

Reg. No.:

Name:



University of Kerala

First Semester FYUGP Degree Examination, December 2025

Discipline Specific Core Course

STATISTICS

UK1DSCSTA110 - STATISTICAL METHODS-I

Academic Level: 100-199

2024 Admission onwards

Time: 1 Hour 30 Minutes(90 Mins.)

Max. Marks: 42

Part A. 6 Marks.Time:6 Minutes.(Cognitive Level:Remember(RE)/Understand(UN)) Objective Type. 1 Mark Each.Answer all questions

Qn No.	Question	CL	CO
1	A _____ frequency distribution groups data into class intervals.	RE	1
2	In case of positively skewed distribution the extreme value lie in the Options : A)left tail B)right tail C)middle D)anywhere	RE	4
3	What is the term for data obtained from sources like government publications or reports?	UN	1
4	25 th percentile is equal to Options : A)1st quartile B)25th quartile C)24 th quartile D)none	UN	3
5	Write an example for a relative measure of dispersion.	UN	4
6	Distinguish between primary and secondary data.	UN	1

Part B.8 Marks.Time:24 Minutes.(Cognitive Level:Understand(UN)/Apply(AP))Short Answer. 2 marks each.Answer all questions

Qn No.	Question	CL	CO
7	State two merits of the median.	UN	3
8	Distinguish between bar diagram and histogram.	UN	2
9	Calculate A.M for the following data 280,180,96,98,104,75,80,94,100,75,600,200	AP	3
10	For the data: 4, 6, 7, 9, 10, 14, calculate the quartile deviation .	AP	4

Part C. 28 Marks.Time:60 Minutes (Cognitive Level:Apply(AP)/Analyse(AN)/Evaluate(EV)/Create(CR)) Long Answer:7 marks each.Answer all 4 Questions choosing among options * within each question

Qn No.	Question	CL	CO
11	A) Briefly describe Sheppard's corrections and their role in improving kurtosis estimation. OR B) Calculate D_2 , D_8 , P_{88} , P_{75} from the following data Class: 10-19 20-29 30-39 40-49 50-59 60-69 Frequency: 5 8 17 29 30 21	AP	4, 3
12	A) The following grouped data represent exam scores.	AN	3, 1

Qn No.	Question	CL	CO												
	Find the Median and Mode and analyses whether the distribution is symmetric or skewed. OR B) What are the limitations of Statistics? How does it misuse?														
	A) The mean and median of a frequency distribution are 23.2 and 25.5 respectively.Find the approximate value of its mode.calculate pearson's coefficient of skewness if the standard deviation is 4.5 OR B) From the following frequency distribution, find: (a) Median (b) Mode														
13	<table><tr><td>Class</td><td>0-10</td><td>10-20</td><td>20-30</td><td>30-40</td><td>40-50</td></tr><tr><td>Frequency</td><td>5</td><td>9</td><td>14</td><td>12</td><td>10</td></tr></table>	Class	0-10	10-20	20-30	30-40	40-50	Frequency	5	9	14	12	10	EV	3, 3
Class	0-10	10-20	20-30	30-40	40-50										
Frequency	5	9	14	12	10										
14	A) A teacher divided students into two groups for a mathematics workshop. Group A has 30 students with an average score of 65, and Group B has 50 students with an average score of 72. After re-evaluation, 10 marks were added to each student in Group A. Write an essay describing how to apply the combined-mean formula to find the new mean and analyse the effect of this adjustment on overall performance. OR B) The number of books read per month by 18 students: 0, 1, 1, 2, 2, 2, 3, 3, 4, 4, 5, 5, 6, 6, 7, 8, 9, 10 (a) Construct a grouped and an ungrouped frequency table. (b) Determine Q1, Q2, Q3. (c) Compute the quartile deviation and interpret.	CR	3, 4												