

Exam : H13-311-ENU

**Title : HCIA-AI (Huawei Certified
ICT Associate-Artificial
Intelligence)**

Vendor : Huawei

Version : V12.35

QUESTION NO: 1

Which of the following does not belong to automatic hyperparameter optimization algorithm?

- A. Grid search
- B. Random gradient descent
- C. Random search
- D. Model-based hyperparameter optimization

Answer: B

QUESTION NO: 2

Which method is not supported in TensorFlow to define variables?

- A. Random number
- B. Constant
- C. Calculated from the initial values of other variables
- D. null

Answer: D

QUESTION NO: 3

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

- A. True
- B. False

Answer: A

QUESTION NO: 4

What are the algorithms supported by TensorFlow? (Multiple Choice)

- A. CNN
- B. ZNN
- C. RNN
- D. HUT

Answer: AC

QUESTION NO: 5

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

- A. Softminus function
- B. Softplus function
- C. Softmax function
- D. Softmin function

Answer: C

QUESTION NO: 6

Python tuples are identified by "()" and internal elements are separated by ":".

- A. True
- B. False

Answer: B

QUESTION NO: 7

The for loop statement in the Python language can iterate through the items in any sequence

A. True

B. False

Answer: A

QUESTION NO: 8

Which of the following products is related to artificial intelligence? (Multiple Choice)

A. AlphaGo

B. Self-driving

C. Voice input

D. Huawei Mate mobile phone

Answer: ABCD

QUESTION NO: 9

Which of the following does not belong to long-term memory LSTM (Long Short-Term Memory) network architecture?

A. Memory door

B. Forget the door

C. Input door

D. Output door

Answer: A

QUESTION NO: 10

Which descriptions are correct about Python's index? (Multiple Choice)

A. Index from left to right defaults from 0

B. Index from left to right defaults from 1

C. Index from right to left defaults from -1

D. Index from right to left defaults from 0

Answer: AC

QUESTION NO: 11

Vector is a number.

A. True

B. False

Answer: B

QUESTION NO: 12

Which of the following is not a module in the TensorFlow library?

A. tf.nn

B. tf.layers

C. tf.boost

D. tf.contrib

Answer: C

QUESTION NO: 13

Which of the following statements about the positive definiteness of the matrix is correct? (Multiple Choice)

A. A matrix in which all eigenvalues are positive is called positive definite.

B. A matrix in which all eigenvalues are non-negative are called semi-positive definite.

C. A matrix in which all eigenvalues are negative is called negative definite.

D. A matrix in which all eigenvalues are non-positive are called semi-negative definite.

Answer: ABCD

QUESTION NO: 14

What are the commonly used activation functions? (Multiple Choice)

A. sigmoid

B. tanh

C. relu

D. danish

Answer: ABC

QUESTION NO: 15

According to the definition of information entropy, what is the bit entropy of throwing a uniform coin?

A. 0

B. 0.5

C. 1

D. -1

Answer: C

QUESTION NO: 16

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

Answer: C

QUESTION NO: 17

The Python language can use multiple statements on the same line, separated by commas

""

A. True

B. False

Answer: B

QUESTION NO: 18

As shown below, which are the following matrix A characteristic value? (Multiple choice)

$$A = \begin{bmatrix} 3 & -1 \\ -1 & 3 \end{bmatrix}$$

A. 2

B. -2

C. -4

D. 4

Answer: AD

QUESTION NO: 19

"print" in Python 3 must be used with "()".

A. True

B. False

Answer: A

QUESTION NO: 20

As the following, what are the Python language design philosophy? (Multiple Choice)

A. Beautiful

B. Expensive

C. Explicit

D. Simple

Answer: ACD

QUESTION NO: 21

How many spaces does PEP 8 stipulate that Python's first line indentation needs to indent?

A. 1

B. 2

C. 4

D. 8

Answer: C

QUESTION NO: 22

Principal Component Analysis (PCA) is a statistical method. A set of variables that may be related to each other is transformed into a set of linearly related variables by orthogonal transformation. The converted set of variables is called the principal component.

A. True

B. False

Answer: B

QUESTION NO: 23

Which of the following options is not the session mode used by TensorFlow?

- A. Explicitly call the session to generate function
- B. Explicitly call the session to close function
- C. Through the Python context manager
- D. Multiple POST queries

Answer: D

QUESTION NO: 24

Which of the following is not a specific technology of artificial intelligence?

- A. Knowledge map
- B. Machine translation
- C. Riemann geometry
- D. Semantic understanding

Answer: C

QUESTION NO: 25

The Python list can be identified by " [] ", and the default index of the first element from left to right is 1.

