1. What are the three types of IIoT Analytics?

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

Answer: (d)

Justification: Please refer to Slide 5 of Lecture 1 of Week 8

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

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

Answer: (d)

Justification: Please refer to Slide 7 of Lecture 1 of Week 8

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3. “Machine learning is a subset of deep learning.” --- True/False?

a. True
b. False

Answer: (b)

Justification: Please refer to Figure 13.1, page 256 of the book,” Introduction to Industrial Internet of Things and Industry 4.0”.

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

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

Answer: (b)

Justification: Please refer to Slide 14 of Lecture 1 of Week 8

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5. Clustering is used in _____ learning?

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

Answer: (a)

Justification: Please refer to Slide 8 of Lecture 2 of Week 8

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6. 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

Answer: (c)

Justification: Please refer to Slide 13 of Lecture 2 of Week 8

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7. 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

Answer: (c)

Justification: Please refer to Slide 12 of Lecture 2 of Week 8

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8. 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

Answer: (b)

Justification: Please refer to Slide 6 of Lecture 3 of Week 8

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9. Why do we need cloud?

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

Answer: (d)

Justification: Please refer to Slide 5 of Lecture 4 of Week 8

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10. What are the three types of services offered by cloud computing?

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

Answer: (c)

Justification: Please refer to Slides 8 of Lecture 4 of Week 8

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11. Which of the following is an example of Infrastructure-as-a-Service?

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

Answer: (b)

Justification: Please refer to Slide 10 of Lecture 4 of Week 8

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12. Amazon Web Service is a _____ cloud.

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

Answer: (a)

Justification: Please refer to Slide 11 of Lecture 3 of Week 8

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13. Which one of the following is not a characteristic of a good SLA?

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

Answer: (c)

Justification: Please refer to Slides 13 of Lecture 5 of Week 8

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14. Fog layer is located between which two layers?

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

Answer: (d)

Justification: Please refer to Slide 22 of Lecture 5 of Week 8

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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

Answer: (d)

Justification: Please refer to Slide 8 of Lecture 3 of Week 8
