pearson correlation

(4) Linear regression

88. What is the primary purpose of research ?

(1) To entertain readers

(2) To generate systematic knowledge and solve problems

(3) To increase the length of a report

(4) To collect information without analysis

89. Which characteristic distinguishes scientific research from casual inquiry ?

(1) It follows a systematic procedure

(2) It depends entirely on personal opinions

(3) It avoids collecting evidence

(4) It accepts assumptions without verification

90. Research conducted primarily to expand theoretical knowledge is called :

(1) Applied research

(2) Basic research

(3) Market research

(4) Action research

91. Research undertaken to solve a specific practical problem is known as :

(1) Applied research

(2) Historical research

(3) Fundamental research

(4) Philosophical research

92. Which type of research describes the characteristics of a population or phenomenon ?

(1) Experimental research

(2) Descriptive research

(3) Exploratory research

(4) Historical research

93. Exploratory research is particularly useful when :

(1) The research problem is already completely understood

(2) The researcher wants to establish a legal rule

(3) Little is known about the research problem

(4) The population size is already fixed

94. Which of the following is a current research challenge in the hotel business ?

(1) Declining relevance of technology

(2) Integration of artificial intelligence and digital technologies

(3) Elimination of customer expectations

(4) Complete disappearance of online reviews

95. Which factor is most important when selecting a research problem ?

(1) Personal interest alone

(2) Availability of relevant resources and feasibility

(3) Length of the research title

(4) Number of pages required

96. A good research problem should primarily be :

(1) Vague and extremely broad

(2) Clear, specific and researchable

(3) Based entirely on assumptions

(4) Impossible to investigate

97. Which of the following should be considered before selecting a research problem ?

(1) Feasibility of conducting the study

(2) Font size of the final report

(3) Number of tables in the thesis

(4) Colour of the questionnaire

98. Research methodology refers to :

(1) The physical location of the researcher

(2) The systematic approach used to conduct research

(3) The bibliography of a research report

(4) The title page of a thesis

99. Which of the following normally comes first in the research process ?

(1) Data analysis

(2) Identification of the research problem

(3) Statistical testing

(4) Report publication

100. Research design can best be described as :

(1) A blueprint or plan for conducting research

(2) A list of references

(3) A statistical software package

(4) A questionnaire answer sheet

Total No. of Printed Pages : 30

(DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU ARE ASKED TO DO SO)

PH.D.-EE-October, 2026 (IHTM)

C

100011

Sr. No. .....

Time : 1¼ Hours **Max. Marks : 100** **Total Questions : 100**

Roll No. _____ (in figure) _____ (in words)

Name _____ Father's Name _____

Mother's Name _____ Date of Examination _____

(Signature of the Candidate) (Signature of the Invigilator)

CANDIDATES MUST READ THE FOLLOWING INFORMATION/ INSTRUCTIONS BEFORE STARTING THE QUESTION PAPER.

1. Before answering the questions, the candidates should ensure that they have been supplied correct and complete booklet. Discrepancy, if any, should be immediately reported to the invigilator and should ask for replacement of Question booklet / OMR Answer Sheet. **Complaints, if any, regarding misprinting etc. will not be entertained 30 minutes after start of the examination.**
2. All questions are compulsory. There will be no negative marking. Each correct answer will be awarded one full mark.
3. For each question, four suggested answers (1), (2), (3), (4) are given. The candidate is to choose only one answer which he / she considers the correct or best one. If the candidate darkens more than one circle or cutting / over writing / erasing, then such answer(s) shall not be evaluated.
4. The candidate **MUST NOT** do any rough work or writing in the OMR Answer-Sheet. Rough work, if any, may be done in the space provided in the end of question booklet. Answers **MUST NOT** be ticked in the Question book-let.
5. Use only Black or Blue **BALL POINT PEN** of good quality in the OMR Answer-Sheet.
6. Keeping in view the transparency of the examination system, carbonless OMR Sheet is provided to the candidate so that a copy of OMR Sheet may be kept by the candidate.
7. Question Booklet(s) along with answer key(s) of all the A, B, C & D codes will be got uploaded on the university website after the conduct of Entrance Examination. Candidates may raise valid objection / complaint, if any, with regard to discrepancy in the question booklet / answer key within 24 hours of uploading the same on the University website. The complaint be sent by the student to the Controller of Examinations by hand or through email. Thereafter, no complaint in any case, will be considered.
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SEAL

1. Which type of lighting provides general illumination throughout a space ?

(1) Ambient lighting

(2) Accent lighting

(3) Task lighting

(4) Decorative lighting only

2. Which statement BEST distinguishes linen par stock from uniform par stock ?

(1) Linen par is based only on hotel size; uniform par is based only on room occupancy.