- A. True
- B. False

Answer: B

QUESTION NO: 26

A scalar k is multiplied by matrix A equal to k and each of the numbers in A is multiplied.

- A. True
- B. False

Answer: A

QUESTION NO: 27

Deep learning is different from machine learning and there are no unsupervised algorithms.

- A. True
- B. False

Answer: B

QUESTION NO: 28

Which of the following about the description of the number of rows and columns for the determinant is correct?

- A. The number of rows is greater than the number of columns
- B. The number of rows is equal to the number of columns
- C. The number of rows is less than the number of columns
- D. The number of rows has no relationship with the number of columns.

Answer: B

QUESTION NO: 29

What is wrong description of the Python module?

- A. The Python module is a Python file that ends with .py and contains Python object definitions and Python statements.
- B. The Python module allows you to logically organize your Python code snippets.
- C. Python modules can define functions, classes, and variables, but the module does not contain executable code.
- D. Assigning relevant code to a module can make your code better and easier to understand.

Answer: C

QUESTION NO: 30

What quotation marks can the Python language use? (Multiple Choice)

- A. Single quotes
- B. Double quotes
- C. Three quotes
- D. Four quotes

Answer: ABC

QUESTION NO: 31

What is wrong description of backpropagation?

- A. The learning process of the backpropagation algorithm consists of a forward propagation process and a back-propagation process.
- B. The backpropagation algorithm is a learning algorithm suitable for multi-layer neural networks, which is based on the gradient descent method.
- C. The backpropagation phase sends training inputs to the network to obtain an stimuli response.
- D. The backpropagation algorithm is mainly repeated by two loops (excitation propagation, weight update) until the response of the network to the input reaches the predetermined target range.

Answer: C

QUESTION NO: 32

Which of the following statements about Python are correct? (Multiple choice)

- A. Python is often nicknamed glue language, which can easily connect various modules made in other languages.
- B. Python syntax is simple and clean. One of the features is to force blank characters to be used as statement indentation.
- C. Python is purely free software and the source code follows the GPL (GNU General Public License) protocol.
- D. Invented in 1989 by the Dutch Guido van Rossum, the first public release was issued in 1991.

Answer: A,B,C,D

QUESTION NO: 33

What are the implementation modes of TensorFlow? (Multiple Choice)

- A. Stand-alone mode
- B. Distributed mode
- C. Reverse mode
- D. Forward mode

Answer: AB

QUESTION NO: 34

Which of the following is not a way for the TensorFlow program to read data?

- A. Preload data
- B. Feeding data
- C. Read from the file
- D. Write a file format reader

Answer: D

QUESTION NO: 35

Which of the following options is not a tensor attribute?

- A. name (Logo)
- B. shape (Dimensionality)
- C. type (Type)
- D. node (Node)

Answer: D

QUESTION NO: 36

Which is not a Python operator?

- A. arithmetic operator
- B. Reasoning operator
- C. Logical operator
- D. Comparison operator

Answer: B

QUESTION NO: 37

Which of the following are the characteristics of the Python language? (Multiple choice)

- A. Explanatory
- B. Process oriented
- C. Object-oriented
- D. Dynamic data type

Answer: ACD

QUESTION NO: 38

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

Answer: B

QUESTION NO: 39

What are the mainstream deep learning open source tools? (Multiple choice)

A. Theano

B. Caffe

C. TensorFlow

D. Scikit-learn

E. Torch

Answer: A,B,C,E

QUESTION NO: 40

Which is the correct description of the Python creation function? (Multiple choice)

A. The function created starts with the def keyword followed by the function name and parentheses.

B. The parameters need to be placed in parentheses.

C. The function content starts with a colon and needs to be indented.

D. Return the result with return and the function ends.

Answer: ABCD

QUESTION NO: 41

The continue statement in the Python language is used to jump out of this loop and then continue to execute the next round of statements.

A. True

B. False

Answer: A

QUESTION NO: 42

The number of rows and columns of the three matrices A, B, and C is 3 rows and 2 columns, 2 rows, 3 columns, 3 rows and 3 columns, which of the following operations is meaningful?

A. AC

B. BC

C. A+B

D. AB-BC

Answer: B

QUESTION NO: 43

Which of the following are included in the application scenarios of TensorFlow? (Multiple choice)

A. Speech recognition

B. Face recognition

C. Image style changes

D. Autopilot

Answer: ABCD

QUESTION NO: 44

Which of the following about the description of expectations and variances is incorrect?

