

WEEK 8 2020A

Assignment 8

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-03-25, 23:59 IST.

- 1) In reinforcement learning 1 point
- a. No external supervisor to guide the agent
 - b. Agent is guided by an external supervisor who has the knowledge of the environment
 - c. Both a and b
 - d. None
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers:
a.
- 2) Which one of the following is correct? 1 point
- a. Fuzzy-c means can be extremely faster than K-means
 - b. K-means is faster than Fuzzy-c means
 - c. Both a and b
 - d. None
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers:
a.
- 3) Fog computing is a 1 point
- a. complement to cloud computing
 - b. replacement of cloud computing
 - c. substitution of cloud computing
 - d. none of the above
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers:
a.
- 4) Which one of the following is true for Reinforcement learning algorithm? 1 point
- a. Enables machines to improve its performance by automatically learning the ideal behaviors for an environment
 - b. Enables machines to improve its performance by manually learning the ideal behaviors for an environment
 - c. Both a and b
 - d. None
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers:
a.

5) The main requirements of deep learning are _____ 1 point

- a. Low quality and low quantity data
- b. Low quality and high quantity data
- c. High quality and low quantity data
- d. High quality and high quantity data

- a.
- b.
- c.
- d.

No, the answer is incorrect.

Score: 0

Accepted Answers:
d.

6) In deep learning, deep refers to the _____ 1 point

- a. Number of hidden layers
- b. Number of input layers
- c. Number of output layers
- d. None

- a.
- b.
- c.
- d.

No, the answer is incorrect.

Score: 0

Accepted Answers:
a.

7) Which of the following option is true about the cloud features offered for IIoT? 1 point

- a. High data storage capacity
- b. High computational speed of processing data
- c. High Scalability
- d. All of the above

- a.
- b.
- c.
- d.

No, the answer is incorrect.

Score: 0

Accepted Answers:
d.

8) One of the important characteristics of cloud is _____ 1 point

- a. Homogeneity
- b. Productivity
- c. Abstraction
- d. None of the above

- a.
- b.
- c.
- d.

No, the answer is incorrect.

Score: 0

Accepted Answers:
c.

9) The digital twin technology implies: 1 point

- a. Technology that enables to increase the production
- b. Technology that enables prediction and optimization
- c. Both (a) and (b)
- d. None of the above

- a.
- b.
- c.
- d.

No, the answer is incorrect.

Score: 0

Accepted Answers:

b.

10) The major services of the cloud provided by Honeywell includes: 1 point

- a. Onsite control and management
- b. Smart and secure alliance
- c. Connected world of devices and assets
- d. All of the above

- a.
- b.
- c.
- d.

No, the answer is incorrect.

Score: 0

Accepted Answers:

d.

11) Go through the statements and choose the correct option. 1 point

- Statement I: Centralized cloud-based solution for IoT suffers from latency problems.
Statement II: Fog based decentralized solutions has no support for reducing latency issues.
- a. Both statement I and II are correct
 - b. Only statement I is correct
 - c. Only statement II is correct
 - d. Both statement I and II are false

- a.
- b.
- c.
- d.

No, the answer is incorrect.

Score: 0

Accepted Answers:

b.

12) Suppose a cloud vendor provides features of edge intelligence. What does it exactly mean? 1 point

- a. Devices at the edge of network can take all the decisions and there is no need of cloud in the infrastructure
- b. Devices at the edge of network can take some decisions based on local data rather than delegating every decision to cloud
- c. Devices at the edge of network work act as forwarding devices to delegate all the decisions to cloud.
- d. None of the above

- a.
- b.
- c.
- d.

No, the answer is incorrect.

Score: 0

Accepted Answers:

b.

- 13) Consider the following statements and choose the correct option. 1 point

Statement A: Fog computing offers better scalability
Statement B: Fog computing helps in decreasing delay
a. Only statement A is true
b. Only statement B is true
c. Both Statements are true
d. None of them are true

- a.
- b.
- c.
- d.