(2) Linen par is primarily related to operational linen requirements, while uniform par is related to employee requirements and uniform-change cycles.

(3) Both are always calculated identically.

(4) Neither requires inventory control.

3. Which design style generally emphasizes simplicity, functionality and limited ornamentation ?

(1) Minimalist

(2) Baroque

(3) Eclectic

(4) Classical

4. Which principle is most important when selecting a stain-removal agent ?

(1) Strongest chemical should always be used

(2) Treatment should be appropriate to both stain and fabric

(3) All stains require bleach

(4) Hot water should always be used

5. The Garde Manger is traditionally associated with :

(1) Cold kitchen preparations

(2) Bakery only

(3) Meat purchasing

(4) Beverage service

6. Class C fires generally involve :

(1) Wood

(2) Paper

(3) Cooking oil

(4) Flammable gases

7. Minerals are generally :

(1) Destroyed completely by heat

(2) Inorganic nutrients

(3) Proteins

(4) Carbohydrates

8. The white portion of an egg is called :

(1) Albumen

(2) Yolk

(3) Cuticle

(4) Germinal disc

9. Brunoise refers to :

(1) Long strip

(2) Large slice

(3) Fine dice

(4) Whole vegetable

10. Braising is a :

(1) Combination cooking method

(2) Dry method only

(3) Moist method only

(4) Raw preparation technique

11. Consommé is a :

(1) Dessert

(2) Thick soup

(3) Clear soup

(4) Sauce

12. The five classical mother sauces include Béchamel, Velouté, Espagnole, Tomato and :

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(2) Pesto

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(4) Soy sauce

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39. The front bar is primarily :

(1) The guest-facing counter

(2) A storage cellar

(3) A kitchen worktable

(4) A stewarding area

40. A hotel has high beverage sales but unusually high beverage cost. Which combination should management investigate ?

1. Pouring control
2. Pilferage
3. Wastage
4. Inventory reconciliation
5. Standard recipes

(1) 1, 2 and 3 only

(2) 2, 3 and 4 only

(3) 1, 2, 3, 4 and 5

(4) 1 and 5 only

41. Which seating arrangement is particularly suitable for a presentation where guests face a speaker ?

(1) Theatre style
(2) Classroom style only
(3) Hollow square only
(4) Boardroom only

42. Which of the following is a correct classical French menu term ?

(1) Rôti—Roast
(2) Potage—Dessert
(3) Poisson—Cheese
(4) Fromage—Fish

43. A Continental breakfast traditionally includes :

(1) Eggs, bacon and sausages as standard components
(2) Bread/bakery items, preserves and beverage(s)
(3) Rice, curry and dal only
(4) Steak and potatoes

44. Which sequence is most logical ?

(1) Mise-en-place → service → clearing → settlement
(2) Settlement → mise-en-place → service → clearing
(3) Service → purchasing → mise-en-place
(4) Clearing → preparation → service

45. Which characteristic makes HRD particularly important in hotels ?

(1) Capital-intensive production

(2) Highly automated production

(3) Labour-intensive service delivery

(4) Agricultural production

46. "Responsible for inspecting guest rooms and ensuring adherence to housekeeping standards" is an example of :

(1) Job specification

(2) Job description

(3) Recruitment advertisement only

(4) Training evaluation

47. Consider the following statements :

1. Housekeeping contributes to the physical quality of the guest experience.
2. Front Office depends on accurate room-status information.
3. Maintenance coordination helps preserve room functionality.
4. Housekeeping operates independently of other hotel departments.

Which statements are correct ?

(1) 1, 2 and 3 only

(2) 1 and 4 only

(3) 2 and 4 only

(4) All four

48. Which of the following is a beer style known for its dark colour and roasted flavours ?

(1) Wheat beer exclusively
(2) Pilsner
(3) Light lager exclusively
(4) Stout

49. Consider the following statements :

1. Daily cleaning maintains routine standards.
2. Deep cleaning addresses areas requiring more intensive attention.
3. Spring cleaning can be organized as a periodic comprehensive programme.
4. Deep cleaning eliminates the need for daily cleaning.

