

Reg. No.: .....



Name: .....

University of Kerala

U8835

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 No. | Question                                                                         | CL | CO |
|--------|----------------------------------------------------------------------------------|----|----|
| 1      | Name any two types of Data Integration                                           | RE | 2  |
| 2      | Identify the difference between TRIM and CLEAN functions                         | RE | 3  |
| 3      | Identify one key difference between a Database Administrator and a Data Engineer | UN | 4  |
| 4      | State the role of SQL in data science                                            | UN | 1  |
| 5      | Name the statement in SQL helps in modify the structure of a database            | UN | 1  |
| 6      | Clarify the term pivot table                                                     | UN | 3  |

**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      | State the importance of data science in AI.                | UN | 1  |
| 8      | Describe the use of sorting and filtering in data analysis | UN | 3  |
| 9      | Compare bar charts and Pie charts                          | AP | 4  |
| 10     | Explain the importance of concept hierarchy?               | AP | 2  |

**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     | A) Explain the Data Analytics life cycle using the suitable diagram. OR<br>B) Illustrate how excel stores time values               | AP | 1, 3 |
| 12     | A) Identify different data cleaning functions in EXCEL OR<br>B) Examine any five excel functions with syntax and examples.          | AN | 3, 3 |
| 13     | A)<br>Select any four standard techniques used for feature selection<br>OR<br>B)<br>Compare different methods of outlier detection. | EV | 2, 2 |
| 14     | A)<br>Organize the data in worksheet with different LOOKUP functions.<br>OR<br>B)                                                   | CR | 4, 3 |

| Qn<br>No. | Question                                                                                                                                  | CL | CO |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------|----|----|
|           | Prepare a work sheet for a flower shop with invoice id, flower name, quantity, price, total price<br>.Produce pivot table and pivot chart |    |    |