A. Expectation reflects the average level of random variable values

B. The variance reflects the degree of deviation between the random variable and its mathematical expectation

C. Expectation and variance are both numerical characteristics of random variables

D. The greater the expectation, the smaller the variance

Answer: D

QUESTION NO: 45

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

A. Mean variance

B. Sigmoid cross entropy

C. Softmax cross entropy

D. Sparse cross entropy

E. Weighted Sigmoid Cross Entropy

Answer: ABCDE

QUESTION NO: 46

TensorFlow Operations and Computation Graph are not - run in the Session.

A. True

B. False

Answer: B

QUESTION NO: 47

In May 1997, the famous "Human-Machine Wars" final computer defeated Kasparov, the world chess king, with a total score of 3.5 to 2.5. Is this computer called?

A. Dark blue

B. Dark green

C. Ponder

D. Blue sky

Answer: A

QUESTION NO: 48

Which of the following is not included in the recurrent neural network usage scenario?

A. Machine translation

B. Speech recognition

C. Image style migration

D. Text generation

Answer: C

QUESTION NO: 49

Which of the following statements about overflow and underflow in numerical calculations is correct? (Multiple choice)

- A. Underflow occurs when the number close to zero is rounded to zero
- B. Overflow occurs when the number close to zero is rounded to zero
- C. Overflow occurs when a large number of levels are approximated as ∞ or $-\infty$
- D. Underflow occurs when a large number of levels are approximated as ∞ or $-\infty$

Answer: AC

QUESTION NO: 50

Which of the following about the gradient descent is incorrect?

- A. Random gradient descent is a commonly used one in gradient descent.
- B. Gradient descent includes random gradient descent and batch gradient descent.
- C. The gradient descent algorithm is fast and reliable.
- D. Random gradient descent is one of the commonly used optimization algorithms in deep learning algorithms.

Answer: C

QUESTION NO: 51

What are the mainstream deep learning open source tools? (Multiple choice)

- A. TensorFlow
- B. Caffe
- C. Torch
- D. Theano
- E. Scikit-learn

Answer: ABCD

QUESTION NO: 52

The Python language does not allow embedding another loop body in a loop body.

- A. True
- B. False

Answer: B

QUESTION NO: 53

GAN is a deep learning model and one of the most promising methods for unsupervised learning in complex distribution in recent years.

- A. True
- B. False

Answer: A

QUESTION NO: 54

Which of the following statements about Python are correct? (Multiple choice)

- A. Invented in 1989 by the Dutch Guido van Rossum, the first public release was issued in 1991.
- B. Python is purely free software and the source code follows the GPL (GNU General Public License) protocol.
- C. Python syntax is simple and clean. One of the features is to force blank characters to be used as statement indentation.
- D. Python is often nicknamed glue language, which can easily connect various modules made in other languages.

Answer: ABCD

QUESTION NO: 55

What are the steps that are not part of the operation of a Python file object?

- A. open
- B. delete
- C. read
- D. write
- E. close

Answer: B

QUESTION NO: 56

Cyclic neural networks are more suitable for dealing with image recognition problems.

- A. True
- B. False

Answer: B

QUESTION NO: 57

What is the subject of artificial intelligence?

- A. Mathematics and Physiology
- B. Psychology and Physiology
- C. Linguistics
- D. Comprehensive interdisciplinary and marginal disciplines

Answer: D

QUESTION NO: 58

Which of the following schools does the neural network study belong to?

- A. Symbolism
- B. Connectionism
- C. Behaviorism
- D. None of the above

Answer: B

QUESTION NO: 59

What is not the optimization method in deep learning?

- A. Random gradient descent
- B. Back propagation algorithm
- C. Principal component analysis
- D. Momentum

Answer: C

QUESTION NO: 60

TensorFlow is the second generation of artificial intelligence learning system developed by Google based on ().

- A. DistBelief
- B. PaleyFunction
- C. ConvexOne
- D. Infinity

Answer: A

QUESTION NO: 61

In a neural network, knowing the weight and deviations of each neuron is the most important step. If you know the exact weights and deviations of neurons in some way, you can approximate any function.

What is the best way to achieve this?

- A. Random assignment, pray that they are correct
- B. Search for a combination of weight and deviation until the best value is obtained
- C. Assign an initial value to iteratively update weight by checking the difference between the best value and the initial.
- D. The above is not correct

Answer: C

QUESTION NO: 62

Which of the following options belong to TensorFlow concept? (Multiple Choice)

- A. Tensor
- B. Variables
- C. Placeholder
- D. Operation
- E. Conversation

Answer: ABCDE

QUESTION NO: 63

In order for a machine to be intelligent, it must be knowledgeable. Therefore, there is a research field in artificial intelligence, which mainly studies how computers automatically acquire knowledge and skills to achieve self-improvement. What is the branch of this research called?