No, the answer is incorrect.

Score: 0

Accepted Answers:

c.

- 14) Why is the fog computing suitable for mining industry? 1 point

a. It is the scenario where processing of data can be delayed
b. The scenario is suitable for the implementation of the fog computing
c. It is a highly risky environment
d. All of the above

- a.
- b.
- c.
- d.

No, the answer is incorrect.

Score: 0

Accepted Answers:

c.

- 15) Which of the following fog platform produces the FogOS? 1 point

a. Sonm
b. Crosser
c. FogHorn
d. Nebbiolo Technologies

- a.
- b.
- c.
- d.

No, the answer is incorrect.

Score: 0

Accepted Answers:

d.

Week 8 Assignment 8

Assignment not submitted

Due date: 2021-03-17, 23:59 IST.

1) The types of IIoT analytics are as follows:

1 point

- (a) Descriptive Analytics
- (b) Predictive Analytics
- (c) Prescriptive Analytics
- (d) All of the above

- a.
- b.
- c.
- d.

2) What is/are the necessity of IIoT analytics in industries?

1 point

- (a) optimal decision making for intelligent operation
- (b) automatic system
- (c) autonomous machines
- (d) none of the above

- a.

3) What is the function of prognostic analytics?

1 point

- (a) To detect irregular behavior of assets
- (b) To identify the root cause of anomaly
- (c) To inform about the remaining useful life of an asset
- (d) All of the above

- a.
- b.
- c.

4)

1 point

Which of the following is not a category of Machine learning algorithms?

- (a) Supervised
- (b) Unsupervised
- (c) Reinforcement
- (d) AdaBoost

- a.
- b.
- c.
- d.

5) K-means clustering algorithm is a type of - 1 point

- (a) Hard clustering
- (b) Soft clustering
- (c) Both a and b
- (d) None of the above

a.

6) Which of the following techniques is used to predict the value of a dependent variable based on the known dependent and independent variables? 1 point

- (a) Linear regression
- (b) Decision tree
- (c) K-means
- (d) Fuzzy c-mean

a.

7) What does "deep" in Deep learning refers to? 1 point

- (a) It refers to the hidden layers in the deep neural network
- (b) It refers to the data size
- (c) It refers to data storage
- (d) None of the above

a.

8) Which of the following requirements in Deep learning makes it suitable for IIoT? 1 point

- (a) Requirement of large data
- (b) Requirement of high end computational power
- (c) Both a and b
- (d) None of the above

a.

9) The learning process in Toshiba's Collaborative Distributed Deep learning technology is done in - 1 point

- (a) Cloud
- (b) Edge
- (c) End-device
- (d) All of the above

a.

10) The major services of the cloud provided by Honeywell includes:

1 point

- a. Onsite control and management
- b. Smart and secure alliance
- c. Connected world of devices and assets
- d. All of the above

- a.
- b.
- c.
- d.

11) What is SLA?

1 point

- (a) Service level Allowance
- (b) Service Level Agreement
- (c) Sensor Level Accuracy
- (d) Sensor Level Agreement

- a.
- b.

12) MindSphere is a -

1 point

- (a) SaaS
- (b) Open PaaS
- (c) IaaS
- (d) None of the above

- a.
- b.

13) Consumer IoT platforms have -

1 point

- (a) Modest security
- (b) specific applications for end-users
- (c) Cost sensitive
- (d) All of the above

- a.
- b.
- c.
- d.

14) Cloud is preferred in IIoT because of its -

1 point

- (a) High computational power
- (b) Huge data storage capacity
- (c) Scalable and secure services
- (d) All of the above

- a.
- b.
- c.
- d.

15)

1 point

What is the function of SLA?

- (a) Helps in maintaining the quality of the cloud services
- (b) Helps the service provider in promising the deliverables
- (c) Both a and b
- (d) None of the above

- a.
- b.
- c.

