

National Testing Agency

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Big Data Analytics For Smart Grid

Group Number : 1
Group Id : 2886079
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Big Data Analytics For Smart Grid

Section Id : 2886079
Section Number : 1
Section type : Online
Mandatory or Optional: Mandatory
Number of Questions: 100
Number of Questions to be attempted: 100
Section Marks: 100

Sub-Section Number: 1
Sub-Section Id: 2886079
Question Shuffling Allowed : Yes

Question Number : 1 Question Id : 288607801 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

- The smart Grid sensing and control infrastructure is comprised of,
- A. DG, Combined heat and power (CHP), PHEVs, PV cells and WT
 - B. Sensors, intelligent electronic devices (IEDs) and smart meters
 - C. μ wave, IR, PLCC, GSM and CDMA
 - D. High-end servers, middleware and data-storage unit

Options :

2886073201. 1

2886073202. 2

2886073203. 3

2886073204. 4

Question Number : 2 Question Id : 288607802 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

If a smart meter provides 15 minutes interval data, how many record you will get in a week?

- A. 96 reads
- B. 672 reads
- C. 192 reads
- D. 48 reads

Options :

2886073205. 1

2886073206. 2

2886073207. 3

2886073208. 4

Question Number : 3 Question Id : 288607803 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

What is the sampling rate of Digital Fault Recorder (DFR)?

- A. 1600 Samples per second
- B. 4 Samples per second
- C. 6 Samples per second
- D. 240 Samples per second

Options :

2886073209. 1

2886073210. 2

2886073211. 3

2886073212. 4

Question Number : 4 Question Id : 288607804 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Which among these cannot be determined from equal area criterion?

- A. Critical clearing angle
- B. Critical clearing time
- C. Transient stability limit
- D. Voltage Stability

Options :

2886073213. 1

2886073214. 2

2886073215. 3

2886073216. 4

Question Number : 5 Question Id : 288607805 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Which among these is related to the critical clearing time of a fault in a power system?

- A. Transient stability limit
- B. Steady state stability limit
- C. Frequency limit
- D. Voltage limit

Options :

2886073217. 1

2886073218. 2

2886073219. 3

2886073220. 4

Question Number : 6 Question Id : 288607806 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Phasor Measurement Unit is used in

- A. Local Area Monitoring
- B. Wide Area Monitoring
- C. Both Local and Wide Area Monitoring
- D. Option Missing

Options :

2886073221. 1

2886073222. 2

2886073223. 3

2886073224. 4

Question Number : 7 Question Id : 288607807 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

PMU uses which of the following phasor estimation technique

- A. Full DFT
- B. Half DFT
- C. Recursive DFT
- D. Cosine DFT

Options :

2886073225. 1

2886073226. 2

2886073227. 3

2886073228. 4

Question Number : 8 Question Id : 288607808 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

PMU provides which of the following information

- A. Voltage Magnitude
- B. Phase Angle
- C. Voltage and Phase Information
- D. Voltage Magnitude, Phase Angle and Frequency

Options :

2886073229. 1

2886073230. 2

2886073231. 3

2886073232. 4

Question Number : 9 Question Id : 288607809 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Time Synchronization information is provided with the help of

- A. GPS Satellites
- B. GPRS
- C. WiFi
- D. Zigbee

Options :

2886073233. 1

2886073234. 2

2886073235. 3

2886073236. 4

Question Number : 10 Question Id : 288607810 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

In order to provide correct time syhchronization information, the antenna must synch with atleast how many GPS Satellites?

A. 2

B. 3

C. 4

D. 5

Options :

2886073237. 1

2886073238. 2

2886073239. 3

2886073240. 4

Question Number : 11 Question Id : 288607811 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

In Empirical Wavelet Transform, there is H no. of filters with one LPF andno. of BPFs.

A. H-3

B. H-2

C. H-1

D. H+1

Options :

2886073241. 1

2886073242. 2

2886073243. 3

2886073244. 4

Question Number : 12 Question Id : 288607812 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

What is the sampling rate of PMU?