- A. Expert system
- B. Machine learning

- C. Neural Network
- D. Natural language processing

Answer: B

QUESTION NO: 64

Machine Learning Service is a data mining and analytics platform service that helps users quickly discover data patterns and build predictive models through machine learning techniques and deploy them as predictive analytics solutions.

A. True

B. False

Answer: A

QUESTION NO: 65

Python script execution mode includes interactive mode and script mode.

A. True

B. False

Answer: A

QUESTION NO: 66

Training error will reduce the accuracy of the model and produce under-fitting. How to improve the model fit? (Multiple choice)

A. Increase the amount of data

B. Feature Engineering

C. Reduce regularization parameters

D. Add features

Answer: ABD

QUESTION NO: 67

Which description is wrong about the lambda function of the Python language?

A. lambda is just an expression, and the function body is much simpler than def.

B. The body of a lambda can be an expression or a block of code.

C. The lambda function can access the parameters in the global namespace.

D. The lambda function accepts only one parameter value.

Answer: D

QUESTION NO: 68

The history of robots is not long. In 1959, the United States, Engelberg and Devol made the world's first generation of industrial robots, and the history of robots really began.

According to the development process of the robot, it is usually divided into three generations, respectively are: (Multiple Choice)

A. Teaching Reproduction Robot

B. Robot with sensation

C. Robots that will think

D. Intelligent robot

Answer: ABD

QUESTION NO: 69

What does factors that promote the development of artificial intelligence not include?

- A. Big data
- B. Computing ability
- C. Algorithm theory
- D. Blockchain

Answer: D

QUESTION NO: 70

As shown in the figure below, what is the value of the determinant A?

$$A = \begin{vmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{vmatrix}$$

- A. 24
- B. 18
- C. -24
- D. 0

Answer: D

QUESTION NO: 71

Python is a fully object-oriented language. Which of the following options belong to the Python object? (Multiple Choice)

- A. Function
- B. Module
- C. Number
- D. Character string

Answer: ABCD

QUESTION NO: 72

Reducing the gap between the training error and the test error will result in over-fitting. How to prevent over-fitting? (Multiple Choice)

- A. Cross validation
- B. Integration method
- C. Increase regularization
- D. Feature Engineering

Answer: ABCD

QUESTION NO: 73

Which of the following is not an artificial intelligence school?

- A. Symbolism

B. Statisticalism

C. Behaviorism

D. Connectionism

Answer: B

QUESTION NO: 74

What are the service categories included in Huawei Cloud EI Enterprise Intelligence?

(Multiple Choice)

A. EI visual cognition

B. EI online games

C. EI speech semantics

D. EI industry scene

Answer: ACD

QUESTION NO: 75

Which of the following can optimization problem be classified according to the constraints?

(Multiple choice)

A. equality constraints

B. Inequality constraints

C. Unconstrained conditions

D. Semi-constraint conditions

Answer: ABC

QUESTION NO: 76

Which of the following environments does not support to install the TensorFlow?

A. Linux

B. Mac OS

C. Docker

D. OpenStack

Answer: D

QUESTION NO: 77

Deep learning algorithms can be divided into supervised learning and unsupervised learning.

A. True

B. False

Answer: A

QUESTION NO: 78

The timestamps in the Python language are represented by how long (in seconds) elapsed from midnight (epoch) on January 1, 1970.

A. True

B. False

Answer: A

QUESTION NO: 79

Huawei firmly believes that the value of AI is ultimately reflected in solving the actual business problems of the enterprise. Therefore, Huawei is firmly committed to the development of AI technology, focusing on domain solutions, focusing on basic technologies and enabling platforms, and working with industry practice leaders to develop industry solutions.

A. True

B. False

Answer: A

QUESTION NO: 80

Which of the following options is not central to linear algebra?

A. Matrix theory

B. Vector space

C. Linear transformation

D. Probability theory

Answer: D

QUESTION NO: 81

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

A. The concept of deep learning stems from the study of 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.

Answer: C

QUESTION NO: 82

There are a lot of data generated during the training of the neural network. What mechanism does TensorFlow use to avoid excessive input data?

A. Client

B. feed

C. placeholder

D. fetch

Answer: C

QUESTION NO: 83

Which of the following data types does TensorFlow not support?