WEEK 8 2021B

Week 8 : Assignment 8

Assignment not submitted

Due date: 2021-09-22, 23:59 IST.

1)

Which of the following is/are the necessary application(s) of IIoT analytics?

- a. Dynamic operations optimization
- b. Prognostic maintenance
- c. Real-time data analysis
- d. All of the above

- a.
- b.
- c.
- d.

2)

Which of the following is not a type of IIoT analytics?

- a. Descriptive Analytics
- b. Predictive Analytics
- c. Prescriptive Analytics
- d. None of the above

- a.
- b.
- c.
- d.

3)

The batch-oriented analytics is useful for _____

- a. Long-term statistics
- b. Short-term statistics
- c. Both (a) and (b)
- d. None of the above

- a.
- b.
- c.
- d.

4)

Machine learning is _____

- a. A subset of AI
- b. A superset of AI
- c. Equivalent to AI
- d. Completely different from AI

- a.
- b.
- c.
- d.

5)

Which of the following is/are true for the K-means clustering algc

- a. One data point may be categorized in multiple clusters
- b. One data point is strictly categorized in only one cluster
- c. Both (a) and (b) is possible based on the user's requirement
- d. None of the above

a.
 b.
 c.
 d.

Now

6)

Which of the following is not a component of a reinforcement learn

- a. State
- b. Action
- c. Remote
- d. None of the above

a.
 b.
 c.
 d.

Now

7)

Deep learning imitates the _____

- a. Human neural system and activity
- b. Human body posture
- c. Human mobility
- d. None of the above

a.
 b.
 c.
 d.

Now

8)

Which of the following are referred to as the critical requirements

- a. Low quantity and High quality of data
- b. Large quantity and Low quality of data
- c. Low quantity and Low quality of data
- d. Large quantity and High quality of data

a.

b.

c.

d.



9)

Deep learning empowers TOSHIBA with _____ in

- a. Improved yield and low productivity
- b. Improved yield and high productivity
- c. Reduced yield and low productivity
- d. Reduced yield and high productivity

a.

b.

c.

d.



10)

Which of the following necessitate(s) the emergence of Cloud Computing

- a. The requirement of scalable and secure service
- b. The requirement of non-scalable and secure service
- c. The requirement of non-scalable and vulnerable service
- d. None of the above

a.

b.

c.

d.



11) Which of the following is/are not an example(s) of PaaS in cloud

- a. Predix
- b. Sentience
- c. Industrial Machinery Catalyst
- d. Both (a) and (b)

- a.
- b.
- c.
- d.

NOW

12)

Which of the following is/are the property(ies) of the private computing?

- a. Cloud setup for the use of a single organization
- b. Cloud setup for the use of any person or industry
- c. Cloud setup by multiple unique cloud setup
- d. All of the above

- a.
- b.
- c.
- d.

13)

Which of the following is/are the cloud platform provider(s)?

- a. C3 IoT
- b. Uptake
- c. Meshify
- d. All of the above

- a.
- b.
- c.
- d.

NOW

14) Which of the following solutions is/are provided by Meshify?

- a. Supply network
- b. Tracker
- c. Data integrator
- d. All of the above

a.

b.

c.

d.



15) Which of the following feature(s) need(s) to be considered while choosing an Cloud Vendor?

- a. Scalability support
- b. Bandwidth requirements
- c. Interoperability
- d. All of the above

a.

b.

c.

d.

WEEK 8 2022A

Week 8 : Assignment 8

Assignment not submitted

Due date: 2022-03-23, 23:59 IST.