- A. 240 samples/second
- B. 250 samples/second
- C. 1600 samples/second
- D. 120 samples/second

Options :

2886073245. 1

2886073246. 2

2886073247. 3

2886073248. 4

Question Number : 13 Question Id : 288607813 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

FACTS devices used in

- A) Generation
- B) AC transmission
- C) DC transmission
- D) None

Options :

2886073249. 1

2886073250. 2

2886073251. 3

2886073252. 4

Question Number : 14 Question Id : 288607814 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

AMI means

- A. Automated Metering Instrument
- B. Alternate Metering Instrument
- C. Advanced Metering Infrastructure
- D. Advanced Metering Instrument

Options :

2886073253. 1

2886073254. 2

2886073255. 3

2886073256. 4

Question Number : 15 Question Id : 288607815 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Four V's of Big Data are:

- A. Volume, Velocity, Variety and Veracity
- B. Variety, Volume, Velocity and vacuity
- C. Velocity, Variety, vacuity and vagility
- D. Volume, Veracity, Variety and vacuility

Options :

2886073257. 1

2886073258. 2

2886073259. 3

2886073260. 4

Question Number : 16 Question Id : 288607816 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

The NY Stock Exchange captures _____ of trade information during each trading session

- A. 1 TB
- B. 100 MB
- C. 10 GB
- D. 700 MB

Options :

2886073261. 1

2886073262. 2

2886073263. 3

2886073264. 4

Question Number : 17 Question Id : 288607817 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

What is WASA in Smart Grid?

- A. Wide Area Synchronous Awareness
- B. Wide Area Situational Awareness
- C. Wide Area Situational Altitude
- D. Wide Area Synchrophasor Awareness

Options :

2886073265. 1

2886073266. 2

2886073267. 3

2886073268. 4

Question Number : 18 Question Id : 288607818 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Which of these is a problem of Power System State Estimation?

- A. Bad Data
- B. Less Amount of data
- C. Generation- Load mismatch
- D. Transient Stability Issues

Options :

2886073269. 1

2886073270. 2

2886073271. 3

2886073272. 4

Question Number : 19 Question Id : 288607819 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Which of the following is not an Open Source Big Data Tool

- A. Hadoop
- B. R Programming Tool
- C. Embedded C Programming
- D. Apache Spark

Options :

2886073273. 1

2886073274. 2

2886073275. 3

2886073276. 4

Question Number : 20 Question Id : 288607820 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

..... is the process of examining large and variety data sets.

- A. Big data analytics
- B. Cloud computing
- C. Machine Learning
- D. None

Options :

2886073277. 1

2886073278. 2

2886073279. 3

2886073280. 4

Question Number : 21 Question Id : 288607821 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

All of the following accurately describe Hadoop, EXCEPT _____

- A. Open source
- B. Real-time
- C. Java-based
- D. Distributed computing approach

Options :

2886073281. 1

2886073282. 2

2886073283. 3

2886073284. 4

Question Number : 22 Question Id : 288607822 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

The plot method on Series and DataFrame is used as :

- A. gplt.plot()
- B. plt.plot()
- C. plt.plotgraph()
- D. none of the Mentioned

Options :

2886073285. 1

2886073286. 2

2886073287. 3

2886073288. 4

Question Number : 23 Question Id : 288607823 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Point out the correct combination with regards to kind keyword for graph plotting:

- A. 'hist' for histogram
- B. 'box' for boxplot
- C. 'area' for area plots
- D. all of the Mentioned

Options :

2886073289. 1

2886073290. 2

2886073291. 3

2886073292. 4

Question Number : 24 Question Id : 288607824 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following value is provided by kind keyword for barplot ?

- A. barh
- B. kde
- C. hexbin
- D. none of the Mentioned

Options :

2886073293. 1

2886073294. 2

2886073295. 3

2886073296. 4

Question Number : 25 Question Id : 288607825 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following input can be accepted by DataFrame ?

- A. Structured ndarray
- B. Series
- C DataFrame
- D. All of the Mentioned

Options :

2886073297. 1

2886073298. 2

2886073299. 3

2886073300. 4

Question Number : 26 Question Id : 288607826 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following statement will import pandas?