Which are correct ?

(1) 1, 2 and 3 only
(2) 1 and 4 only
(3) 2 and 4 only
(4) All four

50. A room marked Vacant Clean (VC) generally indicates :

(1) Vacant and requiring cleaning
(2) Vacant and cleaned, subject to the hotel's inspection/release procedure
(3) Occupied and clean
(4) Out of order

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(2) The median

(3) The standard deviation

(4) The regression coefficient

Total No. of Printed Pages : 30

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PH.D.-EE-October, 2026 (IHTM)

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100012

Sr. No. .....

Time : 1¼ Hours **Max. Marks : 100** **Total Questions : 100**

Roll No. _____ (in figure) _____ (in words)

Name _____ Father's Name _____

Mother's Name _____ Date of Examination _____

(Signature of the Candidate) (Signature of the Invigilator)

CANDIDATES MUST READ THE FOLLOWING INFORMATION/ INSTRUCTIONS BEFORE STARTING THE QUESTION PAPER.

SEAL

1. Before answering the questions, the candidates should ensure that they have been supplied correct and complete booklet. Discrepancy, if any, should be immediately reported to the invigilator and should ask for replacement of Question booklet / OMR Answer Sheet. **Complaints, if any, regarding misprinting etc. will not be entertained 30 minutes after start of the examination.**
2. All questions are compulsory. There will be no negative marking. Each correct answer will be awarded one full mark.
3. For each question, four suggested answers (1), (2), (3), (4) are given. The candidate is to choose only one answer which he / she considers the correct or best one. If the candidate darkens more than one circle or cutting / over writing / erasing, then such answer(s) shall not be evaluated.
4. The candidate **MUST NOT** do any rough work or writing in the OMR Answer-Sheet. Rough work, if any, may be done in the space provided in the end of question booklet. Answers **MUST NOT** be ticked in the Question book-let.
5. Use only Black or Blue **BALL POINT PEN** of good quality in the OMR Answer-Sheet.
6. Keeping in view the transparency of the examination system, carbonless OMR Sheet is provided to the candidate so that a copy of OMR Sheet may be kept by the candidate.
7. Question Booklet(s) along with answer key(s) of all the A, B, C & D codes will be got uploaded on the university website after the conduct of Entrance Examination. Candidates may raise valid objection / complaint, if any, with regard to discrepancy in the question booklet / answer key within 24 hours of uploading the same on the University website. The complaint be sent by the student to the Controller of Examinations by hand or through email. Thereafter, no complaint in any case, will be considered.
8. The candidates must return the Question booklet as well as Original OMR answer-sheet to the Invigilator concerned before leaving the Examination Hall, failing which a case of use of unfair-means / misbehavior will be registered against him / her, in addition to lodging of an FIR with the police. Further the answer-sheet of such a candidate will not be evaluated.

