



Name:

Enrolment No:

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2022

Course: Introduction to Data Science

Program: BSc

Course Code: SLLS1008

Semester: I

Time: 03 hrs.

Max. Marks: 100

Instructions: All questions are compulsory

SECTION A
10Qx2M=20Marks

S. No.		Marks	CO
Q 1	Which of the following is not a part of the data science process? a) Communication building b) Operationalize c) Model Planning d) Discovery		CO1
Q 2	Point out the correct statement. a) Data has only qualitative value b) Data has only quantitative value c) Data has both qualitative and quantitative value d) None of the mentioned		CO2
Q 3	Which of the following data is put into a formula to produce commonly accepted results? a) Raw b) Processed c) Synchronized d) All of the Mentioned		CO3
Q 4	Processing data includes Subsetting, formatting and merging only. a) True b) False		CO4
Q 5	Which of the following is an example of raw data? a) original swath files generated from a sonar system b) initial time-series file of temperature values c) a real-time GPS-encoded navigation file d) all of the mentioned		CO1
Q 6	Machine learning is a subset of which of the following. a) Artificial Intelligence b) Deep Learning c) Data Learning d) None of the above		CO2
Q 7	Identify the key data science skills among the following a) Data Visualization		CO3

	b) Machine Learning c) Statistics d) All of the above		
Q 8	Raw data should be processed only one time. a) True b) False		CO4
Q 9	Among the following options choose which one of the following focuses on the discovery of unknown properties on the data. a) Big Data b) Data Mining c) Machine Learning d) Data wrangling		CO1
Q 10	Identify the model which is usually a gold standard for data analysis a) Casual b) Inferential c) Descriptive d) All of the above		CO2
SECTION B 4Qx5M= 20 Marks			
Q 11	What is data?	5	CO1
Q 12	How do we collect data?	5	CO2
Q 13	What is exploratory research?	5	CO3
Q 14	Why context is compulsory for Data Science?	5	CO4
SECTION-C 3Qx10M=30 Marks			
Q 15	What is statistics and why do we need statistics for data science	10	CO3
Q 16	How do we obtain patterns from data in MS-Excel? Or If data is to be converted from qualitative form to the quantitative form on a scale of 5, how can it be done in MS-Excel?	10	CO4
Q 17	Explain the Knowledge pyramid.	10	CO1
SECTION-D 2Qx15M= 30 Marks			
Q 18	What is market and how is the business in market “data driven”? Explain with example. Or Forecast the drivers of demand in the health sector industry and project how they are likely to change. Conduct sensitivity analyses to understand the most critical assumptions and to gauge risks to the baseline forecast	15	CO3
Q 19	“Decision making is a science influenced by data”, Justify the given statement with appropriate examples from your field of study.	15	CO4