Republic of the Philippines
SULTAN KUDARAT STATE UNIVERSITY
College of Computer Studies
Isulan Campus, Isulan, Sultan Kudarat

MS 312 – Quantitative Methods
MIDTERM EXAMINATION
1st Semester SY 2024-2025

Name: _____   Contact No: _____

General Instructions:
1. Write all your answers in the provided space.
2. Write neatly and legibly using a black or a blue pen.
3. You may use the blank spaces in your questionnaire for your computation.

Test I: Modified True or False (30 pts, 3 pts each)
Instruction: Write **TRUE** if the statement is correct or write **FALSE** if the statement is incorrect in the space provided before the number. If the statement is FALSE, change the underlined word or phrase to make the statement correct. Write the **CORRECT AND COMPLETE** statement in the space provided below each item.

_____ 1. Hair color is an example of a continuous data.

_____ 2. Data type is one factor to consider in choosing the appropriate analysis tool to use.

_____ 3. In encoding data in a spreadsheet, it is best practice to place variable names on the columns instead of rows.

Table 1: Students are grouped into three sections. They were given the same set of exam. The table shows the average exam scores of each section.

	Section 1	Section 2	Section 3
Mean	84	86	89
Standard Deviation	4	3	5

_____ 4. In Table 1, Section 1 has the highest mean of the three sections.

_____ 5. In Table 1, Section 2 has consistent similar scores.

_____ 6. Faulty instrument for collecting data is one of the reasons of inaccurate data.

_____ 7. Quantitative Methods focus more on answering the how's and why's of a phenomena.

_____ 8. The advantage of mean is that it not affected by outliers.

_____ 9. A very high positive score (too far away from the rest of the data) will pull the mean towards the left.

_____ 10. If the mean is lower than the median, the data is positively skewed.
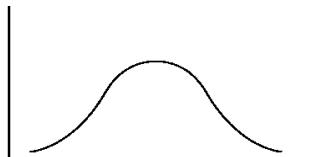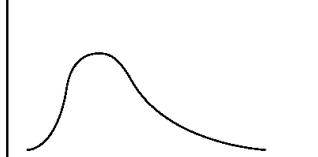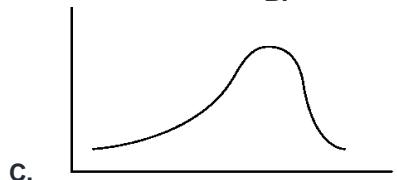
Test II: Multiple Choice (20 pts, 2 pts each)
Instruction: Write the letter corresponding to your best choice of answer. Write clearly in **CAPITAL LETTERS**.

_____ 11. Which of the following is not a scale of measurement?
   A. nominal
   B. ordinal
   C. proportional
   D. ratio

_____ 12. Which of the following is defined as is the sum of all observations divided by the total number of observations?
   A. mean
   B. median
   C. mode
   D. range

_____ 13. Which of the following is defined as the numerical description of a sample?
   A. population
   B. parameter
   C. sample
   D. statistic

_____ 14. Which of the following measures of central location or measures of variability is NOT sensitive to outliers?
   A. mean
   B. median
   C. range
   D. variance

**Table 2:** The following data are the mean and standard deviation of employee monthly salaries from three companies.

	Company A	Company B	Company C
Mean	48,000	53,000	50,000
Standard Deviation	10,000	8,000	6,000

_____ 15. Given the following information in Table 2, which company gives the highest monthly salary on the average?
   A. Company A
   B. Company B
   C. Company C
   D. All company are the same

_____ 16. If the mean of Data 1 is 5.5 and the mean of Data 2 is 10.6, which of the following is true?
   A. Most of the observations of both Data 1 and Data 2 are near 5.5.
   B. Most of the observations of both Data 1 and Data 2 are near 10.6.
   C. Data 1 observations tend to be higher than observations in Data 2.
   D. None of the above.

_____ 17. Which of the following instances is the mean not appropriate to use as a measure of central location?
   A. If the data has a normal distribution.
   B. If the data is categorical.
   C. If there is existence of outlier.
   D. If there is less than 30 observation

_____ 18. Which of the following is/are factors of data quality?
   A. Accuracy
   B. Completeness
   C. Consistency
   D. All of the above.

_____ 19. Which of the following is not a step in data preparation?
     A. Data cleaning
     B. Data integration
     C. Data transformation
     D. None of the above.

_____ 20. Which of the following is the graph of the curve if there are more low values than high values?

A.

B.

C.

Test III: Essay (30 pts)
Instruction: Answer the following questions comprehensively. Write your answer on the back of this page.

21. What is quantitative methods? Explain comprehensively. Also discuss its difference from qualitative methods. (10 pts)

22. What are the measures of central location? Illustrate each one by giving some examples. Explain how you can use the measures of central location to check if your data is symmetric. (10 pts)

23. What are the different steps in data preparation? Explain each step and give examples to illustrate. (10 pts)

******END OF EXAM*****

Prepared by: Reviewed by:

    KYRENE L. DIZON   **MARCK JOVIC A. DADAY, DIT**
       Instructor   Program Head, BSIT

Approved by:

                               BENEDICT A. RABUT, DIT
                          Dean, College of Computer Studies

Republic of the Philippines
SULTAN KUDARAT STATE UNIVERSITY
Colleges of Computer Studies
Isulan Campus, Isulan, Sultan Kudarat

Course Number/Description: MS 312 – Quantitative Methods   Term: Midterm   Semester: 1st Semester – SY 2024-2025

Prepared by: Kyrene L. Dizon   Date Submitted: _____

TABLE OF SPECIFICATIONS

Topics/Content	Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation	No. of Items	Total Score
Quantitative Methods and Descriptive Statistics	**3** (7)	**7** (1,12,14)	**7** (9,15,16)	**8** (2,10,17)	**13** (4,5,20, 21)	**8** (8,21)	15	**46**
Data Types and Data Preparation	**4** (22, 23)	**4** (11,13)	**7** (3,22,23)	**7** (6,18,19)	**6** (22, 23)	**6** (22, 23)	8	**34**
Total Score	**7**	**11**	**14**	**15**	**19**	**14**	23	**80**

Summary:

	Item Nos.	No. of Points
Test I: Modified True or False	1 – 10	30
Test II: Multiple Choice	11 – 20	20
Test III: Essay	21 – 23	30
Total Score		80

Checked by:

MARK JOVIC A. DADAY, DIT
Program Head, BSIT