ARTIFICIAL INTELLIGENCE EXPERT CERTIFICATE

Sample Exam CAIEC V092021

1. TensorFlow It is one of the most popular deep learning frameworks.

A. True
B. False

2. Which of the following is the computing model of TensorFlow?

A. Calculation chart
B. Tensor
C. Conversation
D. Variable

3. In neural networks, weights are often shareD. Which of the following neural networks will share weights? (Multiple choice)

A. Sensor
B. Convolutional Neural Network
C. Fully connected neural network
D. Recurrent neural network

4. Deep learning makes it easy to derive simple mathematical functions from a large amount of high-dimensional data to describe complex decision interfaces.

A. True
B. False

5. Traditional machine learning and deep learning are the core technologies of artificial intelligence. There is a slight difference in the engineering process. The following steps. What you don't need to do in deep learning is:

A. Model evaluation
B. Feature engineering
C. Data cleaning
D. Model building

6. The Python dictionary is identified by "{}", and the internal data consists of the key and its corresponding value.

A. True
B. False

7. Convolutional neural networks are more suitable for image recognition problems than cyclic neural networks.

A. True
B. False

8. Where is the main foothold of symbolism?

A. The foothold is in neuron networks and deep learning
B. The foothold is reasoning, symbolic reasoning and machine reasoning
C. The foothold is perception and action
D. The foothold is behavior control, adaptive and evolutionary computing

9. When training the network, we often encounter many problems. For the problem of gradient disappearance, we can alleviate the problem by choosing which of the following functions to use?

A. Softsign function
B. Relu function
C. Tanh function
D. Sigmoid function

10. During application development, which of the following operations is not a typical network definition?

A. Network definition
B. Network execution
C. Knowledge distillation
D. Weight initialization

11. Which of the following description of the validation set is wrong?

A. The verification set can coincide with the test set
B. The test set can coincide with the training set
C. The subset used to pick hyperparameters is called a validation set
D. Typically 80% of the training data 1s used for training and 20% 1s used for verification

12. Which of the following functions can numerically stabilize overflow and underflow?

A. Softminus function
B. Softplus function
C. Soft max function
D. Softmin func!Jon

13. The loss function of logistic regression is the cross-entropy loss function.

A. True
B. False

14. What are the common clustering algorithms? (Multiple choice)

A. Density clustering
B. Hierarchical clustering
C. Spectral clustering
D. Kmeans

15. Python script execution mode includes interactive mode and script mode

A. True
B. False

16. The loss function reflects the error between the target output and actual output of the neural network. The commonly used loss function in deep learning is:

A. Exponential loss function
B. Mean square loss function
C. Log loss function
D. Hinge Loss function

17. The model composed of machine learning algorithms cannot represent the true data distribution function on a theoretical level. Just approach it.

A. True
B. False

18. About the image content review service returned when the call is successful suggestion Field, the correct statement is? (Multiple choice)

A. Pass Representative does not contain sensitive information, passed
B. Review the representative needs a manual review
C. Suggestion The field represents whether the test passed
D. Block Representative contains sensitive information and does not pass

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19. Artificial Intelligence is about_____

A. Playing a game on Computer
B. Making a machine Intelligent
C. Programming on Machine with your Own Intelligence
D. Putting your intelligence in Machine

20. The meaning of artificial intelligence was first proposed by a scientist in 1950, and at the same time a test model of machine intelligence was proposed. Who is this scientist?

A. Minsky
B. Zade
C. Turing
D. Von Neumann

21. A technique that was developed to determine whether a machine could or could not demonstrate the artificial intelligence known as the___

A. Boolean Algebra
B. Turing Test
C. Logarithm
D. Algorithm

22. Which of the following descriptions of the depth feedforward network is correct?

A. Deep feedforward network 1s a kind of neural network
B. The deep feedforward network has only one hidden layer
C. The unit on the hidden layer of the deep feedforward network will have countless
D. Deep feedforward network 1s used to deal with linear problems