1) Which of the following is/are the necessary requirements in IIoT analytics? **1 point**

- (a) Static operation optimization
- (b) Prognostic maintenance
- (c) Historical data analysis
- (d) None of the above

2) Which of the following is/are true for the K-means clustering algorithm? **1 point**

- (a) One data point may be categorized under multiple cluster heads
- (b) One data point is strictly categorized under a cluster head
- (c) Both (a) and (b) are possible based on the user's requirement
- (d) None of the above

3) Reinforcement learning amalgamates _____ control system. **1 point**

- (a) No
- (b) An open-loop based
- (c) A closed-loop based
- (d) None of the above

4) Which of the following is/are true for the decision tree algorithm? **1 point**

- (a) Tree-based machine learning approach
- (b) Uses non-linear learning function
- (c) Includes decision nodes and leaf nodes
- (d) All of the above

5) Which of the following is true for reinforcement learning? **1 point**

- (a) There is no mapping between input and output features
- (b) There is a mapping between input and output features
- (c) Reinforced learning is not concerned with the mapping between input and output variables
- (d) None of the above

6) Which of the following uses ANN for face tagging in photos? **1 point**

- (a) WhatsApp
- (b) Orkut
- (c) Facebook
- (d) None of the above

7) Using IIoT and machine learning, Toumetis helps _____ engineers to access **1 point** real-time data and predict anomalies

- (a) Oil and gas
- (b) Automobile
- (c) Dairy
- (d) None of the above

8) When did deep learning start to gain popularity? **1 point**

- (a) 2005
- (b) 2006
- (c) 2007
- (d) 2008

9) Which of the following is/are true for TOSHIBA? **1 point**

- (a) Inference process at edge
- (b) Learning process at cloud
- (c) Both (a) and (b)
- (d) None of the above

10) Which of the following nature of data raises the need for the cloud in IIoT analytics **1 point** and data management?

- (a) Unorganized data
- (b) Organized data
- (c) Static data quality
- (d) None of the data

11) How many types of services are provided by cloud computing in IIoT **1 point**

- (a) 4
- (b) 3
- (c) 2
- (d) 5

12) MindSphere facilitates _____. 1 point

- (a) AWS cloud service
- (b) Open PaaS
- (c) Both (a) and (b)
- (d) None of the above

13) Why does Honeywell use cloud software services? 1 point

- (a) Managing IoT
- (b) Tracking of capital
- (c) Tracking of managers
- (d) None of the above

14) Which of the following is/are the IIoT requirements in Industry 4.0? 1 point

- (a) Achieve greater production
- (b) Deeper insights of analysis and prediction
- (c) Connected world of machines
- (d) All of the above

15) In comparison with the centralized approach, decentralized approach in IIoT 1 point

- _____.
- (a) Increases load at cloud
 - (b) Does not have any impact at cloud
 - (c) Reduces load at cloud
 - (d) None of the above

WEEK 8 2022B

Week 8 : Assignment 8

Assignment not submitted

Due date: 2022-09-21, 23:59 IST.

1) What are the different types of IIoT analytics? 1 point

- (a) Descriptive analytics
- (b) Predictive analytics
- (c) Prescriptive analytics
- (d) All of the above

- a
- b
- c
- d

2) Which of the following is/are the challenges of analytics 1 point

- (a) Timing
- (b) Safety
- (c) Automatic
- (d) All of the above

a
 b
 c
 d



3) Big data analytics in data science considers _____ of data. 1 point

- (a) Volume
- (b) Velocity
- (c) Both (a) and (b)
- (d) None of the above

a
 b
 c

4) Which of the following is the correct sequence of implementing machine learning 1 point

- (a) Data collection, feature extraction, model creation, model validation, deployment
- (b) Data collection, model creation, feature extraction, model validation, deployment
- (c) Data collection, feature extraction, model validation, model creation, deployment
- (d) Data collection, feature extraction, model creation, deployment, model validation

a

5) What is Machine Learning? 1 point

- (a) Machine learning is a subset of Artificial Intelligence
- (b) Machine learning is a subset of Deep Learning
- (c) Both (a) and (b)
- (d) None of the above

a

6) In decision tree, decision node _____. 1 point

- (a) is used to test or decide the outcome based on some value of an attribute
- (b) Denotes the classification of an example
- (c) Both (a) and (b)
- (d) None of the above

a

7) The main components of reinforcement learning includes _____. 1 point

- (a) State
- (b) Action
- (c) Agent
- (d) All of the above

a
 b
 c
 d

8) Which of the following is/are true? 1 point

- (a) Pfizer exploits IBM Watson for drugdiscovery
- (b) Genentech provide personalized treatmentfor patients
- (c) Both (a) and (b)
- (d) ~~None~~ of the above

a
 b
 c

9) The important factors required by deep learning methods in IIoT for solving critical issues are _____ 1 point

