



V. M. SALGAOCAR INSTITUTE
of
INTERNATIONAL HOSPITALITY EDUCATION
B. Sc. International Hospitality Management

Type: Semester End Assessment

Date: 12/04/2024

Batch and Term: 2021-2024 and 9

Total Marks: 25

Time Duration: 2 Hours

Course Name: Data Analysis

Course Code: IHOH116

Instructor: 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.1. Answer the following (Any 5)

(5*2 = 10 Marks)

1. Define Statistics according to Croxton and Cowden. Explain it briefly giving examples.

2. The monthly bookings for a popular catering service in town is as follows:

15,10,24,20,40,26,29,17,15, 16,18,20

Calculate the 3 statistical averages on the above data.

3. In Regression analysis, explain with example dependent and independent variables.

4. As a part of its CSR activity a Hotel Chain plans to conduct a door-to-door survey to identify the unemployed in the nearby slum area, in order to help them provide job opportunities. What are the steps that should be followed during the various stages of this statistical survey?

5. What do you mean by trimmed mean? Calculate a 20% trimmed mean for the following data: 22, 25, 29, 11, 14, 18, 13, 13, 17, 11, 8, 8, 7, 12, 15, 6, 8, 7, 9, 12.

6. Explain briefly any 2 differences in the plural and singular sense of Statistics giving examples.

7. John rolls a fair dice, with sides labelled A, B, C, D, E and F. What is the probability that the dice lands on a vowel?

8. Explain the difference between using a histogram and a bar chart for data analysis with examples.



V. M. SALGAOCAR INSTITUTE
of
INTERNATIONAL HOSPITALITY EDUCATION

Q.2. Answer the following (Any 2)

(2*5 = 10 Marks)

1. The House keeping department of Golden Arch Hotels registers the number of complaints from customers on various issues related to housekeeping at the hotel. The number of complaints recorded each day is as follows : { 13, 2 , 7 , 12, 8 , 11 , 14 , 15 , 6, 22 , 8 , 23 }

Answer the following questions with respect to the above problem.

- What is a box plot? What kind of summary statistic does it help you measure in the above case?
- What do you mean by quartiles? Find Q 1, Q 2, and Q 3 for the above data set.
- Draw a box-and-whisker plot depicting the above data set.

2. The interview scores of 200 candidates who appeared for an interview for various posts at a leading star property were recorded and shown by the following frequency distribution.

Score %	Number of Candidates
10 - 19	7
20 - 29	11
30 - 39	20
40 - 49	46
50 - 59	57
60 - 69	37
70 - 79	15
80 - 89	7

Construct the cumulative frequency table.

Also answer the following.

- What do you mean by cumulative frequency?



V. M. SALGAOCAR INSTITUTE
of
INTERNATIONAL HOSPITALITY EDUCATION

- (ii) How many candidates obtained less than 50 %?
- (iii) What percentage of candidates obtained score between 60 – 90?
- (iv) What is the difference between cumulative and relative frequency?
- (v) What is cumulative relative frequency?

3. A sound production company with around 30 employees, wants to carry out a survey about the company communications. It wants to look into evaluation of both internal and external communications. Through the survey it wants to check if the policies of the organization are being enforced across the board, both with employees and clients. They want to check for the satisfaction of both the employees and clients towards the policies and work culture of the company.

- a. What is the best way to carry out data collection for this kind of survey? Why?
- b. Give some merits and demerits of the above method you would be using.
- c. Suggest some questions that could be put forth through the method you choose to get the required information (atleast 5).

Q.3. Answer the following (Any 1)

(1*5 = 5 Marks)

- 1. Explain the difference between the 4 types of non - probability sampling techniques with appropriate examples.
- 2. Explain briefly Time Series analysis giving examples. Also explain in detail the use of time series analysis by statisticians.
