

Roll No



**PRESIDENCY UNIVERSITY
BENGALURU**

SET B

**SCHOOL OF MEDIA STUDIES
END TERM EXAMINATION - JAN 2024**

Semester : Semester V - 2021

Course Code : BAJ3002

Course Name : Media Research and Data Analysis **Program :** BA
Journalism and Mass Communication

Date : 10-JAN-2024

Time : 1:00 PM - 4:00 PM

Max Marks : 100

Weightage : 50%

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and non-programmable calculator are permitted.
- (iv) Do not write any information on the question paper other than Roll Number.

PART A

ANSWER ALL THE QUESTIONS

4X5M=20M

1. Data Set:

You are given the following discrete data set representing the ages (in years) of 20 individuals:

25,28,31,33,36,39,42,44,47,50,53,55,58,61,64,66,69,72,75,78,25,28,31,33,36,39,42,44,47,50,53,55,58,61,64,

Task:

1. Convert to a Continuous Data Set (8 marks)

Your task is to convert the given discrete data set into a continuous one by defining suitable age intervals (classes). Here's what you need to do:

- o Determine an appropriate number of intervals (classes) for the continuous data set.
- o Define the age intervals (classes) such that each individual in the original data set falls into one of these intervals.
- o Present the converted continuous data set in tabular form, showing the age intervals, the number of individuals falling into each interval, and the total count.

(CO1) [Knowledge]

2. What is quantitative research method? what types of research are quantitative in nature

(CO2) [Knowledge]

3. What is research gap and how do you identify research gap

(CO3) [Knowledge]

4. Mention the levels of measurement with examples

(CO4) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS

5X10M=50M

5. Explain the steps involved in conducting a literature review for a media research study.
(CO1) [Comprehension]

6. Discuss your research and why you believe it will benefit society, in particular.
(CO2) [Comprehension]

7. Data Sets:

You are provided with three different sets of data:

- Data Set A:** Scores of 50 students in a science quiz (out of 100 marks):
55,58,60,62,65,66,68,70,72,74,75,76,78,80,82,83,85,86,88,90,91,92,94,96,97,98,100,100,100,100,100,91
- Data Set B:** The heights (in centimeters) of 40 basketball players:
175,178,180,182,185,187,190,193,195,198,200,202,205,207,210,212,215,217,220,222,225,227,230,232,
- Data Set C:** The number of pages read per day by 30 individuals:
10,15,20,25,30,35,40,45,50,55,60,65,70,75,80,85,90,95,100,105,110,115,120,125,130,135,140,145,150,1

Tasks:

1. Draw Histograms (9 marks)

- For each data set (A, B, and C), draw a histogram. Ensure each histogram has appropriate bins to effectively represent the distribution of data. Label each histogram clearly with a title, and axes labels indicating frequency and the relevant measurement (scores, heights, pages).

2. Identify Normalized Distribution Curves (6 marks)

- Examine each histogram and identify the type of normalized distribution curve it represents (e.g., normal distribution, positively skewed, negatively skewed).
- For each histogram, provide a brief explanation of why you have identified a particular type of distribution curve based on the shape and spread of the data in the histogram.

(CO3) [Comprehension]

8. Data Set:

You are provided with the following data representing the test scores of 30 students in a mathematics test (out of 100 marks):

56,62,67,73,76,78,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100,100,100,100,56,62,67,7

Tasks:

1. Create a Histogram (6 marks)

- Using the given data, draw a histogram. The histogram should have appropriate bins (intervals) that effectively represent the distribution of test scores. Ensure that the histogram is properly labeled with a title, and axes labels (including the frequency and test score ranges).

2. Overlay a Distribution Curve (4 marks)

- On the same graph as your histogram, overlay a curve that represents the distribution of the test scores. This curve should accurately follow the pattern of the data as shown in your histogram.
- Briefly explain what the shape of the distribution curve indicates about the performance of the students in the test.

(CO4) [Comprehension]

9. Scenario:

You are part of a research team studying the effects of dietary habits on cardiovascular health among adults.

Variables:

1. **Independent Variable:** Type of diet (e.g., high-fat, vegetarian, Mediterranean, etc.).
2. **Dependent Variable:** Cardiovascular health (measured by blood pressure levels).
3. **Constant Variable:** Age group (participants are all within the 40-50 years age range).

