



Reg. No.:

Name:

University of Kerala

First Semester FYUGP Degree Examination, December 2025

Discipline Specific Core Course

STATISTICS

UK1DSCSTA111 - DESCRIPTIVE STATISTICS WITH R

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	The process of collecting information from each and every unit of the population is called	RE	1
2	Define harmonic mean	RE	5
3	For a positively skewed distribution what is the relation between mean, median and mode	UN	5
4	What is the purpose of drawing a scatter plot?	UN	4
5	What do you mean by a primary data?	UN	2
6	If the lowest and highest observation are 520 and 800, what is the range of the data?	UN	5

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	What do you mean by an ordinal data? Give an example of it.	UN	1
8	State differences between a bar diagram and a histogram	UN	4
9	Describe situations where geometric mean is used.	AP	5
10	How would you determine inter-quartile range of the data using R program? 16,18,19,16,15,16,21,16,28,9	AP	5

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	<p>A)</p> <p>How will you assess the consistency of the data of two groups using R programming?</p> <p>OR</p> <p>B)</p> <p>How would you prepare a subdivided bar diagram using R programming for the following data?</p>	AP	5, 4
12	<p>A)</p> <p>Discuss the term central tendency and explain arithmetic mean a measure of it.</p> <p>OR</p> <p>B)</p> <p>Explain nominal, ordinal, interval and ratio types of data with examples.</p>	AN	5, 1
13	<p>A)</p> <p>Write an R-program to obtain the (i) mean (ii)SD and (iii)quartile deviation for the observations 23,14,17,10,11,13,15,20,30,26.</p> <p>OR</p> <p>B)</p> <p>Discuss about statistical population, census, primary and secondary data. Also explain when will you chose secondary data over primary data.</p>	EV	5, 1
14	<p>A)</p> <p>Create a program in R to compute coefficient of skewness for the following observations on the body mass index values (kg/m^2) given below for 14 adults:</p> <p>24.4,30.4,21.4,25.4,21.3,23.8,20.8,22.9,23.2,21.1,23.5,20.6, 26.1,20.9.</p> <p>OR</p> <p>B)</p> <p>Write an R Program to create a histogram for a data with a size 25 of your own choice.</p>	CR	5, 4