A. int8

B. float32

C. double64

D. bool

Answer: C

QUESTION NO: 84

Which of the following can improve the computational efficiency of the neural network model?
(Multiple choice)

- A. TPU
- B. GPU
- C. FPGA
- D. Large-scale distributed cluster

Answer: ABCD

QUESTION NO: 85

Which is not a deep learning algorithm?

- A. Self-encoder
- B. Convolutional neural networks
- C. Recurrent neural networks
- D. Support vector machine

Answer: D

QUESTION NO: 86

The determinant of square matrix A is a scalar.

- A. True
- B. False

Answer: A

QUESTION NO: 87

What are the Python language data types? (Multiple Choice)

- A. numbers
- B. string
- C. list
- D. tuple
- E. dictionary

Answer: ABCDE

QUESTION NO: 88

Vector group $a_1=(1,1,1)$, $a_2=(0,2,5)$, $a_3=(1,3,6)$, which of the following options is correct?

- A. Linear correlation
- B. Linear independence
- C. $a_1+a_2+a_3=0$
- D. $2a_1+a_2+a_3=0$

Answer: A

QUESTION NO: 89

TensorFlow only supports Python and R language

- A. True
- B. False

Answer: B

QUESTION NO: 90

What are the core concepts in TensorFlow? (Multiple Choice)

- A. Gridding
- B. Calculation Chart
- C. Dot Product
- D. Tensor

Answer: BD

QUESTION NO: 91

The TensorFlow framework does not support Windows systems.

- A. True
- B. False

Answer: B

QUESTION NO: 92

The matrix produced by the exchange of matrix A rows and columns is called the transpose of A.

What are the correct properties of matrix transposition? (Multiple Choice)

- A. $(A^T)^T = A$
- B. $(A + B)^T = A^T + B^T$
- C. $(\lambda A)^T = \lambda A^T$
- D. $(AB)^T = A^T + B^T$

Answer: ABC

QUESTION NO: 93

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 is 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.

Answer: D

QUESTION NO: 94

What are the conditions for m row n column matrix A and p row q column matrix B to be multiplied?

- A. $m=p, n=q$
- B. $n=p$
- C. $m=n$
- D. $p=q$

Answer: B

QUESTION NO: 95

Python authors deliberately design very restrictive grammars that make bad programming habits (such as the next line of if statement not indented to the right) cannot be compiled.

A. True

B. False

Answer: A

QUESTION NO: 96

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

 **A. Deep feedforward network is 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 is used to deal with linear problems.

Answer: A

QUESTION NO: 97

Which of the following files is the graph structure of TensorFlow saved in?

A. checkpoint file

B. index file

C. .cpkt file

D. .meta file

Answer: D

QUESTION NO: 98

What is wrong description of the normal distribution?

A. In natural phenomena and social phenomena, many random variables obey or approximate a normal distribution.

B. The normal distribution takes the maximum value at the mean.

C. The larger the standard deviation, the steeper the normal distribution curve.

D. The larger the standard deviation, the slower the normal distribution curve.

Answer: C

QUESTION NO: 99

Artificial intelligence is a new technical science that studies and develops theories, methods and application systems for simulating, extending and extending human intelligence. It is one of the core research areas of machine learning.

A. True

B. False

Answer: B

QUESTION NO: 100

Huawei Machine Learning Service MLS is a one-stop platform that supports the entire process of data analysis. Which of the following is not a feature of MLS?

A. A rich library of machine learning algorithms.

B. machine learning program is intuitive and easy to use.

C. Distributed and scalable big data computing engine.

D. Support for the R language, but does not support the Python language.

Answer: D

QUESTION NO: 101

Linear algebra is a branch of algebra that deals with linear problems.

The linear relationship is that the relationship between exponential objects is expressed in () times form?

A. 1

B. 2

C. 3

D. 4

Answer: A

QUESTION NO: 102

Which of the following descriptions about the Recurrent Neural Network (RNN) is correct?

A. Can be used to process sequence data.

B. Cannot process variable length sequence data.

C. Unlike convolutional neural networks, parameters of RNN cannot be shared.

D. The units above the hidden layer are not associated with each other.

Answer: A

QUESTION NO: 103

What are the characteristics of Python code? (Multiple Choice)

A. legibility

B. Simplicity

C. Rapidity

D. Scalability

Answer: ABD

QUESTION NO: 104

Which of the following conditions do the randomized trials need to meet? (Multiple Choice)

A. It can be repeated under the same conditions.

B. There may be more than one possible outcome for each trial, and all possible outcomes of the trial can be clarified in advance.