- A. import pandas as pd
- B. import panda as py
- C. import pandaspy as pd
- D. all of the Mentioned

Options :

2886073301. 1

2886073302. 2

2886073303. 3

2886073304. 4

Question Number : 27 Question Id : 288607827 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Which of the following object you get after reading CSV file?

- A. DataFrame
- B. Character Vector
- C. Panel
- D. All of the Mentioned

Options :

2886073305. 1

2886073306. 2

2886073307. 3

2886073308. 4

Question Number : 28 Question Id : 288607828 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Computers are best at learning

- A. facts.
- B. concepts.
- C. procedures.
- D. principles.

Options :

2886073309. 1

2886073310. 2

2886073311. 3

2886073312. 4

Question Number : 29 Question Id : 288607829 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following statement(s) is / are true for Gradient Decent (GD) and Stochastic Gradient Decent (SGD)?

1. In GD and SGD, you update a set of parameters in an iterative manner to minimize the error function.
 2. In SGD, you have to run through all the samples in your training set for a single update of a parameter in each iteration.
 3. In GD, you either use the entire data or a subset of training data to update a parameter in each iteration.
- A) Only 1
B) Only 2
C) Only 3
D) 1 and 2

Options :

2886073313. 1

2886073314. 2

2886073315. 3

2886073316. 4

Question Number : 30 Question Id : 288607830 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Let's say, you are working with categorical feature(s) and you have not looked at the distribution of the categorical variable in the test data.

You want to apply one hot encoding (OHE) on the categorical feature(s). What challenges you may face if you have applied OHE on a categorical variable of train dataset?

- A) All categories of categorical variable are not present in the test dataset.
- B) Frequency distribution of categories is different in train as compared to the test dataset.
- C) Train and Test always have same distribution.
- D) Both A and B

Options :

2886073317. 1

2886073318. 2

2886073319. 3

2886073320. 4

Question Number : 31 Question Id : 288607831 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following machine learning algorithm can be used for imputing missing values of both categorical and continuous variables?

- A) K-NN
- B) Linear Regression
- C) Logistic Regression

Options :

2886073321. 1

2886073322. 2

2886073323. 3

Question Number : 32 Question Id : 288607832 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Linear Regression is a supervised machine learning algorithm.

- A) TRUE
- B) FALSE

Options :

2886073324. 1

2886073325. 2

Question Number : 33 Question Id : 288607833 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Which of the following methods do we use to find the best fit line for data in Linear Regression?

- A) Least Square Error
- B) Maximum Likelihood
- C) Logarithmic Loss
- D) Both A and B

Options :

2886073326. 1

2886073327. 2

2886073328. 3

2886073329. 4

Question Number : 34 Question Id : 288607834 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Overfitting is more likely when you have huge amount of data to train?

- A) TRUE
- B) FALSE

Options :

2886073330. 1

2886073331. 2

Question Number : 35 Question Id : 288607835 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following statement is true about outliers in Linear regression?

- A) Linear regression is sensitive to outliers
- B) Linear regression is not sensitive to outliers
- C) Can't say
- D) None of these

Options :

2886073332. 1

2886073333. 2

2886073334. 3

2886073335. 4

Question Number : 36 Question Id : 288607836 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following is an example of a deterministic algorithm?

- A) PCA
- B) K-Means
- C) None of the above
- D) missing

Options :

2886073336. 1

2886073337. 2

2886073338. 3

2886073339. 4

Question Number : 37 Question Id : 288607837 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following option would you more likely to consider iterating SVM next time?

- A) You want to increase your data points
- B) You want to decrease your data points
- C) You will try to calculate more variables
- D) You will try to reduce the features

Options :

2886073340. 1

2886073341. 2

2886073342. 3

2886073343. 4

Question Number : 38 Question Id : 288607838 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Support vectors are the data points that lie closest to the decision surface.

- A) TRUE
- B) FALSE

Options :

2886073344. 1

2886073345. 2

Question Number : 39 Question Id : 288607839 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

The minimum time complexity for training an SVM is $O(n^2)$. According to this fact, what sizes of datasets are not best suited for SVM's?

