



GRETSA UNIVERSITY - THIKA

UNIVERSITY EXAMINATIONS SEPTEMBER - DECEMBER 2021 SEMESTER

DIPLOMA IN HOTEL & RESTAURANT MANAGEMENT; DIPLOMA IN TRAVEL & TOURISM MANAGEMENT

COURSE CODE: DIHM 023/DTTM 023

**COURSE TITLE: BASIC STATISTICAL METHODS IN
HOSPITALITY & TOURISM**

DATE: 16 NOVEMBER 2021

TIME: 11.30 AM - 2.30 PM

INSTRUCTIONS TO CANDIDATES

1. SECTION A IS **COMPULSORY**.
2. SECTION B: ANSWER ANY OTHER **THREE** QUESTIONS.
3. **DO NOT** WRITE ANYTHING ON THIS QUESTION PAPER AS IT WILL BE AN EXAM IRREGULARITY.
4. ALL ROUGH WORK SHOULD BE AT THE BACK OF YOUR ANSWER BOOKLET AND CROSSED OUT.

CAUTION: All exam rooms are under CCTV surveillance during the examination period.

SECTION A: COMPULSORY

Question One

- a) Distinguish between the following:
- (i) Population and Sample [2 Marks]
 - (ii) Descriptive statistic and Inferential statistic [4 Marks]
- b) The data represent the ages of employees working in a chain of hotel.
57, 61, 57, 57, 58, 57, 61, 54, 68, 51, 49, 64, 50, 48, 65, 52, 56, 46, 54, 49, 50, 47, 55, 55, 54, 42, 51, 56, 55, 54, 51, 60, 62, 43, 55, 56, 61, 52, 69, 64, 46, 54
- (i) What kind of data is the one indicated by the dataset above? Explain your answer [4 Marks]
 - (ii) Calculate **all** measures of central tendency without grouping the data [9 Marks]
 - (iii) Organize the data into a frequency distribution table [6 Marks]
 - (iv) Calculate the mean, median and mode after grouping the dataset [9 Marks]
 - (v) Calculate the variance and standard deviations after grouping the dataset [6 Marks]

SECTION B: ANSWER ANY THREE QUESTIONS

Question Two

- a) Discuss five characteristics of statistics in the hospitality and tourism industry [10 Marks]
- b) Describe four levels of measurement used to measure data in statistics giving two examples of variables in the hospitality business that can be measured on each level [10 Marks]

Question Three

Listed below are the ages of a group of 50 employees in Shanzu Hotel:

26, 38, 28, 41, 30, 26, 28, 37, 29, 39, 27, 27, 18, 36, 22, 31, 26, 43, 16, 20, 39, 25, 31, 24, 44, 21, 38, 23, 34, 24, 43, 24, 40, 22, 40, 21, 45, 23, 37, 29, 36, 26, 49, 42, 44, 45, 47, 51, 54, 55

You are required to:

- a) Calculate all measures of central tendency without grouping the data [9 Marks]
- b) Compute the standard deviation and variance without grouping observations in the dataset [6 Marks]
- c) Distinguish between continuous variable and discrete variable [5 Marks]

Question Four

- a) Discuss the importance of statistics to hospitality and tourism management [10 Marks]

- b) Explain the characteristics, uses, advantages and disadvantages of the mean, median and mode
[10 Marks]

Question Five

- a) The following table gives the frequency distribution of the number of orders received each day during the past 50 days at the office of a purchasing department of a hotel company.

No of order	Frequency
10-12	4
13-15	12
16-18	20
19-21	14

Calculate;

- (i) The mean [3 Marks]
 - (ii) The median [3 Marks]
 - (iii) The mode [3 Marks]
 - (iv) Variance [3 Marks]
 - (v) Standard deviation [3 Marks]
- b) Enumerate five benefits of statistics as applied in the field of hospitality and tourism management [5 Marks]