- (a) Large Quantity of data
- (b) High Quality and accuracy of reliable data
- (c) Both (a) and (b)
- (d) None of the above

a
 b
 c

10) Digitization Process includes _____. 1 point

- (a) Data acquisition
- (b) Resource management
- (c) Knowledge management
- (d) All of the data

a
 b
 c

11) Software-as-a-Service in cloud includes _____. 1 point

- (a) Industrial applications with web or program Interface
- (b) Subscribe-and-use feature to industry clients with final product
- (c) Everything managed by the service provider
- (d) All of the above

a
 b
 c
 d

12) Microsoft Azure facilitates _____. 1 point

- (a) Infrastructure-as-a-Service
- (b) Platform-as-a-service
- (c) Both (a) and (b)
- (d) None of the above

a

13) Meshify provides

1 point

- (a) Industrial IoT platform
- (b) Real-time monitoring
- (c) Low-cost solutions
- (d) All of the above

a
 b
 c
 d

14) Which of the following is/are the IIoT requirements in Industry 4.0?

1 point

- (a) Achieve greater production
- (b) Deeper insights of analysis and prediction
- (c) Connected world of machines
- (d) All of the above

a
 b
 c
 d

15) In comparison with the centralized approach, decentralized approach in IIoT _____.

1 point

- (a) Increases load at cloud
- (b) Does not have any impact at cloud
- (c) Reduces load at cloud
- (d) None of the above

a
 b
 c

WEEK 8 2023A

Week 08: Assignment 08

Assignment not submitted

Due date: 2023-03-22, 23:59 IST.

1) Which of the following is not a part of IIoT analytics ?

1 point

- (a) Real time data analysis
- (b) Dynamic operations optimization
- (c) Prognostic maintenance
- (d) Renewable energy

2) Prescriptive analytics is one of the categories of IIoT analytics. True or False?

1 point

(a) True
 (b) False

3) Volume, veracity, velocity are the characteristics of which of the following entity?

1 point

- (a) SDN
- (b) Image processing
- (c) Big data
- (d) Machine learning

4) Feature engineering is absent in which of the following tools or algorithms?

1 point

- (a) Machine learning
- (b) Deep learning
- (c) Both a and b
- (d) Clustering

- 5) What is the purpose of diagnostic analytics ? 1 point
- (a) Detect irregular behavior of assets quickly in the timescale of milliseconds
 - (b) Identify the root cause of an anomaly in the timescale of minutes
 - (c) Inform about remaining useful life of an asset
 - (d) None of the above
- 6) How many different categories of clustering are there? 1 point
- (a) 2, hard and soft clustering
 - (b) 2, long and short clustering
 - (c) 2, labeled and unlabelled clustering
 - (d) No categories
- 7) Fuzzy c-Means Clustering can be used when - 1 point
- (a) Data points may belong to more than one clusters
 - (b) Faster clustering is required
 - (c) Both a and b
 - (d) Data points strictly belong to only one cluster
- 8) Which of the following statements is/are true about linear regression? 1 point
- (a) It is an unsupervised learning algorithm
 - (b) It is used to label the data
 - (c) It is use for prediction of values
 - (d) All of the above
- 9) Select the machine learning-base IIoT application(s) used in the retail sector? 1 point
- (a) Drug discovery
 - (b) Product recommendation
 - (c) Dynamic price setup
 - (d) All of the above
- 10) Select the correct statement. 1 point
- (a) Artificial intelligence is a subset of machine learning
 - (b) Machine learning is a subset of deep learning
 - (c) Machine learning is a subset of artificial intelligence
 - (d) Artificial intelligence is a subset of deep learning
- 11) What does deep in deep learning refer to? 1 point
- (a) Number of visible neurons
 - (b) Number of hidden layers
 - (c) Number of deep neurons
 - (d) Number of deep layers
- 12) What is/are the critical requirement(s) of deep learning applications? 1 point
- (a) Large amount of data.
 - (b) High quality data.
 - (c) Both a and b
 - (d) Small amount of data
- 13) Which of the following is/are example(s) of Software-as-a-Service? 1 point
- (a) MindSphere
 - (b) Microsoft Azure
 - (c) DropBox
 - (d) All of the above
- 14) What is/are the characteristic(s) of Good SLA? 1 point
- (a) Achievable
 - (b) Meaningful
 - (c) Affordable
 - (d) All of the above