- A) Large datasets
- B) Small datasets
- C) Medium sized datasets
- D) Size does not matter

Options :

2886073346. 1

2886073347. 2

2886073348. 3

2886073349. 4

Question Number : 40 Question Id : 288607840 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following distance metric can not be used in k-NN?

- A) Manhattan
- B) Minkowski
- C) Tanimoto
- D) Jaccard
- E) Mahalanobis
- F) All can be used

Options :

2886073350. 1

2886073351. 2

2886073352. 3

2886073353. 4

2886073354. 5

2886073355. 6

Question Number : 41 Question Id : 288607841 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following will be true about k in k -NN in terms of Bias?

- A) When you increase the k the bias will be increases
- B) When you decrease the k the bias will be increases
- C) Can't say
- D) None of these

Options :

2886073356. 1

2886073357. 2

2886073358. 3

2886073359. 4

Question Number : 42 Question Id : 288607842 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

The SVM's are less effective when:

- A) The data is linearly separable
- B) The data is clean and ready to use
- C) The data is noisy and contains overlapping points
- D) missing

Options :

2886073360. 1

2886073361. 2

2886073362. 3

2886073363. 4

Question Number : 43 Question Id : 288607843 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

What would happen in SVM when you use very small C ($C \rightarrow 0$)?

- A) Misclassification would happen
- B) Data will be correctly classified
- C) Can't say
- D) None of these

Options :

2886073364. 1

2886073365. 2

2886073366. 3

2886073367. 4

Question Number : 44 Question Id : 288607844 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following statement is true about k-NN algorithm?

1. k-NN performs much better if all of the data have the same scale
2. k-NN works well with a small number of input variables (p), but struggles when the number of inputs is very large
3. k-NN makes no assumptions about the functional form of the problem being solved

- A) 1 and 2
B) 1 and 3
C) Only 1
D) All of the above

Options :

2886073368. 1

2886073369. 2

2886073370. 3

2886073371. 4

Question Number : 45 Question Id : 288607845 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following option is true about k-NN algorithm?

- A) It can be used for classification
B) It can be used for regression
C) It can be used in both classification and regression

Options :

2886073372. 1

2886073373. 2

2886073374. 3

Question Number : 46 Question Id : 288607846 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

What would be the time taken by 1-NN if there are N(Very large) observations in test data?

- A) $N \cdot D$
B) $N \cdot D \cdot 2$
C) $(N \cdot D) / 2$
D) None of these

Options :

2886073375. 1

2886073376. 2

2886073377. 3

2886073378. 4

Question Number : 47 Question Id : 288607847 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Which of the following will be Euclidean Distance between the two data point A(1,3) and B(2,3)?

- A) 1
- B) 2
- C) 4
- D) 8

Options :

2886073379. 1

2886073380. 2

2886073381. 3

2886073382. 4

Question Number : 48 Question Id : 288607848 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

_____ refers to applications/services that run on a distributed network using virtualized resources.

- A. Distributed computing
- B. Cloud computing
- C. Soft computing
- D. Parallel computing

Options :

2886073383. 1

2886073384. 2

2886073385. 3

2886073386. 4

Question Number : 49 Question Id : 288607849 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Which of the following cloud concept is related to pooling and sharing of resources?

- A. Polymorphism
- B. Abstraction
- C. Virtualization
- D. Service Oriented Architecture

Options :

2886073387. 1

2886073388. 2

2886073389. 3

2886073390. 4

Question Number : 50 Question Id : 288607850 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

The Cloud Platform of Amazon is _____?

- A. Azure
- B. AWS
- C. Cloudera
- D. OpenNebula

Options :

2886073391. 1

2886073392. 2

2886073393. 3

2886073394. 4

Question Number : 51 Question Id : 288607851 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Which service layer rely on the virtual machine technology to deliver servers?

- A. CaaS
- B. AaaS
- C. PaaS
- D. IaaS

Options :

2886073395. 1

2886073396. 2

2886073397. 3

2886073398. 4

Question Number : 52 Question Id : 288607852 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

How do you define a public cloud?