1. Which sequence is correct ?

(1) Wants → Needs → Demands

(2) Needs → Wants → Demands

(3) Demands → Needs → Wants

(4) Products → Needs → Wants

2. Which philosophy places customer satisfaction at the centre of business decisions ?

(1) Production concept

(2) Product concept

(3) Marketing concept

(4) Selling concept

3. An unsold hotel room for a particular night represents :

(1) Inventory that can be sold tomorrow

(2) Perishable service capacity

(3) A tangible product

(4) A durable good

4. The additional 3 Ps in the services marketing mix are :

(1) People, Process, Physical Evidence

(2) Planning, Packaging, Positioning

(3) Publicity, People, Planning

(4) Product, Planning, Personnel

5. The three levels of a product are commonly identified as :

(1) Primary, secondary and tertiary product

(2) Basic, intermediate and final product

(3) Raw, semi-finished and finished product

(4) Core, actual and augmented product

6. Which characteristic of management emphasizes achievement of pre-determined objectives ?

(1) Dynamic

(2) Universal

(3) Goal-oriented

(4) Intangible

7. Supervisory management is also known as :

(1) Top management

(2) Middle management

(3) First-line management

(4) Strategic management

8. The entrepreneur role is classified as :

(1) Interpersonal

(2) Decisional

(3) Informational

(4) Technical

9. Break-even analysis determines the point where :

(1) Total revenue equals total cost

(2) Profit is maximum

(3) Sales are zero

(4) Variable cost is zero

10. Laissez-faire leadership provides :

(1) Constant supervision

(2) Strict centralized control

(3) No employee autonomy

(4) High degree of freedom to subordinates

11. The transition from traditional lodging to modern hospitality organizations reflects a shift from :

(1) International travel to local travel

(2) Commercial service to religious service

(3) Luxury service to no service

(4) Informal guest care to standardized and professional service

12. Which sequence best represents the guest-room cycle involving Front Office and Housekeeping ?

(1) Reservation → Arrival → Room assignment → Occupancy → Departure → Room cleaning → Ready for sale

(2) Room cleaning → Reservation → Departure → Arrival

(3) Arrival → Departure → Reservation → Room assignment

(4) Reservation → Departure → Arrival → Room cleaning

13. Arrange the following in the most appropriate hierarchy for a large hotel's Front Office :

1. Front Office Manager
2. Reception Supervisor
3. Receptionist
4. Assistant Front Office Manager

(1) 4 → 1 → 3 → 2

(2) 1 → 4 → 2 → 3

(3) 3 → 2 → 4 → 1

(4) 2 → 3 → 1 → 4

14. The published rate for a hotel room without discounts or special concessions is commonly known as :

(1) Rack rate

(2) Net rate

(3) Contract rate

(4) Group rate

15. Which system is used to maintain hotel room availability, rates and bookings electronically ?

(1) Property Management System (PMS)

(2) Payroll system only

(3) Inventory ledger only

(4) Central Reservation System (CRS)

16. Which of the following is commonly associated with foreign guest registration in India ?

(1) Passport details

(2) Visa details

(3) Guest address/contact details

(4) All of the above

17. Which account records transactions for guests who have checked out but have outstanding balances ?

(1) Guest ledger
(2) City ledger
(3) Stores ledger
(4) Payroll ledger

18. Management by Objectives (MBO) is strongly associated with :

(1) Peter Drucker
(2) Frederick Taylor
(3) Elton Mayo
(4) Henri Fayol

19. Which of the following is an important tool of yield management ?

(1) Demand forecasting
(2) Historical data analysis
(3) Inventory control
(4) All of the above

20. A hotel security programme is primarily designed to :

(1) Increase room rates
(2) Protect guests, employees, property and information
(3) Improve food production
(4) Increase advertising

21. Which of the following is an operating department of a hotel ?

(1) Human Resources

(2) Finance

(3) F & B Service

(4) Purchasing

22. Espresso is prepared by :

(1) Forcing hot water through finely ground coffee under pressure

(2) Boiling whole coffee cherries in wine

(3) Infusing tea leaves

(4) Distilling roasted beans

23. Which service method is most strongly associated with the presentation of food from a service dish and guest-side serving by the waiter ?

(1) American service

(2) Russian service

(3) Cafeteria service

(4) Vending service

24. Chardonnay is primarily a :

(1) White grape variety

(2) Red grape variety

(3) Fortified spirit

(4) Beer variety

25. The front bar is primarily :

(1) The guest-facing counter

(2) A storage cellar

(3) A kitchen worktable

(4) A stewarding area

26. A hotel has high beverage sales but unusually high beverage cost. Which combination should management investigate ?

1. Pouring control
2. Pilferage
3. Wastage
4. Inventory reconciliation
5. Standard recipes

(1) 1, 2 and 3 only

(2) 2, 3 and 4 only

(3) 1, 2, 3, 4 and 5

(4) 1 and 5 only

27. Which seating arrangement is particularly suitable for a presentation where guests face a speaker ?

(1) Theatre style
(2) Classroom style only
(3) Hollow square only
(4) Boardroom only

28. Which of the following is a correct classical French menu term ?

(1) Rôti—Roast
(2) Potage—Dessert
(3) Poisson—Cheese
(4) Fromage—Fish

29. A Continental breakfast traditionally includes :

(1) Eggs, bacon and sausages as standard components
(2) Bread/bakery items, preserves and beverage(s)
(3) Rice, curry and dal only
(4) Steak and potatoes

30. Which sequence is most logical ?

(1) Mise-en-place → service → clearing → settlement
(2) Settlement → mise-en-place → service → clearing
(3) Service → purchasing → mise-en-place
(4) Clearing → preparation → service

31. Which characteristic makes HRD particularly important in hotels ?

(1) Capital-intensive production

(2) Highly automated production

(3) Labour-intensive service delivery

(4) Agricultural production

32. "Responsible for inspecting guest rooms and ensuring adherence to housekeeping standards" is an example of :

(1) Job specification

(2) Job description

(3) Recruitment advertisement only

(4) Training evaluation

33. Consider the following statements :

1. Housekeeping contributes to the physical quality of the guest experience.
2. Front Office depends on accurate room-status information.
3. Maintenance coordination helps preserve room functionality.
4. Housekeeping operates independently of other hotel departments.

