



B.Tech - Even Sem : End Semester Exam
Academic Year:2021-2022

19EE3241 - AI AND IOT FOR ELECTRIC VEHICLE
Set No: 2

Time:		Max.Marks: 100					
S.NO	Answer All Questions	Choice	Options	Marks	CO	CO BTL	COI BTL
1.	Use Network diagram to explain the gateway for communicating VPC components with Internet	choice Q-2		10Marks	CO1	2	1
2.	Outline the importance of following key decisions to be made to create EC2 Instance i) IAM ii) Instance type, iii) network settings iv) IAM role			10Marks	CO1	2	1
3.	Answer the questions below	choice Q-4		15Marks	CO1	2	2
3.A.	Give an overview of EC2 computing service.			7Marks	CO1	2	1
3.B.	Support why EC2 is it called so? Also give some examples of Amazon EC2 instance applications.			8Marks	CO1	2	2
4.	Answer the questions below			15Marks	CO1	2	2
4.A.	Identify the different types of storage systems in AWS.			7Marks	CO1	2	2
4.B.	Explain Amazon S3 service in AWS?			8Marks	CO1	2	2
5.	Use IAM service to create an IAM account with 2 different user groups a) Admin b) developer c) Testing. The user groups should contain 2,4,6 user each with full admin access to Admin user group.			25Marks	CO2	3	3
6.	Enumerate the usage of Amazon sage maker for ML applications.	choice Q-7		10Marks	CO3	4	2
7.	Identify how machine learning can be used to solve a business problem			10Marks	CO3	4	2
8.	Answer the questions below	choice Q-9		15Marks	CO3	4	4
8.A.	Elaborate the training pipeline to be followed in training of Model in ML process			7Marks	CO3	4	3
8.B.	Elucidate the usage of Scikit-learn, Tensor flow and Keras python libraries for Machine learning.			8Marks	CO3	4	4
9.	Answer the questions below			15Marks	CO3	4	4
9.A.	Deduce the procedure to realize the supervised learning ML models using Amazon SageMaker			7Marks	CO3	4	3
9.B.	Deduce the procedure to realize the unsupervised learning ML models using Amazon SageMaker			8Marks	CO3	4	4
10.	Use the dataset of electric vehicle and develop a notebook instance in Amazon SageMaker to compare using histogram the acceleration, Top speed, range, fast charge of different electric vehicle models in the datasheet. https://www.kaggle.com/datasets/geoffnel/evs-one-electric-vehicle-dataset?select=ElectricCarData_Clean.csv			25Marks	CO4	4	4

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