C. All results of the test cannot be clarified in advance.

D. It is not possible to determine which result will appear before conducting a test.

Answer: ABD

QUESTION NO: 105

The time interval in the Python language is a floating-point fraction in seconds.

A. True

B. False

Answer: A

QUESTION NO: 106

What operating systems does Python support? (Multiple Choice)

- A. DOS
- B. Linux
- C. Mac OSX
- D. Windows

Answer: ABCD

QUESTION NO: 107

Which of the following options is not a reason for traditional machine learning algorithms to promote the development of deep learning?

- A. Dimensional disaster
- B. Local invariance and smooth regularization
- C. Manifold learning
- D. Feature Engineering

Answer: D

QUESTION NO: 108

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 is used for training and 20% is used for verification.

Answer: A

QUESTION NO: 109

What are the results returned by the if conditional statements in the Python language? (Multiple choice)

- A. TRUE
- B. 0
- C. FALSE
- D. null

Answer: AC

QUESTION NO: 110

The following are the description of the distribution function, distribution law, and density function of random variables, which is incorrect?

- A. Distribution law can only describe the value rule of discrete random variables
- B. The density function can only describe the value rule of continuous random variables
- C. Discrete random variables have no distribution function
- D. Distribution function describes the value rule of random variables

Answer: C

QUESTION NO: 111

Which of the following options is not central to linear algebra?

- A. Probability theory
- B. Linear transformation
- C. Matrix theory
- D. Vector space

Answer: A

QUESTION NO: 112

What are the application scenarios for the break statement in the Python language? (Multiple Choice)

- A. Any Python statement
- B. while loop statement
- C. for loop statement
- D. Nested loop statement

Answer: BCD

QUESTION NO: 113

In Huawei Cloud EI Enterprise Intelligence, which basic platform services are included? (Multiple Choice)

- A. Machine learning
- B. Deep learning
- C. Graph engine
- D. Batch processing

Answer: ABCD

QUESTION NO: 114

Functions are well-organized, non-reusable code segments used to implement a single, or associated function.

- A. True
- B. False

Answer: B

QUESTION NO: 115

Only matrix A and matrix B have the same number of rows and columns, A and B can be added.

- A. True
- B. False

Answer: A

QUESTION NO: 116

Huawei Cloud EI builds enterprise intelligence services based on three-tier services. Which

of the following options does not belong to Layer 3 services?

- A. Basic platform services
- B. General domain services
- C. Industry sector services
- D. Integration services

Answer: D

QUESTION NO: 117

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

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

Answer: D

QUESTION NO: 118

Which of the following are the cloud services provided by Huawei Cloud EI Visual Cognition? (Multiple choice)

- A. Text recognition
- B. Face recognition
- C. Image recognition
- D. Content detection
- E. Image processing

Answer: ABCDE

QUESTION NO: 119

Convolutional neural networks are more suitable for dealing with speech recognition problems.

- A. True
- B. False

Answer: B

QUESTION NO: 120

Which of the following is the computing model of TensorFlow?

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

Answer: A

QUESTION NO: 121

Which of the following about the dictionary in Python is correct? (Multiple Choice)

- A. Each key and its corresponding value need to be separated by ":"

- B. Separate the different key-value with ","
- C. The entire dictionary is included in the " {} "
- D. The keys of the dictionary are unique and the data type is uniform

Answer: ABCD

QUESTION NO: 122

What are the commonly used gradient descent optimization functions? (Multiple Choice)

- A. Random gradient descent
- B. Adadelta
- C. Adagrad
- D. momentum
- E. RMSProp

Answer: ABCDE

QUESTION NO: 123

What are the regularizations in deep learning? (Multiple Choice)

- A. L1 norm, L2 norm
- B. Data set enhancement
- C. Integration method
- D. Dropout

Answer: ABCD

QUESTION NO: 124

Which of the following is not part of the deep learning development framework?

- A. CNTK
- B. Keras
- C. BAFA
- D. MXNet

Answer: C

QUESTION NO: 125

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

- A. Sparse cross entropy
- B. Softmax cross entropy
- C. Weighted Sigmoid Cross Entropy
- D. Sigmoid cross entropy
- E. Mean variance

Answer: A,B,C,D,E

QUESTION NO: 126

Self-encoder is an unsupervised learning algorithm.

- A. True
- B. False

Answer: A

QUESTION NO: 127

Which of the following features does Python support? (Multiple choice)

- A. Inheritance
- B. Heavy load
- C. Derived
- D. Multiple inheritance

Answer: ABCD

QUESTION NO: 128

What is the English abbreviation for AI?