Which statements are correct ?

(1) 1, 2 and 3 only

(2) 1 and 4 only

(3) 2 and 4 only

(4) All four

34. Which of the following is a beer style known for its dark colour and roasted flavours ?

(1) Wheat beer exclusively
(2) Pilsner
(3) Light lager exclusively
(4) Stout

35. Consider the following statements :

1. Daily cleaning maintains routine standards.
2. Deep cleaning addresses areas requiring more intensive attention.
3. Spring cleaning can be organized as a periodic comprehensive programme.
4. Deep cleaning eliminates the need for daily cleaning.

Which are correct ?

(1) 1, 2 and 3 only
(2) 1 and 4 only
(3) 2 and 4 only
(4) All four

36. A room marked Vacant Clean (VC) generally indicates :

(1) Vacant and requiring cleaning
(2) Vacant and cleaned, subject to the hotel's inspection/release procedure
(3) Occupied and clean
(4) Out of order

37. Which type of lighting provides general illumination throughout a space ?

(1) Ambient lighting

(2) Accent lighting

(3) Task lighting

(4) Decorative lighting only

38. Which statement BEST distinguishes linen par stock from uniform par stock ?

(1) Linen par is based only on hotel size; uniform par is based only on room occupancy.

(2) Linen par is primarily related to operational linen requirements, while uniform par is related to employee requirements and uniform-change cycles.

(3) Both are always calculated identically.

(4) Neither requires inventory control.

