

Reg. No.:



Name:

University of Kerala

W7807

First Semester FYUGP Degree Examination, December 2025

Discipline Specific Core Course

COMPUTER SCIENCE

UK1DSCCSC106 - Data Science Fundamentals

Academic Level: 100-199

2024 Admission onwards

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	NLP stand for _____.	RE	1
2	Name three data transformation techniques.	RE	2
3	1)In excel ,a data sheet refers to : Options : A)A slide used for presentations B) A text document C) A page containing rows and columns for data D)A coding interface	UN	1
4	Summarize the purpose of data cleaning in one sentence.	UN	2
5	A group of adjacent cells is called: Options : A)Cell Address B)Range C)Sheet D)Row	UN	3
6	Give one responsibility of a Data Scientist.	UN	4

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	Explain the difference between predictive and prescriptive analysis.	UN	2
8	Describe the role of Macros in automating worksheet tasks.	UN	3
9	Explain about pivot table	AP	3

Qn No.	Question	CL	CO
10	Classify different types of charts used for multivariate data.	AP	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 No.	Question	CL	CO
11	A) Compare Python and R as data science tools. OR B) Implement dimensionality reduction concepts in a given dataset scenario.	AP	1, 2
12	A) Analyze the various data cleaning techniques and explain how each method improves data quality OR B) Examine the differences between Machine Learning and Deep Learning.	AN	2, 4
13	A) Compare the different date and time functions in Excel. Write down the syntax and give an example for each. OR B) Compare four types of data analysis.	EV	3, 1
14	A) Construct an excel sheet and perform the LOOKUP, VLOOKUP, and HLOOKUP functions and write the output obtained for each. OR B) Categorize the different types of data and provide examples for each.	CR	4, 2