Name:	
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2019

Course: IT application in Exploration & Production   **Semester: V**
Program: B.Tech-CS-OGI   **Time 03 hrs.**
Course Code: CSOG3002   **Max. Marks: 100**
Instructions:

SECTION A

S. No.		Marks	CO
Q 1	Identify the different types of data and represent them with a suitable example to explain it.	4	CO1
Q 2	Explain the different components of Knowledge Pyramid and explain them with examples	4	CO1
Q 3	Illustrate the properties of a TPS system and explain them with example	4	CO2
Q 4	Explain NLP and identify its application areas in AI	4	CO3
Q 5	Enumerate the working principle of Fuzzy Logic and its application areas with example.	4	CO2

SECTION B

	Statement of question	Marks	CO
Q 6	Explain in detail the difference between Clustering and classification	10	CO3
Q 7	Identify the different data cleaning processes	10	CO2
Q 8	Differentiate between single layer & double layer architecture of DWH	10	CO4
Q 9	Analyze the application areas and benefits of ANN OR Recognize and explain the different Deep Neural Networks	10	CO5/ CO4

SECTION-C

Q	Internalize the given case study and answer Q10 & Q11.	Total Marks-40	
	A nationalized bank is setting up an AI based customer analysis system for identification of different customer segments for dolling out credit card and loan.		
Q10	Design a data warehousing architecture and identify the proper ETL process for the same	20	CO5
Q11	Design and analyze the AI module to handle the above scenario. **Or** Design a Fuzzy logic based decision support system and give argument that how this model is better than AI model.	20	CO4