- A. Automatic Intelligence
- B. Artificial Intelligence
- C. Automatic Information
- D. Artifical Information

Answer: B

QUESTION NO: 129

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

- A. True
- B. False

Answer: A

QUESTION NO: 130

Under the large-scale relationship analysis scenario, which of the following options does not belong to the three high demands of massive relationship processing?

- A. Efficient relationship discovery data for massive data
- B. Efficient sharing of massive data
- C. Efficient storage and access requirements for massive amounts of data
- D. High scalability and high availability requirements for relational analysis platforms

Answer: B

QUESTION NO: 131

About Python correct tuple, which is correct description? (Multiple choice)

- A. The difference between a list and a tuple is that the elements of the tuple cannot be modified.
- B. The list uses square brackets, and the tuple uses parentheses.
- C. Tuple creation is very simple, just add elements in parentheses and separate them with commas.
- D. When a tuple contains only one element, you need to add a comma after the element.

Answer: ABCD

QUESTION NO: 132

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

A. True

B. False

Answer: A

QUESTION NO: 133

Which of the following description is wrong about the image recognition cloud service?

A. The service identifies specific objects such as skyscrapers, buildings, and ships.

B. The service can also identify the sea, city, port and other scenes.

C. The service can perform semantic analysis on the content in the image to extract labels with specific abstract meanings.

D. The service can provide object and scene labels, and can also provide more conceptual labels.

Answer: D

QUESTION NO: 134

The correlation coefficient, also known as the linear correlation coefficient, is used to measure the linear relationship between two variables, which is a real number greater than zero.

A. True

B. False

Answer: B

QUESTION NO: 135

There are many commercial applications for machine learning services. What are the main business scenarios covered? (Multiple Choice)

A. Financial product recommendation

B. Predictive maintenance

C. Telecom customer retention

D. Retailer grouping

Answer: ABCD

QUESTION NO: 136

What is in the category of artificial intelligence? (Multiple choice)

A. Action

B. Perception

C. Cognition

D. None of the above

Answer: ABC

QUESTION NO: 137

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

A. True

B. False

Answer: A

QUESTION NO: 138

What are the scenarios or industries that are suitable for using Python? (Multiple Choice)

A. Artificial intelligence

B. web development

C. Game development

D. Hardware development

Answer: ABC

QUESTION NO: 139

Which of the following description about the relationship between the Poisson distribution and the binomial distribution is correct?

A. The mathematical model of the Poisson distribution and the binomial distribution are both Lagrangian models.

B. Poisson distribution is an approximation of the binomial distribution when n is very large and p is small.

C. Poisson distribution has no relationship with binomial distribution

D. Poisson distribution can replace binomial distribution

Answer: B

QUESTION NO: 140

About Bayesian formula: $P(W|X)=P(X|W)*P(W)/P(X)$ What is the correct description?

A. $P(W|X)$ is a prior probability

B. $P(X|W)$ is a conditional probability

C. $P(W)$ is the posterior probability

D. $P(X)$ is the posterior probability

Answer: B

QUESTION NO: 141

The number or matrix is stored in the tensor.

A. True

B. False

Answer: B

QUESTION NO: 142

What does not belong to supervised learning?

A. Logistic regression

B. Support vector machine

C. Decision tree

D. Principal component analysis

Answer: D

QUESTION NO: 143

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 to unsupervised learning
- D. None of the above

Answer: A

QUESTION NO: 144

Which of the following options is not the TensorFlow build process?

- A. Building a calculation chart
- B. Input tensor
- C. Generate a session
- D. Update weights

Answer: D

QUESTION NO: 145

What are the advantages of Python? (Multiple choice)

- A. Simple
- B. Free
- C. High-level language
- D. Rich library

Answer: ABCD

QUESTION NO: 146

The Python language can use the "#" at the beginning of a single line of code for code comments.

- A. True
- B. False

Answer: A

QUESTION NO: 147

Which description is wrong about the hyperparameter?

- A. Hyperparameters are parameters that set values before the algorithm begins learning.
- B. Most machine learning algorithms have hyperparameters.
- C. Hyperparameters cannot be modified.
- D. The value of the hyperparameter is not learned by the algorithm itself.

Answer: C

QUESTION NO: 148

Which is wrong with the Python module time introduction method?