- A. A cloud formation that can be seen across the globe
- B. A cloud service that can only be accessed from a publicly shared computer
- C. A multi-tenant cloud environment accessed over the internet
- D. A cloud environment owned, operated and controlled by a public company

Options :

2886073399. 1

2886073400. 2

2886073401. 3

2886073402. 4

Question Number : 53 Question Id : 288607853 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following acronyms refers to a software distribution model in which a cloud provider manages and hosts an app that users access via the internet?

- A. IaaS
- B. PaaS
- C. SaaS
- D. DaaS

Options :

2886073403. 1

2886073404. 2

2886073405. 3

2886073406. 4

Question Number : 54 Question Id : 288607854 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which Azure big data cloud service is used to perform real-time analytics, specifically for the internet of things (IoT)?

- A. Azure HDInsight
- B. Azure IoT Analytics
- C. Azure Real-time Insights
- D. Azure Stream Analytics

Options :

2886073407. 1

2886073408. 2

2886073409. 3

2886073410. 4

Question Number : 55 Question Id : 288607855 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

What is Google's new big data service, which it has coined as a successor to MapReduce?

- A. Cloud Dataflow
- B. Kubernetes
- C. onMetal Cloud Big Data Platform
- D. DynamoDB

Options :

2886073411. 1

2886073412. 2

2886073413. 3

2886073414. 4

Question Number : 56 Question Id : 288607856 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

What is HBASE?

- A. Hbase is separate set of the Java API for Hadoop cluster.
- B. Hbase is a part of the Apache Hadoop project that provides interface for scanning large amount of data using Hadoop infrastructure.
- C. Hbase is a "database" like interface to Hadoop cluster data.
- D. HBase is a part of the Apache Hadoop project that provides a SQL like interface for data processing.

Options :

2886073415. 1

2886073416. 2

2886073417. 3

2886073418. 4

Question Number : 57 Question Id : 288607857 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

In Hadoop MapReduce framework spawns one map task for each _____ generated by the InputFormat for the job.

- A. OutputSplit
- B. InputSplit
- C. InputSplitStream
- D. Slave node

Options :

2886073419. 1

2886073420. 2

2886073421. 3

2886073422. 4

Question Number : 58 Question Id : 288607858 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

What is edge computing?

- A. An architecture that processes data as close to its source as possible
- B. A new name for computing
- C. A type of computing that leaves network teams on edge
- D. Computing that teams can only attempt when standing on the edge of something

Options :

2886073423. 1

2886073424. 2

2886073425. 3

2886073426. 4

Question Number : 59 Question Id : 288607859 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

What's the difference between edge computing and fog computing?

- A. No difference
- B. The architectures place compute power in separate places
- C. Fog computing encompasses a large web of connected devices and data locations, and edge computing processes data and compute solely at the edge
- D. Edge computing deals with smaller data and fog computing deals with larger data

Options :

2886073427. 1

2886073428. 2

2886073429. 3

2886073430. 4

Question Number : 60 Question Id : 288607860 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

What issue is common in many edge computing challenges?

- A. Bandwidth
- B. Latency
- C. Network Security
- D. Network Traffic

Options :

2886073431. 1

2886073432. 2

2886073433. 3

2886073434. 4

Question Number : 61 Question Id : 288607861 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Why should anyone care about edge computing?

- A. It can alleviate latency and network congestion issues
- B. Better than cloud computing
- C. Supports IoT
- D. Good Programming Support

Options :

2886073435. 1

2886073436. 2

2886073437. 3

2886073438. 4

Question Number : 62 Question Id : 288607862 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

What technological advancement contributed to edge computing's popularity?

- A. IoT
- B. Cloud
- C. 5G
- D. 802.11ax or Wi-Fi 6

Options :

2886073439. 1

2886073440. 2

2886073441. 3

2886073442. 4

Question Number : 63 Question Id : 288607863 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

The input image has been converted into a matrix of size 28 X 28 and a kernel/filter of size 7 X 7 with a stride of 1. What will be the size of the convoluted matrix?