15) Which of the following is/are the limitation(s) of cloud-based approaches in IIoT?

1 point

- (a) Unlimited storage
- (b) Interoperability
- (c) Cost efficient
- (d) Higher latency

WEEK 8 2023B

1) What are the three types of IIoT Analytics?

1 point

- a. Systematic Analytics, Predictive Analytics, Prescriptive Analytics
- b. Descriptive Analytics, Systematic Analytics, Prescriptive Analytics
- c. Descriptive Analytics, Predictive Analytics, Systematic Analytics
- d. Descriptive Analytics, Predictive Analytics, Prescriptive Analytics

- a.
- b.
- c.
- d.

2) What are the main 5 Vs of big data?

1 point

- a. Volume, virtualization, viscosity, veracity, variety
- b. Volume, virtualization, variability, viscosity, variety
- c. Volume, velocity, virtualization, veracity, viscosity
- d. Volume, velocity, variability, veracity, variety

- a.
- b.
- c.
- d.

3) "Machine learning is a subset of deep learning." --- True/False?

1 point

- a. True
- b. False

- a.
- b.

4) Which of the following is an example of Classification?

1 point

- a. Bayes Regression
- b. Support Vector Machine
- c. Gaussian Mixture Model
- d. All of the above

- a.
- b.

5) Clustering is used in _____ learning?

1 point

- a. Unsupervised
- b. Supervised
- c. Reinforcement
- d. None of the above

a.

6)

1 point

Which machine learning algorithm enables machines to improve performance by automatically learning the ideal behaviors for a specific environment??

- a. Unsupervised Learning
- b. Supervised Learning
- c. Reinforcement Learning
- d. Deep Learning

a.

b.

c.

7)

1 point

Which node in the Decision Tree evaluates or determines the outcome based on an attribute's value?

- a. Parent node
- b. Leaf node
- c. Decision node
- d. Root node

a.

b.

c.

8)

1 point

What is the subfield of machine learning that mimics the working function of billions of neurons in our brain??

- a. Regression
- b. Deep Learning
- c. Decision tree
- d. Reinforcement learning

a.

b.

9) Why do we need cloud? 1 point

- a. For high computational speed for data monitoring and analytics
- b. For storage of huge amount of data
- c. For effective data acquisition
- d. All of the above

a.
 b.
 c.
 d.

10) What are the three types of services offered by cloud computing? 1 point

- a. SeaaS, PaaS and IaaS
- b. SeaaS, CaaS and IaaS
- c. SaaS, PaaS and IaaS
- d. NaaS, CaaS and IaaS

a.
 b.
 c.

11) Which of the following is an example of Infrastructure-as-a-Service? 1 point

- a. Google App Engine
- b. Microsoft Azure
- c. Microsoft 365
- d. All of the above

a.
 b.

12) Amazon Web Service is a _____ cloud. 1 point

- a. public
- b. private
- c. hybrid
- d. community

a.

13) Which one of the following is not a characteristic of a good SLA? 1 point

- a. Mutually Acceptable
- b. Quantifiable
- c. Refundable
- d. Controllable

a.
 b.
 c.

