Name:
Enrolment No:

UPES

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester/Supplementary (ODD/EVEN) Examination, July 2020

Course: IT for Petroleum Refining&Petrochemicals   **Semester: VI**
Course Code: CSOG3005
Time: 2hrs
Programme: B.Tech. CSE (OGI)   **Max. Marks: 60**
Instructions:

MC	machine learning algorithm based on the idea of bagging?	Decision Tree	Incorrect	Random Forest	Correct	Classification	Incorrect	Regression	
MC	The most widely used metrics and tools to assess a classification model are	Confusion matrix	Incorrect	Cost-sensitive accuracy	Incorrect	Area under the ROC curve	Incorrect	All of the above	
TF	ADU stands for Atomic Distillation Unit	FALSE	TRUE						
TF	The more the sulfur the better the quality of Crude	FALSE	TRUE						
TF	sulfur is calculated by API	TRUE	FALSE						
TF	Crude is a viscous liquid	TRUE	FALSE						
TF	There are two types of Distillation column	TRUE	FALSE						
TF	In batch operation, the feed to the column is	TRUE	FALSE						
TF	Butane is present in LPG	TRUE	FALSE						
TF	CNG & LPG has same composition	FALSE	TRUE						
TF	Barges are used for transportation of Crude	TRUE	FALSE						
TF	Hydrotreating and Hydrocracking is the same thing	FALSE	TRUE						
TF	scales formation is a good practice in distillation	FALSE	TRUE						
TF	Heat exchenger is present in a refiner	TRUE	FALSE						
TF	SCADA is used for controll of Refining process	TRUE	FALSE						
TF	ANN is a process for cracking of crude	FALSE	TRUE						
TF	Reinforced learning does clustering	FALSE	TRUE						
TF	KNN is a clustering algorithm	FALSE	TRUE						
TF	Digital Oilfield desnot contain SCADA	FALSE	TRUE						
MC	Why do we need biological neural networks?	to solve tasks like machine vision & natural language processing	Incorrect	to apply heuristic search methods to find solutions of problem	Incorrect	to make smart human interactive & user friendly system	Incorrect	all of the mentioned	
MC	What's the main point of difference between human & machine intelligence?	human perceive everything as a pattern while machine perceive it merely as data	Correct	human perceive everything as a pattern while machine perceive it merely as data	Incorrect	human have more IQ & intellect	Incorrect	human have sense organs	
MC	What is unsupervised learning?	features of group explicitly stated	Incorrect	number of groups may be known	Incorrect	neither feature & nor number of groups is known	Correct	none of the mentioned	
TF	Does pattern classification belongs to category of non-supervised learning?	FALSE	TRUE						

Type	Question	Option A		Option B		Option C		Option D	
MC	machine learning algorithm based on the idea of bagging?	Decision Tree	Incorrect	Random Forest	Correct	Classification	Incorrect	Regression	
TF	Does pattern classification & grouping involve same kind of learning?	FALSE	TRUE						
MC	Example of a unsupervised feature map?	text recognition	Incorrect	voice recognition	Correct	image recognition	Incorrect	none of the mentioned	
MC	What are the issues on which biological networks proves to be superior than AI networks?	robustness & fault tolerance	Incorrect	flexibility	Incorrect	collective computation	Incorrect	all of the mentioned	
MC	What is an activation value?	weighted sum of inputs	Correct	threshold value	Incorrect	main input to neuron	Incorrect	none of the mentioned	
MC	Connections across the layers in standard topologies & among the units within a layer can be organised?	in feedforward manner	Incorrect	in feedback manner	Incorrect	both feedforward & feedback	Incorrect	either feedforward & feedback	
MC	On what parameters can change in weight vector depend?	learning parameters	Incorrect	input vector	Incorrect	learning signal	Incorrect	all of the mentioned	
MC	What is STM in neural network?	short topology memory	Incorrect	stimulated topology memory	Incorrect	short term memory	Correct	none of the mentioned	
MC	Which of the following is true about Naive Bayes ?	Assumes that all the features in a dataset are equally important	Incorrect	Assumes that all the features in a dataset are independent	Incorrect	Both A and B		None of the above options	Correct
MC	What is a sentence parser typically used for?	It is used to parse sentences to check if they are utf-8 compliant.	Incorrect	It is used to parse sentences to derive their most likely syntax tree structures.		It is used to parse sentences to assign POS tags to all tokens.	Correct	It is used to check if sentences can be parsed into meaningful tokens.	Incorrect
MC	Which of the following statements is true about the capabilities of GIS	Data capture and preparation	Incorrect	Data management, including storage and maintenance		4. Data presentation	Incorrect	All of the above	Incorrect
MC	By 'spatial data' we mean data that has	Complex values	Incorrect	Positional values	Correct	Graphic values	Incorrect	Decimal values	
MC	Key components of 'spatial data' quality include	Positional accuracy	Incorrect	Temporal accuracy	Incorrect	Lineage and completeness	Incorrect	All of the above	

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MC	Successful spatial analysis needs	Appropriate software	Incorrect	Appropriate hardware	Incorrect	Competent user	Incorrect	All of the above	
MC	Which of the following is related to GIS	Euclidean space	Correct	Ramanujan space	Incorrect	Pythagorian space	Incorrect	None of the above	
MC	Interpolation is made possible by a principle called	Spatial Autocorrelation	Correct	Spatial auto-correction	Incorrect	Thematic Autocorrelation	Incorrect	Thematic auto-correction	
MC	TIN stands for	Triangulated Irregular Network	Correct	Traffic Internet Network	Incorrect	Temporal Interest Network	Incorrect	Temperature Interface Node	
MC	The process of adjusting the weight is known as?	activation	Incorrect	synchronisation	Incorrect	learning	Correct	none of the mentioned	
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