39. Which design style generally emphasizes simplicity, functionality and limited ornamentation ?

(1) Minimalist

(2) Baroque

(3) Eclectic

(4) Classical

40. Which principle is most important when selecting a stain-removal agent ?

(1) Strongest chemical should always be used

(2) Treatment should be appropriate to both stain and fabric

(3) All stains require bleach

(4) Hot water should always be used

41. The Garde Manger is traditionally associated with :

(1) Cold kitchen preparations

(2) Bakery only

(3) Meat purchasing

(4) Beverage service

42. Class C fires generally involve :

(1) Wood

(2) Paper

(3) Cooking oil

(4) Flammable gases

43. Minerals are generally :

(1) Destroyed completely by heat

(2) Inorganic nutrients

(3) Proteins

(4) Carbohydrates

44. The white portion of an egg is called :

(1) Albumen

(2) Yolk

(3) Cuticle

(4) Germinal disc

45. Brunoise refers to :

(1) Long strip

(2) Large slice

(3) Fine dice

(4) Whole vegetable

46. Braising is a :

(1) Combination cooking method

(2) Dry method only

(3) Moist method only

(4) Raw preparation technique

47. Consommé is a :

(1) Dessert

(2) Thick soup

(3) Clear soup

(4) Sauce

48. The five classical mother sauces include Béchamel, Velouté, Espagnole, Tomato and :

(1) Hollandaise

(2) Pesto

(3) Barbecue

(4) Soy sauce

49. A fillet is generally a :

(1) Skin only

(2) Bone-in cut only

(3) Whole animal

(4) Boneless cut

50. The traditional mirepoix commonly contains :

(1) Potato, tomato and spinach

(2) Onion, carrot and celery

(3) Garlic, ginger and chilli

(4) Rice, wheat and corn

51. In regression analysis, the variable being predicted is commonly called the :

(1) Independent variable

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(4) Extraneous variable

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(3) The standard deviation

(4) The regression coefficient

89. Which measure of central tendency is obtained by adding all observations and dividing by their number ?

(1) Mode

(2) Median

(3) Arithmetic mean

(4) Range

90. The middle value of an ordered dataset is called the :

(1) Mean

(2) Median

(3) Mode

(4) Variance

91. Which measure represents the most frequently occurring value ?

(1) Mean

(2) Median

(3) Mode

(4) Standard deviation

92. Which measure of central tendency is generally least affected by extreme values ?

(1) Arithmetic mean

(2) Median

(3) Weighted mean

(4) Geometric mean

93. Which measure of variation is calculated as the difference between the largest and smallest observations ?

(1) Variance

(2) Standard deviation

(3) Range

(4) Mean deviation

94. Standard deviation measures :

(1) The central value only

(2) The dispersion of observations around the mean

(3) The number of observations

(4) The most common observation

95. A smaller standard deviation indicates that the observations are :

(1) More widely scattered

(2) More closely clustered around the mean

(3) Always negatively correlated

(4) Always normally distributed

96. Correlation is primarily used to measure :

(1) The strength and direction of association between variables

(2) The frequency of observations

(3) The sample size

(4) The reliability of a questionnaire only

97. The value of Pearson's correlation coefficient generally ranges from :

(1) 0 to 100

(2) – 1 to + 1

(3) – 100 to + 100

(4) 1 to 10

98. A correlation coefficient of + 0.90 indicates :

(1) Strong positive relationship

(2) Strong negative relationship

(3) No relationship

(4) Perfectly random data

99. A correlation coefficient close to zero generally indicates :

(1) Strong positive association

(2) Strong negative association

(3) Little or no linear association

(4) Perfect causation

100. Regression analysis is mainly used for :

(1) Predicting or estimating one variable from another variable or set of variables

(2) Counting respondents

(3) Designing questionnaires only

(4) Arranging data alphabetically

Answer keys for Ph.D (Hotel Management) entrance exam held on 23.10.2026				
Q. NO.	A	B	C	D
1	4	1	1	2
2	1	3	2	3
3	2	1	1	2
4	1	1	2	1
5	1	2	1	4
6	4	1	4	3
7	2	3	2	3
8	1	2	1	2
9	4	1	3	1
10	2	4	1	4
11	3	1	3	4
12	1	2	1	1
13	2	1	4	2
14	1	2	2	1
15	1	1	2	1
16	3	2	3	4
17	1	1	2	2
18	1	4	1	1
19	2	2	4	4
20	1	1	3	2
21	3	3	3	3
22	2	1	2	1
23	1	3	1	2
24	4	1	4	1
25	1	4	4	1
26	2	2	1	3
27	1	2	2	1
28	2	3	1	1
29	1	2	1	2
30	2	1	4	1
31	1	4	2	3
32	4	3	1	2
33	2	3	4	1
34	1	2	2	4
35	3	1	3	1
36	1	4	1	2
37	3	4	2	1
38	1	1	1	2
39	4	2	1	1
40	2	1	3	2
41	2	1	1	1
42	3	4	1	4
43	2	2	2	2
44	1	1	1	1
45	4	4	3	3
46	3	2	2	1
47	3	3	1	3
48	2	1	4	1
49	1	2	1	4
50	4	1	2	2

Anoop Kumar

Answer keys for Ph.D (Hotel Management) entrance exam held on 23.10.2026				
Q. NO.	A	B	C	D
51	2	1	3	2
52	1	1	2	1
53	2	3	3	2
54	1	1	2	4
55	2	1	3	1
56	3	1	2	1
57	2	2	2	2
58	2	1	1	3
59	2	1	2	1
60	1	1	1	1
61	2	2	3	3
62	2	1	1	3
63	1	3	2	1
64	1	2	1	2
65	1	3	2	1
66	3	2	4	2
67	1	3	1	1
68	1	2	1	2
69	1	2	2	3
70	2	1	3	2
71	1	2	1	2
72	1	1	1	2
73	1	3	3	1
74	2	1	3	2
75	1	2	1	2
76	3	1	2	1
77	2	2	1	1
78	3	4	2	1
79	2	1	1	3
80	3	1	2	1
81	2	2	3	1
82	2	3	2	1
83	1	1	2	2
84	2	1	2	1
85	1	3	1	1
86	3	3	2	1
87	1	1	2	2
88	2	2	1	1
89	1	1	1	3
90	2	2	1	2
91	4	1	3	3
92	1	2	1	2
93	1	3	1	3
94	2	2	1	2
95	3	2	2	2
96	1	2	1	1
97	1	1	1	2
98	3	2	1	1
99	3	2	2	3
100	1	1	1	1