14) Fog layer is located between which two layers?

1 point

- a. the edge and the gateways
- b. the devices and the edge
- c. the devices and the gateways
- d. the edge and the cloud

a.
 b.
 c.
 d.

15) What are the three main layers of Deep learning?

- a. Input layer, prediction layer, output layer
- b. Input layer, hidden layer, decision layer
- c. Input layer, prediction layer, decision layer
- d. Input layer, hidden layer, output layer

a.
 b.
 c.
 d.

WEEK 8 2024A

Week 8 : Assignment 8

Assignment not submitted

Due date: 2024-03-20, 23:59 IST.

1) Which of the following does not characterize big data analytics?

1 point

- a. Volume
- b. Velocity
- c. Vector
- d. Variability

a.
 b.
 c.

2) Which of the following algorithms is useful when it is feasible to acquire training data for the different states (or classes) that need to be modeled?

1 point

- a. Unsupervised learning algorithm
- b. Supervised learning algorithm
- c. Reinforcement learning algorithm
- d. None of the above

a.
 b.

3) "Which of the following is false about the deep learning models?" 1 point

- a. Learns features automatically without manually specifying them
- b. Does not use neural networks
- c. Raw data from sensors can be directly fed into the model
- d. Generally require a large amount of computation power

a.

b.

4) Which of the following software may be used for batch-oriented analytics? 1 point

- a. Apache Hadoop and Apache Spark
- b. Eclipse
- c. Sublime
- d. None of the above

a.

5) Which of the following is an example of a classification algorithm? 1 point

- a. Density-Based Spatial Clustering of Applications with Noise
- b. Support Vector Machine
- c. K-Means
- d. Bayes Regression

a.

b.

6) In _____, data points may belong to more than one cluster. Fill in the blanks. 1 point

- a. Hard Clustering
- b. Soft Clustering
- c. Hard Classification
- d. Soft Classification

a.

b.

7) Which of the following supervised learning algorithms may be used when the output variable is a real number instead of a categorical value? 1 point

- a. Regression
- b. Classification
- c. Both (a) and (b)
- d. Neither (a) nor (b)

a.

8) Which of the following statements about the reinforcement learning algorithm is false? 1 point

- a. There is no external supervisor to guide the agent
- b. Builds a knowledge graph from the constant feedback of the corresponding actions
- c. There is no reward function
- d. There is a mapping between input and output

a.

b.

c.

9) "Machine learning is a subset of deep learning that can learn automatically by finding the features of the object on its own." State true or false.

1 point

- a. True
- b. False

a.
 b.

10) Why is cloud computing necessary for IIoT?

1 point

- a. High computational speed for data monitoring and analytics
- b. Scalable and secure services
- c. Effective data acquisition
- d. All of the above

a.
 b.
 c.
 d.

11) Which of the following is not true about Platform-as-a-service for IIoT?

1 point

- a. Allows industries to self-develop applications
- b. Clients have control over the application and the configuration environment
- c. The service provider manages everything
- d. Software firms like Cumulocity, Bosch IoT, and Carriots offer PaaS for IoT industries

a.
 b.
 c.

12) Who among the following does not provide Industrial Cloud Platform?

1 point

- a. C3 IoT
- b. Uptake
- c. Netbeans
- d. GE Predix

a.
 b.
 c.

13) Which of the following is/are the advantage(s) of using a Cloud simulator before real deployment?

1 point

- a. Pre-deployment test before real implementation
- b. System testing at no cost
- c. Repeatable evaluation of the system
- d. All of the above

a.
 b.
 c.
 d.

14) Which of the following does not represent the objective of Industry 4.0?

1 point

- a. Rigid solutions
- b. Expanded security
- c. Better performance
- d. Higher production

a.

15) “K-medoid is a clustering algorithm that is used to maximize the distance between some randomly selected points in a cluster.” State true or false.

- a. True
- b. False

FALSE