- A) 22 X 22
- B) 21 X 21
- C) 28 X 28
- D) 7 X 7

Options :

2886073443. 1

2886073444. 2

2886073445. 3

2886073446. 4

Question Number : 64 Question Id : 288607864 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

In a simple MLP model with 8 neurons in the input layer, 5 neurons in the hidden layer and 1 neuron in the output layer. What is the size of the weight matrices between hidden output layer and input hidden layer?

A) [1 X 5], [5 X 8]

B) [8 X 5], [1 X 5]

C) [8 X 5], [5 X 1]

D) [5 X 1], [8 X 5]

Options :

2886073447. 1

2886073448. 2

2886073449. 3

2886073450. 4

Question Number : 65 Question Id : 288607865 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Which of following activation function can't be used at output layer to classify an image?

A) sigmoid

B) Tanh

C) ReLU

D) If($x > 5$, 1, 0)

Options :

2886073451. 1

2886073452. 2

2886073453. 3

2886073454. 4

Question Number : 66 Question Id : 288607866 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

What value would be in place of question mark?

INPUT

1	1	1	0	0
0	1	1	1	0
0	0	1	1	1
0	0	1	1	0
0	1	1	0	0

FILTER

1	0	1
0	1	0
1	0	1

CONVOLVED FEATURE

?		

Here we see a convolutional function being applied to input.

- A) 3
- B) 4
- C) 5
- D) 6

Options :

2886073455. 1

2886073456. 2

2886073457. 3

2886073458. 4

Question Number : 67 Question Id : 288607867 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following would have a constant input in each epoch of training a Deep Learning model?

- A) Weight between input and hidden layer
- B) Weight between hidden and output layer
- C) Biases of all hidden layer neurons
- D) Activation function of output layer

Options :

2886073459. 1

2886073460. 2

2886073461. 3

2886073462. 4

Question Number : 68 Question Id : 288607868 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

The number of nodes in the input layer is 10 and the hidden layer is 5. The maximum number of connections from the input layer to the hidden layer are

- A) 50
- B) Less than 50
- C) More than 50
- D) It is an arbitrary value

Options :

2886073463. 1

2886073464. 2

2886073465. 3

2886073466. 4

Question Number : 69 Question Id : 288607869 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following sentence is FALSE regarding regression?

- (A) It relates inputs to outputs.
- (B) It is used for prediction.
- (C) It may be used for interpretation.
- (D) It discovers causal relationships.

Options :

2886073467. 1

2886073468. 2

2886073469. 3

2886073470. 4

Question Number : 70 Question Id : 288607870 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following value of K will have least leave-one-out cross validation accuracy?

- A) 1NN
- B) 3NN
- C) 4NN
- D) All have same leave one out error

Options :

2886073471. 1

2886073472. 2

2886073473. 3

2886073474. 4

Question Number : 71 Question Id : 288607871 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Overfitting is more likely when you have huge amount of data to train?

A) TRUE

B) FALSE

Options :

2886073475. 1

2886073476. 2

Question Number : 72 Question Id : 288607872 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Which of the following is a good test dataset characteristic?

- A. Large enough to yield meaningful results
- B. Is representative of the dataset as a whole
- C. Both A and B
- D. None of the above

Options :

2886073477. 1

2886073478. 2

2886073479. 3

2886073480. 4

Question Number : 73 Question Id : 288607873 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Which of the following methods do we use to find the best fit line for data in Linear Regression?

- A) Least Square Error
- B) Maximum Likelihood
- C) Logarithmic Loss
- D) Both A and B

Options :

2886073481. 1

2886073482. 2

2886073483. 3

2886073484. 4

Question Number : 74 Question Id : 288607874 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

How do you handle missing or corrupted data in a dataset?

- A. Drop missing rows or columns
- B. Replace missing values with mean/median/mode
- C. Assign a unique category to missing values
- D. All of the above

Options :

2886073485. 1

2886073486. 2

2886073487. 3

2886073488. 4

Question Number : 75 Question Id : 288607875 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

When performing regression or classification, which of the following is the correct way to preprocess the data?

