U7995

Reg. No.: .....

Name:.....

University of Kerala

First Semester Degree Examination, November 2024

Four Year Under Graduate Programme

Discipline Specific Core Course

STATISTICS

UK1DSCSTA110 STATISTICAL METHODS-I

Academic Level: 100-199

Time:1½ Hours **Max.Marks:42**

Part A.

Answer All Questions, Objective Type. 1 Mark Each.

6 Marks. Time: 6 Minutes

Qn. No.	Question	Cognitive Level	Course Outcome (CO)
1	Define the term "harmonic mean."	Remember	CO2
2	Range is a _____ measure of dispersion.	Remember	CO4
3	The β2 value for a mesokurtic curve is	Understand	CO4
4	The total number of partition values for percentiles is _____.	Remember	CO3
5	The sum of squares of the deviations is minimum when deviations are taken from _____.	Understand	CO4
6	Name any one source of secondary data	Understand	CO1

Part B.

Answer All Questions ,Short Answer. 2 Marks Each.

8 Marks. Time: 24 Minutes

Qn. No.	**Question**	**Cognitive Level**	**Course Outcome (CO)**
7	Define kurtosis and illustrate different measures of kurtosis.	**Apply**	CO4
8	Calculate the geometric mean for the following dataset: 10, 12, 15, 18, 20.	Apply	CO3
9	Explain different sources of secondary data.	Understand	CO2
10	Explain the difference between a census and a sample survey.	Apply	CO1

Part C.

Answer all 4 Questions, choosing among options within each question.

Long Answer. 7 marks each., 28 Marks. Time: 60 Minutes

<table>
<tr><th>Qn. No.</th><th>Question</th><th>Cognitive Level</th><th>Course Outcome (CO)</th></tr>
<tr><td>11.</td><td>A. Explain the concept about measures of dispersion.
OR
B. Find out the variance

<table><tr><th>Seed yield in gms (x)</th><th>No. of plants (f)</th></tr><tr><td>2.5-3.5</td><td>4</td></tr><tr><td>3.5-4.5</td><td>6</td></tr><tr><td>4.5-5.5</td><td>12</td></tr><tr><td>5.5-6.5</td><td>12</td></tr><tr><td>6.5-7.5</td><td>8</td></tr></table></td><td>Apply</td><td>CO4</td></tr>
<tr><td>12.</td><td>A. Describe how moments are useful in the calculation of moments
OR
B. Discuss about symmetry of the distribution.
<table><tr><td>15-25</td><td>17</td></tr><tr><td>25-35</td><td>21</td></tr><tr><td>35-45</td><td>25</td></tr><tr><td>45-55</td><td>12</td></tr><tr><td>55-65</td><td>9</td></tr><tr><td>65-75</td><td>17</td></tr></table></td><td>Apply</td><td>CO4</td></tr>
<tr><td>13.</td><td>A. Describe how diagrams are useful in representing statistical data.
OR
B. Describe the purpose of an Ogive graph in statistics.</td><td>Analyse</td><td>CO2</td></tr>
<tr><td>14.</td><td>A. Calculate the standard deviation for the dataset: 2, 4, 6, 8, 10, and interpret the results.
OR
B. Evaluate the usefulness of standard deviation compared to other measures of dispersion, providing examples.</td><td>Evaluate</td><td>CO3</td></tr>
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