V. M. SALGAOCAR INSTITUTE
of
INTERNATIONAL HOSPITALITY EDUCATION

B.Sc. International Hospitality Management

Type: Semester End Assessment (SEA)   Date: 16/01/2025

Batch and Term: 2023-2026 and VIII   Total Marks: 25   Time Duration: 2 Hours

Course Name: Data Analysis   Course Code: IHOH116

Faculty: Ms. Nisha Raj Nair

This paper contains 03 pages in addition to the cover page.

Full Name of the Student:_____

Permanent Registration Number: _____Class: _____

Marks Obtained: _____ Faculty Signature: _____ Invigilator Signature: _____

Main Answer sheet	Number of Supplements	Total number of Answer sheets
01		

- Carefully read each question at the outset of the paper. All queries must be addressed to the faculty within the first 10 minutes of the examination.
- Students are expected to maintain complete silence in the examination hall and should not interact or communicate with their peers.
- Students will carry only their essential stationery like pens, pencils, ruler and simple calculators into the examination hall.
- Bags, eatables, drinks, etc. will not be allowed inside the hall with the exception of a bottle of water.
- Cell phones, electronic data banks, scientific calculators and smart/beeping watches are prohibited in the examination hall.
- Students will answer the examination with only blue/ black ball point pens unless informed differently by faculty. Avoid usage of green or red ink pens on the answer sheet.
- Dictionaries will not be allowed into examination hall unless informed differently by faculty.

Q.I. Answer the following (Any 5)   **(5 x 02 Marks = 10 Marks)**

1. As part of its community outreach programme, a Manufacturing Company plans to conduct a door-to-door survey in a nearby rural area to identify households without access to clean drinking water. The company aims to use this information to install water purification units in the most affected locations. What steps should be followed during the various stages of this statistical survey?

2. What is a trimmed mean? Calculate a 20% trimmed mean for the following dataset:
   5, 12, 8, 20, 17, 14, 9, 25, 11, 18, 7, 22, 16, 10, 13

3. What do the measures of location in summary statistics tell you about and which are the different measures of location?

4. Define statistics and explain any 2 characteristics of statistics.

5. The monthly number of books borrowed from a public library during one year is as follows:
   310, 295, 280, 300, 345, 360, 330, 350, 370, 365, 390, 405.
   Calculate the mean, median and mode for the above data.

6. What is primary data? State one advantage and one disadvantage of using primary data in statistical investigations.

7. A restaurant serves 50 vegetarian dishes, 35 non-vegetarian dishes, and 15 desserts. If a dish is selected at random, what is the probability that it will not be a dessert?

8. What are qualitative characteristics of an entity? Give examples.

Q.II. Answer the following in detail (Any 2)　　　　　　**(2 x 05 Marks = 10 Marks)**

1. The Housekeeping Department of Hotel Sunshine keeps a record of the number of room service requests received each day over a 12-day period. The number of requests recorded each day is as follows:
   5, 8, 12, 7, 10, 15, 9, 6, 14, 11, 13, 16

   Answer the following questions with respect to the above data:

   i.　What is a box plot? What kind of summary statistic does it help you measure in the above case?

   ii.　What do you mean by quartiles? Find Q1, Q2, and Q3 for the above data set.

   iii.　What is IQR? Why is it the most preferred measure of spread? Calculate IQR for above data.

2. A boutique hotel with around 40 staff members wants to conduct a survey to evaluate its guest services and internal communication among staff. The hotel aims to assess whether its service policies are being consistently implemented and to measure the satisfaction of both employees and guests regarding work culture and service quality.

   a. What is the best method to collect data for this kind of survey? Explain why.

   b. State some advantages and disadvantages of the method you would choose.

   c. Suggest at least 5 questions that could be included in the survey to obtain the required information.

3. A luxury resort collected feedback ratings from 180 guests on a scale of 1 to 10 regarding their overall satisfaction with the resort services. The ratings were recorded as follows:

Score %	Number of Guests
1 - 2	4
3 - 4	12
5 - 6	28
7 - 8	70
9 - 10	66

Data Analysis

Construct the cumulative frequency table. Also Answer the following:

i. What is cumulative frequency?

ii. How many guests gave a rating less than 7?

iii. What percentage of guests gave a rating between 5 and 10?

iv. What is the difference between cumulative frequency and relative frequency?

v. What is cumulative relative frequency? Calculate for the above table.

Q.III. Answer the following in detail (Any 1)   (1 x 5 Marks = 5 Marks)

1. What is sampling? Explain the difference between probability and non-probability sampling. Give two examples of each type in a business or hospitality context.

2. Explain briefly any 4 characteristics of a good questionnaire. What are the steps involved in creating one?

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