- A. Normalize the data → PCA → training
- B. PCA → normalize PCA output → training
- C. Normalize the data → PCA → normalize PCA output → training
- D. None of the above

Options :

2886073489. 1

2886073490. 2

2886073491. 3

2886073492. 4

Question Number : 76 Question Id : 288607876 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

What do you mean by generalization error in terms of the SVM?

- A) How far the hyperplane is from the support vectors
- B) How accurately the SVM can predict outcomes for unseen data
- C) The threshold amount of error in an SVM

Options :

2886073493. 1

2886073494. 2

2886073495. 3

Question Number : 77 Question Id : 288607877 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

What are the benefits of Fog computing security?

- A) Fog computing security only benefits IoT
- B) Fog computing only secures data about Fogs, including mountain Fogs and table Fogs
- C) Fog computing security can respond in real time and host behavioral threat analytics
- D) Fog computing cannot be secure

Options :

2886073496. 1

2886073497. 2

2886073498. 3

2886073499. 4

Question Number : 78 Question Id : 288607878 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Suppose you have trained a logistic regression classifier and it outputs a new example x with a prediction $h_0(x) = 0.2$. This means

- A. Our estimate for $P(y=1 | x)$
- B. Our estimate for $P(y=0 | x)$
- C. Our estimate for $P(y=1 | x)$
- D. Our estimate for $P(y=0 | x)$

Options :

2886073500. 1

2886073501. 2

2886073502. 3

2886073503. 4

Question Number : 79 Question Id : 288607879 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

How can you prevent a clustering algorithm from getting stuck in bad local optima?

- A. Set the same seed value for each run
- B. Use multiple random initializations
- C. Both A and B
- D. None of the above

Options :

2886073504. 1

2886073505. 2

2886073506. 3

2886073507. 4

Question Number : 80 Question Id : 288607880 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

In K-NN algorithm K stands for

- A. no. of neighbour that are investigated
- B. no. of iterations
- C. no. of total records
- D. random number

Options :

2886073508. 1

2886073509. 2

2886073510. 3

2886073511. 4

Question Number : 81 Question Id : 288607881 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

What do you mean by a hard margin?

- A) The SVM allows very low error in classification
- B) The SVM allows high amount of error in classification
- C) None of the above

Options :

2886073512. 1

2886073513. 2

2886073514. 3

Question Number : 82 Question Id : 288607882 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

In which of the following cases will K-means clustering fail to give good results?

1) Data points with outliers 2) Data points with different densities 3) Data points with nonconvex shapes

- A. 1 and 2
- B. 2 and 3
- C. 1, 2, and 3
- D. 1 and 3

Options :

2886073515. 1

2886073516. 2

2886073517. 3

2886073518. 4

Question Number : 83 Question Id : 288607883 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

The minimum time complexity for training an SVM is $O(n^2)$. According to this fact, what sizes of datasets are not best suited for SVM's?

- A) Large datasets
- B) Small datasets
- C) Medium sized datasets
- D) Size does not matter

Options :

2886073519. 1

2886073520. 2

2886073521. 3

2886073522. 4

Question Number : 84 Question Id : 288607884 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following is a widely used and effective machine learning algorithm based on the idea of bagging?

- A. Decision Tree
- B. Regression
- C. Classification
- D. Random Forest

Options :

2886073523. 1

2886073524. 2

2886073525. 3

2886073526. 4

Question Number : 85 Question Id : 288607885 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following option is true about k-NN algorithm?

- A) It can be used for classification
- B) It can be used for regression
- C) It can be used in both classification and regression
- D) It cant be used for either classification or regression

Options :

2886073527. 1

2886073528. 2

2886073529. 3

2886073530. 4

Question Number : 86 Question Id : 288607886 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

What would be the time taken by 1-NN if there are N(Very large) observations in test data?

- A) $N \cdot D$
- B) $N \cdot D \cdot 2$
- C) $(N \cdot D) / 2$
- D) None of these

Options :

2886073531. 1

2886073532. 2

2886073533. 3

2886073534. 4

Question Number : 87 Question Id : 288607887 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Support vectors are the data points that lie closest to the decision surface.

