



U9038

Name: ...... University of Kerala

Second Semester FYUGP Degree Examination, April 2025

Discipline Specific Core Course

#### **COMPUTER APPLICATION**

#### **UK2DSCCAP104 - Introduction to Data Science**

Academic Level: 100-199

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<br>No. | Question                                       | CL | СО |
|-----------|--|----|----|
| 1         | Define DDL.                                    | RE | 1  |
| 2         | State visual encoding                          | RE | 4  |
| 3         | Underline the main functions of GANTT chart    | UN | 4  |
| 4         | Give two examples for Data Science Tools       | UN | 1  |
| 5         | Identify the basic steps of data preprocessing | UN | 2  |
| 6         | Give an outline of subtotal function           | UN | 3  |

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

| Qn<br>No | Question  | $\mathbf{CL}$ | CO |
|----------|---|---------------|----|
| 7        | Illustrate the concept of relation in SQL             | UN            | 1  |
| 8        | Describe the importance of data cleaning?             | UN            | 2  |
| 9        | Illustrate <b>COUNTIF</b> in Excel.                   | AP            | 3  |
| 10       | Discover the role of data scientist in data analytics | ΑP            | 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<br>No | ι μιαςτική  | CL | СО   |
|----------|---|----|------|
| 11       | A) Demonstrate data discretization using an example  OR  B) Explain the factors for choosing appropriate visualization types for different datasets.  | AP | 2, 4 |
| 12       | A) Data pre-processing is a crucial in machine learning. Discuss the importance of data pre-processing in machine learning. OR B) Compare the use of ranges and tables in Excel. Analyze the advantages of using a table over a range of data management. | AN | 2, 3 |
| 13       | A) Differentiate between Band chart and Thermometer chart  OR B)  Compare sorting and filtering in excel?   | EV | 4, 4 |
| 14       | A)  | CR | 3, 2 |
|          | Prepare a procedure for creating worksheet with sales details and make pivot table category and product in row label  |    |      |

| Qn<br>No | Question   | CL | СО |
|----------|--|----|----|
|          | OR<br>B)<br>Criticize on the statement "Data integration is employed in various real-world scenarios". |    |    |
|          |  |    |    |