TH241140MINB

Reg. No.....

Name.....

FYUG PROGRAMME EXAMINATION, NOVEMBER 2024

(2024 Admission Regular)

SEMESTER I – MINOR B COURSE (STATISTICS)

ST1DSCB101B24- BASIC STATISTICS

Time: 1.5 Hours **Maximum Marks: 50**

PART A

I. Answer all questions (MCQ). Each question carries 1 mark

Q.No:	QUESTIONS	CO	LEVEL
1.	Which of the following is an example of interval data? 1. Weight in kilograms 2. Test scores (out of 100) 3. Temperature in Fahrenheit 4. Eye color	1	U
2.	Which of the following is continuous data? 1. Number of books 2. Speed of a car (in km/h) 3. Number of siblings 4. Days of the week	1	U
3.	The mean of the first five odd numbers is: 1. 5 2. 7 3. 9 4. 11	4	Ap
4.	Which chart is best suited for showing trends over time? 1. Line graph 2. Pie chart 3. Bar chart 4. Scatter plot	3	U
5.	What is the range of the dataset: 3, 7, 10, 15, 20? 1. 15 2. 17 3. 10 4. 20	5	A

(5x1=5)

II. Answer all questions in one word. Each question carries 1 mark

Q.No:	QUESTIONS	CO	LEVEL
6.	The data with less coefficient of variation is more _____.	5	U
7.	The intersection point of less than Ogive and greater than Ogives give _____.	4	U
8.	A sampling technique where the population is divided into subgroups, and samples are drawn from each subgroup is called _____.	1	U

9.	The _____ divides the data into two equal parts when the observation is arranged in ascending or descending order .	4	U
10.	The _____ quartile is often called median.	5	U

(5x1=5)

PART B

II. Answer any six questions in one paragraph. Each question carries 5 marks.

Q.No:	QUESTIONS	CO	LEVEL
11.	The following data shows students' scores on a quiz: 10, 12, 14, 16, 18. Compute the standard deviation.	5	Ap
12.	Compute the median and mode of the following dataset: 2, 3, 5, 5, 6, 7, 8.	4	Ap
13.	Compare between a population and a sample. Provide examples to illustrate the difference.	1	U
14.	Infer the difference between primary data and secondary data with suitable examples.	2	U
15.	Given the dataset: 50, 55, 60, 65, 70, 75, compute the standard deviation and variance.	5	Ap
16.	For two products with mean sales of 100 and 200 units, and standard deviations of 20 and 30, compute the coefficient of variation.	5	Ap
17.	Construct a bar chart for the following data on favorite fruits: Apples (10), Oranges (15), Bananas (12), Grapes (8).	3	U
18.	Compare a histogram and a frequency polygon.	3	U

(6x5=30)

PART C

III. Answer any one question. The question carries 10 marks.

Q.No:	QUESTIONS	CO	LEVEL
19.	Given the following weight data of 40 individuals: 50-55 kg (5), 55-60 kg (10), 60-65 kg (15), 65-70 kg (10). Compute the mean, median, and mode of the distribution. (The frequencies are given in brackets)	4	Ap
20.	A survey records the following hours spent studying by 50 students: 1-2 hours (10 students), 3-4 hours (15 students), 5-6 hours (15 students), 7-8 hours (10 students). Compute the standard deviation and coefficient of variation.	5	Ap

(1x10=10)

CO : Course Outcomes Level : R – Remember, U – Understand, Ap- Apply, An- Analyze, E- Evaluate, C- Create