- A) TRUE
- B) FALSE

Options :

2886073535. 1

2886073536. 2

Question Number : 88 Question Id : 288607888 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

What would happen in SVM when you use very small C (C~0)?

- A) Misclassification would happen
- B) Data will be correctly classified
- C) Can't say
- D) None of these

Options :

2886073537. 1

2886073538. 2

2886073539. 3

2886073540. 4

Question Number : 89 Question Id : 288607889 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

What is the role of Bigdata in smart grid architecture?

- A. Store data
- B. Manage data
- C. Collect data
- D. Security

Options :

2886073541. 1

2886073542. 2

2886073543. 3

2886073544. 4

Question Number : 90 Question Id : 288607890 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

What is the role of Cloud in smart grid architecture?

- A. Store data
- B. Manage data
- C. Collect data
- D. Security

Options :

2886073545. 1

2886073546. 2

2886073547. 3

2886073548. 4

Question Number : 91 Question Id : 288607891 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

The power grid is currently undergoing a major transformation to become smarter and more reliable. Which of these is NOT a new technology being used on the grid?

- A. Synchrophasors
- B. Smart meters
- C. Energy Storage
- D. Flux Capacitors

Options :

2886073549. 1

2886073550. 2

2886073551. 3

2886073552. 4

Question Number : 92 Question Id : 288607892 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

A localized grouping of electricity generations, energy storages, and loads is termed as?

- A. Virtual Power Plant
- B. Macro Grid
- C. Micro Grid
- D. Traditional Grid

Options :

2886073553. 1

2886073554. 2

2886073555. 3

2886073556. 4

Question Number : 93 Question Id : 288607893 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Which keyword is used to define methods in Python?

- (A) function
- (B) def
- (C) method
- (D) All of these

Options :

2886073557. 1

2886073558. 2

2886073559. 3

2886073560. 4

Question Number : 94 Question Id : 288607894 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

Which of the following data types is not supported in python?

- A. Numbers
- B. String
- C. List
- D. Slice

Options :

2886073561. 1

2886073562. 2

2886073563. 3

2886073564. 4

Question Number : 95 Question Id : 288607895 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0

_____ describes a distribution model in which applications are hosted by a service provider and made available to users.

- A. Infrastructure-as-a-Service (IaaS)
- B. Platform-as-a-Service (PaaS)
- C. Software-as-a-Service (SaaS)
- D. Cloud service

Options :

2886073565. 1

2886073566. 2

2886073567. 3

2886073568. 4

Question Number : 96 Question Id : 288607896 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

_____ is the feature of cloud computing that allows the service to change in size or volume in order to meet a user's needs.

- A. Scalability
- B. Virtualization
- C. Security
- D. Cost-savings

Options :

2886073569. 1

2886073570. 2

2886073571. 3

2886073572. 4

Question Number : 97 Question Id : 288607897 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

Which of the following service provider provides the least amount of built-in security?

- A. SaaS
- B. PaaS
- C. IaaS
- D. All of above

Options :

2886073573. 1

2886073574. 2

2886073575. 3

2886073576. 4

Question Number : 98 Question Id : 288607898 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

"Cloud" in cloud computing represents what?

- A. Internet
- B. Wireless
- C. Hard drives
- D. People

Options :

2886073577. 1

2886073578. 2

2886073579. 3

2886073580. 4

Question Number : 99 Question Id : 288607899 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

What is the reasonable noise power SNR in designing the D-PMU?

- A. 40 dB
- B. 60 dB
- C. 50 dB
- D. None of above

Options :

2886073581. 1

2886073582. 2

2886073583. 3

2886073584. 4

Question Number : 100 Question Id : 288607900 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0

All cloud computing applications suffer from the inherent _____ that is intrinsic in their WAN connectivity.

- A. propagation
- B. latency
- C. noise
- D. All of the mentioned

Options :

2886073585. 1

2886073586. 2

2886073587. 3

2886073588. 4