23. What is the incorrect relationship between neural networks and deep learning?

A. The concept of deep learning sterns from the study or artificial neural networks
B. A neural network algorithm with multiple hidden layers is a deep learning algorithm
C. Single layer neural networks are also a type of deep learning
D. Convolutional neural networks are a type of deep learning

24. What is the performance of artificial intelligence in the stage of perceptual intelligence?

A. Machines begin to understand, think and make decisions like humans
B. Machines begin to calculate and transmit information just like humans
C. The machine starts to understand and understand, make judgments, and take some simple actions

25. In which year was the first introduction of "artificial intelligence"?

A. 1946
B. 1960
C. 1916
D. 1956

26. Which of the following is true about unsupervised learning?

A. Unsupervised algorithm only processes "features" and does not process *tags*
B. Dimensionality reduction algorithm is not unsupervised learning
C. K-means algorithm and SVM algorithm belong lo unsupervised learning
D. None of the above

27. The following belongs to TensorFlow2.0 The characteristic is? (Multiple choice)

A. Introduce Keras interface
B. Support static image mechanism
C. Support more platforms and more languages
D. Continue to be compatible Tensorflowl.x Related modules

28. The training error will continue to decrease as the model complexity increases.

A. True
B. False

29. What are the advantages of mobile computing platforms? (Multiple choice)

A. Quick source code
B. Diverse tool chain
C. Complete documentation
D. Plentiful API

30. Which of the following statement about the matrix is incorrect?

A. The arbitrary matrix is multiplied by the unit matrix and will not change
B. The transpose of the symmetric matrix A 1s also A itself
C. The transpose of the orthogonal matrix A is equal to the inverse of A
D. There is no inverse matrix for the diagonal matrix

31. Which of the subsequent declaration(s) effectively represents an actual neuron in TensorFlow?

A. A neuron has a single enter and a single output best
B. A neuron has multiple inputs but a single output only
C. A neuron has a single input, however, more than one outputs
D. A neuron has multiple inputs and more than one outputs
E. All of the above statements are valid

32. In the classic convolutional neural network model: Softmax. What hidden layer does the function follow?

A. Convolutional layer
B. Pooling layer
C. Fully connected layer
D. All of the above

33. ModelArts Service and (). The combination of services can easily deploy the model to "end"?
A. OBS
B. OCR
C. ECS
D. HiLens

34. With a lot of sales data but no labels, companies want to identify VIP Customer, the following model Suitable?

A. Logistic regression
B. SVM
C. K-Means
D. Hierarchical clustering

35 The naive Bayes algorithm does not require independent and identical distribution among sample features.

A. True
B. False

36. Which of the following statements about supervised learning is correct?

A. Decision tree is a supervised learning
B. Supervised learning cannot use cross-validation for training
C. Supervised learning is a rule-based algorithm
D. Supervised learning can be trained without labels

37. The commonly used functions for mathematical operations in Python are basically in lhe math module and the cmath module.

A. True
B. False

38. The constituent elements of the Python identifier include: numbers, letters, and underscores.

A. True
B. False

39. Jobs that are repetitive and require weak social skills are the easiest to be AI Replaced work.

A. True
B. False

40. What are the commonly used loss functions? (Multiple choice)

A. Mean variance
B. Sigmoid cross entropy
C. Soft max cross enl10py
D. Sparse cross entropy
E. Weighted S1gmo1d Cross Entropy

41. If the deep learning neural network has the problem of gradient disappearance or gradient explosion, our common solution is. (Multiple choice)

A. Gradient shear
B. Random undersampling
C. Use Relu Activation function
D. Regularization

ANSWERS

1. A
2. A
3. B, D
4. B
5. B
6. A
7. A
8. B
9. B
10. C
11. A
12. C
13. A
14. A, B, C, D
15. A
16. B
17. A
18. A, B, C, D
19. B
20. C
21. B

22. A
23. C
24. C
25. D
26. A
27. A, C, D
28. A
29. A, B, C, D
30. D
31. D
32. C
33. D
34. C, D
35. B
36. A
37. A
38. A
39. A
40. A, B, C, D, E
41. A, C, D