Tasks:

1. **Formulate the Research Objective** (3 marks)
 - Define a precise and focused objective for this research study, considering the given variables.
2. **Develop a Hypothesis** (3 marks)
 - Propose a hypothesis that predicts how different types of diets (independent variable) might affect cardiovascular health (dependent variable). Your hypothesis should be clear, specific, and capable of being tested.
3. **Attributes of the Questionnaire** (2 marks)
 - Identify and briefly describe the essential attributes that the questionnaire should encompass to effectively collect data on the dietary habits and cardiovascular health of the participants.
4. **Determine the Number of Questionnaires** (2 marks)
 - Recommend a suitable number of questionnaires to be distributed for this study and provide a rationale for your decision. Consider aspects such as the desired sample size, representativeness of the sample, and practicality.

(CO5) [Comprehension]

PART C

ANSWER ALL THE QUESTIONS

2X15M=30M

- 10.** You are given a dataset representing the scores of 25 students in a final exam out of a total of 100 marks:
68,74,56,60,72,85,78,74,67,88,90,56,73,65,70,80,82,75,67,70,68,84,72,76,69
Tasks:

1. **Calculate the Mean Score** (3 marks)
 - Compute the mean (average) score of the students in this exam. Show your work clearly.
2. **Determine the Median Score** (3 marks)
 - Identify the median score of the dataset. Describe the steps involved in finding the median in this set of data.
3. **Identify the Mode** (3 marks)
 - Determine the mode of these exam scores. Explain your process in identifying the mode (or modes) for this dataset.
4. **Compute the Standard Deviation** (4 marks)
 - Calculate the standard deviation of the scores. Detail your calculations, including the formula you used and each step in the process.
5. **Interpretation and Analysis** (2 marks)
 - Provide a brief interpretation of your findings. What do the calculated mean, median, mode, and standard deviation suggest about the performance of the students in this exam? Discuss the central tendency, variability, and any potential skewness of the data.

(CO4) [Application]

11. Read the following Problem Statement and answer the following questions

The United Nations Development Programme (UNDP) has outlined a comprehensive framework of goals aimed at addressing key global challenges such as poverty, inequality, climate change, environmental degradation, peace, and justice. However, the realization of these objectives has been uneven and often hindered by a variety of complex, interconnected factors, resulting in significant non-compliance issues worldwide. This non-compliance not only stalls progress towards achieving these goals but also exacerbates existing global challenges.

One of the core issues underpinning this non-compliance is the lack of effective implementation strategies at both national and international levels. This includes inadequate resource allocation, insufficient policy integration, and weak governance structures, which collectively undermine the efficacy of the SDGs. Additionally, the diverse socio-economic and political contexts of different countries lead to varying degrees of commitment and capability to adhere to these goals, thereby creating disparities in compliance.

Another pivotal factor is the inadequate awareness and understanding of the UNDP goals among key stakeholders, including policymakers, industry leaders, and the general public. This lack of engagement and awareness impedes the development of a collective commitment towards these goals. Moreover, the complex and interrelated nature of these goals often presents challenges in communication, making it difficult for stakeholders to comprehend their importance and the need for integrated action.

In the context of the user's expertise in Environmental Communication, addressing this problem necessitates the development of effective communication strategies that can bridge the gap between the objectives of the UNDP goals and their implementation. This involves crafting tailored messages that resonate with diverse audiences, utilizing a variety of media platforms for widespread dissemination, and fostering an inclusive dialogue among all stakeholders. The communication approach should highlight the interconnectedness of these goals and the tangible benefits of compliance, thereby fostering a more collaborative and proactive approach towards achieving sustainable development.

Furthermore, there is a need for robust research and analysis to understand the barriers to compliance and to develop evidence-based strategies for better implementation. This includes evaluating the effectiveness of current policies, identifying best practices, and advocating for more integrated and adaptable frameworks that can cater to the unique challenges of different regions.

In conclusion, the non-compliance with UNDP goals is a multifaceted issue that requires a concerted effort from global leaders, policymakers, and the civil society. A key component of this effort is the strategic use of environmental communication to enhance understanding, foster engagement, and promote action towards these goals. By addressing the barriers to compliance and leveraging effective communication strategies, there is potential to significantly advance the progress towards achieving a more sustainable, equitable, and prosperous world.

- a. Identify the research objective
- b. Identify the research variables and explain why these variables are relevant for your research
- c. draw a hypothesis based on the relationship of variables (each objective will have separate hypothesis)
- d. write the attributes for the variables
- e. write the levels of measurement for attribute as mentioned in answer d

(CO5) [Application]