TEMPLATE4

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| **University ofKerala** | | |
| Discipline: Statistics |  | Time:2 Hours(120Mins.) |
| CourseCode:UK1DSCSTA104 |  | TotalMarks:56 |
| CourseTitle:BEHAVIOURAL DATA ANALYTICS-I |  |  |
| TypeofCourse: DSC |  |  |
| Semester:1 |  |  |
| AcademicLevel:100-199 |  |  |
| TotalCredit:4,Theory:4Credit,Practical:0 Credit |  |  |

PartA.6Marks.Time:5Minutes

Objective Type.1 Mark Each.Answer All Questions(CognitiveLevel:Remember/Understand)

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| **Qn.**  **No.** | **Question** | **Cognitive**  **Level** | **CourseOutcome(CO)** |
| 1. | Name the method of collecting information from every member of the population. | Remember | CO2 |
| 2. | The process of organizing data into groups or classes is called \_\_\_\_\_\_\_\_\_\_. | Remember | CO3 |
| 3. | Write two sources of primary data. | Understand | CO2 |
| 4. | Which type of classification arranges data according to location? | Understand | CO3 |
| 5. | Skewness measures \_\_\_\_\_\_\_\_\_\_\_ of a distribution. | Understand | C05 |
| 6. | Quartiles divide the data into \_\_\_\_\_\_\_\_\_\_ equal parts. | Understand | CO4 |

PartB.10 Marks.Time: 20Minutes

Two-Threesentences.2 MarksEach.AnswerAllQuestions(CognitiveLevel:Understand/Apply)

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| **Qn.**  **No.** | **Question** | **CognitiveLevel** | **CourseOutcome(CO)** |
| 7. | What is statistics? | Understand | CO1 |
| 8. | What is secondary data ? | Understand | CO2 |
| 9. | Distinguish between qualitative and quantitative classification with example. | Apply | CO3 |
| 10. | Explain graphical method for finding median. | Apply | CO4 |
| 11. | Calculate range for the following data   156, 165, 148, 151, 147, 162. | Apply | CO4 |

PartC. 16Marks.Time: 35Minutes

Short Answer. 4 Marks Each. Answer all 4 questions, choosing among options within each question.(CognitiveLevel:Apply/Analyse)

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| Qn.  No. | Question | CognitiveLevel | CourseOutcome(CO) |
| 12. | 12A. Discuss the limitations of statistics  OR  12B. Explain the scope of Statistics | Apply | CO1 |
| 13. | 13A. Explain various methods of classification of statistical data.  OR  13B. The following data are marks obtained by 30 students in an examination. Put the data in the form of a frequency distribution having 6 classes  5,13,52,62,70,65,68,20,40,11,46,57,73,24,0,65,37,15,6,63,10,50,10,3,32,46,58,61,23,70 | Apply | CO3 |
| 14. | 14A. Briefly explain the scaling techniques with examples.  OR  14B. Define cumulative frequency table and relative frequency table. | Analyse | CO2 |
| 15. | 15A. For a data, mean=120,mode=123 and coefficient of skewness= -0.3. Find the coefficient of variation  OR  15B. Explain Mean Deviation and Standard Deviation | Analyse | CO4 |

PartD.24 Marks.Time: 60Minutes

LongAnswer.6MarksEach.Answerall4questions, choosingamongoptionswithineach question.(CognitiveLevel:Analyse/Evaluate/Create)

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| **Qn.**  **No.** | **Question** | **CognitiveLevel** | **CourseOutcome(CO)** |
| 16. | 16A. Describe Systematic and Multistage Sampling Methods.  OR  16 b. Distinguish between census and sampling | Analyse | CO2 |
| 17. | 17A. Given the following data representing the number of books read by 10 students: 2, 3, 3, 5, 4, 2, 1, 4, 5, 3. Construct a discrete frequency distribution table and explain the process you followed.  OR  17B. Using the following data representing the heights (in cm) of 15 students: 150, 152, 155, 160, 162, 158, 165, 167, 170, 172, 175, 180, 182, 178, 160. Create a continuous frequency distribution table with intervals of 5 cm and explain the process you followed. | Evaluate | CO3 |
| 18. | 18A. Given the data set: 15, 20, 22, 22, 25, 28, 30  Calculate the mean and median,.  OR  18B. Calculate standard deviation for the following data  0.25,0.7,1.8,2.6,3.4,5.9 | Evaluate | CO4 |
| 19. | 19A. Given the following data representing the ages of 20 participants in a study:   * 18, 21, 22, 22, 25, 27, 30, 30, 31, 33, 34, 35, 36, 37, 38, 40, 42, 45, 46, 50 Create a histogram with appropriate age intervals   OR  19B. Draw Ogives for the following data   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Class | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | | Frequency | 15 | 22 | 35 | 20 | 18 | | Create | CO3 |

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| **CognitiveLevel** | **Marks** | **Percentage** |
| Remember | 2 | 3.6 |
| Understand | 8 | 14.3 |
| Apply | 14 | 25.0 |
| Analyse | 14 | 25.0 |
| Evaluate | 12 | 21.4 |
| Create | 6 | 10.7 |
| **TOTAL** | **56** | **100** |

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| **CourseOutcomes** | **Marks** | **Percentage** |
| CO1 | 6 | 10.71 |
| CO2 | 14 | 25 |
| CO3 | 20 | 35.71 |
| CO4 | 15 | 26.79 |
| CO5 | 1 | 1.79 |
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| **TOTAL** | **56** | **100** |