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| **University of Kerala** | | |
| Discipline: Statistics |  | Time: 1 Hour 30 Minutes (90 Mins.) |
| Course Code: UK1DSCSTA103 |  | Total Marks: 42 |
| Course Title: **GEO STATISTICS-I** |  |  |
| Type of Course: **DSC** |  |  |
| Semester: 1 |  |  |
| Academic Level: 100-199 |  |  |
| Total Credit: 3, Theory: 3 Credit  (Applicable for 4 Credit Course with 1 Credit Practical Also) |  |  |

Part A. 6 Marks. Time: 6 Minutes

Objective Type. 1 Mark Each. Answer All Questions

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| **Qn.**  **No.** | **Question** | **Cognitive**  **Level** | **Course Outcome (CO)** |
| 1. | Mention any one need of statistics in geography | Remember | CO1 |
| 2. | Two examples of geographical classification of data. | Remember | CO3 |
| 3. | In histogram, the width of rectangle represents……………… | Understand | CO4 |
| 4. | What type of data is referred to as first-hand data? | Understand | CO5 |
| 5. | Median divides the entire data into ………….. | Understand | CO6 |
| 6. | Kurtosis measures….. | Understand | CO7 |

Part B. 8 Marks. Time: 24 Minutes

Short Answer. 2 Marks Each. Answer All

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| **Qn.**  **No.** | **Question** | **Cognitive Level** | **Course Outcome (CO)** |
| 7. | What do you mean by nominal scale? | Understand | CO2 |
| 8. | Write the properties of correlation coefficient. | Understand | CO8 |
| 9. | Compute the mean of the following data  5.2, 5.8, 6.7, 7.2, 7.5, 8.7, 9.3 | Apply | CO6 |
| 10. | Explain the advantages of sampling over census. | Apply | CO3 |

Part C. 28 Marks. Time: 60 Minutes

Long Answer. 7 marks each. Answer all 4 Questions, choosing among options within each question.

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| **Qn.**  **No.** | **Question** | **Cognitive**  **Level** | **Course Outcome (CO)** |
| 11. | A. Compare Simple random sampling and Systematic sampling.  OR   1. Compare Stratified sampling and systematic sampling. | Apply | CO5 |
| 12. | A. Calculate the regression equation of Y on X for the following data.  X 0 1 2 3 4 5  Y 12 14 17 21 27 32  OR   1. Calculate the Correlation coefficient between X and Y.  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | X | 1 | 2 | 3 | 4 | 5 | 6 | | Y | 4 | 6 | 8 | 15 | 18 | 21 | | Analyze | CO8 |
| 13. | A. Evaluate mean deviation about mean for the following data 0,2,7,16,25,32  OR  B. Find the coefficient of variation for the following data  5,7,12,15,18 | Evaluate | CO6 |
| 14. | A. A city's budget is allocated as follows:   |  |  | | --- | --- | | Category | Percentage | | Education | 40 | | Food | 30 | | Rent | 20 | | Miscellaneous | 10 |   Draw Pie diagram for the data.  OR  B. Draw Histogram for the following data.   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Class | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | | Frequency | 15 | 22 | 35 | 20 | 18 | | Create | CO4 |

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| **Cognitive Level** | **Marks** | **Percentage** |
| Remember | 2 | 4.8 |
| Understand | 8 | 19.0 |
| Apply | 11 | 26.2 |
| Analyse | 7 | 16.7 |
| Evaluate | 7 | 16.7 |
| Create | 7 | 16.7 |
| **TOTAL** | **42** | **100** |

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| **Course Outcomes** | **Marks** | **Percentage** |
| CO1 | 1 | 2.38 |
| CO2 | 2 | 4.76 |
| CO3 | 3 | 7.14 |
| CO4 | 8 | 19.05 |
| CO5 | 8 | 19.05 |
| CO6 | 10 | 23.81 |
| CO7 | 1 | 2.38 |
| CO8 | 9 | 21.43 |
| Total | 42 | 100 |