

QP Code: D 112722		Total Pages: 2		Name:	
				Register No.	
FIRST SEMESTER UG DEGREE EXAMINATION, NOVEMBER 2024					
(CUFYUGP)					
STA1MN101 - DESCRIPTIVE STATISTICS FOR DATA SCIENCE					
2024 Admission onwards					
Maximum Time :2 Hours				Maximum Marks :70	
Section A					
All Questions can be answered. Each Question carries 3 marks (Ceiling : 24 Marks)					
1	Define discrete and continuous variables.				
2	Differentiate between population and sample in a statistical investigation.				
3	Define secondary data. Mention any two of its sources.				
4	What is Sturge's rule?				
5	Define pie diagram.				
6	Arithmetic mean of a set of 40 observations was calculated as 30. But one of the observations 35 was misread as 55. Calculate the corrected AM.				
7	Define Geometric mean. Find the GM of 4, 6, 8, 10.				
8	Define deciles and percentiles. What are their interrelations?				
9	Define independence of events. If $P(A) = 0.4$ and $P(B) = 0.5$, find $P(A/B)$ when A and B are independent.				
10	When a set of data is said to be skewed?				
Section B					
All Questions can be answered. Each Question carries 6 marks (Ceiling : 36 Marks)					
11	Define primary data. Explain the methods of collecting primary data.				
12	Obtain a less than and greater than cumulative frequency distribution for the following data Class: 0 – 10 10 – 20 20 – 30 30 – 40 40 – 50 Freq.: 6 9 10 7 3				
13	Explain any two graphical representations of a frequency distribution.				
14	Calculate the harmonic mean for the following data: Class: 0 – 10 10 – 20 20 – 30 30 – 40 40 – 50 50 – 60 Freq.: 6 12 21 16 10 4				
15	Explain kurtosis and its measures.				
16	Define random experiment. Obtain the sample space of the random experiment of				

	(i) tossing a coin and a dice (ii) tossing of three coins
17	If $P(A) = 0.4$, $P(B) = 0.3$, find $P(A \cup B)$ when A and B are (i) independent (ii) mutually disjoint (iii) events with $P(A/B) = 0.1$
18	Explain pair wise independence and mutual independence.
Section C	
Answer any ONE .Each Question carries 10 marks (1x10=10 Marks)	
19	Obtain the median for the following data (i) mathematically and (ii) graphically: Class: 0 – 10 10 – 20 20 – 30 30 – 40 40 – 50 Freq.: 6 14 24 16 8
20	Two unbiased dice are tossed. Consider the sum of the numbers shown. A, B and C are the events of the sum is odd, sum is greater than 7 and the sum is a multiple of 3 respectively. Find $P(A \cup B \cup C)$.