- A. import time

- B. from time import *
- C. import time as t
- D. from time

Answer: D

QUESTION NO: 149

Which of the following are solutions for the Huawei Cloud EI industry scenario? (Multiple Choice)

- A. Intelligent Logistics
- B. Intelligent Water
- C. Intelligent transportation
- D. Intelligent Finance
- E. Intelligent manufacturing

Answer: ABCDE

QUESTION NO: 150

X, Y are random variables, C is a constant, the nature of the difference in the following options, which is wrong? (Multiple choice)

- A. $D(C)=0$
- B. $D(X+Y)=D(X)+D(Y)$
- C. $D(CX)=C \cdot C \cdot D(X)$
- D. $D(XY)=D(X)D(Y)$

Answer: BD

QUESTION NO: 151

What are the numeric types of Python? (Multiple Choice)

- A. int (integer type)
- B. long (long integer type)
- C. float (floating point type)
- D. complex (complex number type)

Answer: ABCD

QUESTION NO: 152

What research areas does artificial intelligence have? (Multiple choice)

- A. Natural language processing
- B. Computer Vision
- C. Machine learning
- D. Speech recognition

Answer: ABCD

QUESTION NO: 153

Which of the following conditions is not a condition that n-fold bernoulli trials needs to meet?

- A. Each test was repeated under the same conditions.

B. There are only two possible outcomes for each trial, i.e. event A occurs and event A does not occur.

C. Each test itself is obeying normal distribution.

D. The results of each trial are independent of each other.

Answer: C

QUESTION NO: 154

X, Y are random variables, C is a constant, which of the following description about the nature of the mathematical expectation is incorrect?

A. $E(C) = CA$. $E(C) = C$

B. $E(X+Y) = E(X)+E(Y)$

C. $E(CX) = CE(X)$

D. $E(XY) = E(X)E(Y)$

Answer: D

QUESTION NO: 155

Numerical calculation refers to the method and process of effectively using the digital computer to solve the approximate problem of mathematical problems, and the discipline consisting of related theories.

Which of the following processes are involved in solving actual problems with a computer? (Multiple Choice)

A. Know the actual problem

B. Mathematical model

C. Numerical calculation method

D. Programming

E. Computer calculation results

Answer: ABCDE

QUESTION NO: 156

The trace operation returns the sum of the diagonal elements of the matrix. Therefore, the trace of matrix A and its transposed matrix are equal.

A. True

B. False

Answer: A

QUESTION NO: 157

Information theory is a branch of applied mathematics. The main research is to quantify how much information a signal contains. Who is the first to propose information theory?

A. Minsky

B. Turing

C. Simon

D. Shannon

Answer: D

QUESTION NO: 158

TensorFlow is Google's first generation of proprietary machine learning systems.

A. True

B. False

Answer: B

QUESTION NO: 159

Python regular expressions are a special sequence of characters that makes it easy to check if a string matches a pattern.

A. True

B. False

Answer: A

QUESTION NO: 160

Which of the following description about Python regular expression is not correct?

A. Python has added the re regular expression module since version 1.5.

B. re regular expression module gives the Python language all the regular expression functionality.

C. re regular expressions are powerful tools for working with strings.

D. re regular expressions can only process string data, not numeric data.

Answer: D

QUESTION NO: 161

Which of the following are the elements of artificial intelligence? (Multiple choice)

A. Algorithm

B. Computing power

C. Data

D. Scene

Answer: ABCD

QUESTION NO: 162

What of the following does belong to convolutional neural network (CNN)? (Multiple Choice)

A. VGGNet

B. ResNet

C. AlexNet

D. GoogleNet

Answer: ABCD

QUESTION NO: 163

Which of the following is not the difference between Python 2 and Python 3?

A. print

B. Unicode

C. import

D. xrange

Answer: C

QUESTION NO: 164

Which of the following does the convolutional neural network structure not include?

A. Convolutional layer

B. Pooling layer

C. Loop layer

D. Fully connected layer

Answer: C

QUESTION NO: 165

In what year did Huawei officially provide services in the form of cloud services, and combined with more partners to provide richer artificial intelligence practices?

A. 2002

B. 2013

C. 2015

D. 2017

Answer: D

QUESTION NO: 166

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

A. True

B. False

Answer: A

QUESTION NO: 167

What model is not a cyclic neural network?

A. RNN

B. LSTM

C. GBDT

D. GRU

Answer: C

QUESTION NO: 168

Artificial intelligence is currently suitable for scenarios with "known environment, clear objectives, and predictable actions". Deep learning in the fields of image recognition, speech recognition, translation, etc., artificial intelligence basically has human recognition ability, even surpassing human beings. Based on these capabilities, it has been applied to many scenes, such as medical care and public safety. However, there is still a lack of reasoning and cognition.

A. True

B. False

Answer: A

QUESTION NO: 169

In TensorFlow, data is represented in the form of tensors and calculation charts.

A. True

B. False

Answer: B

QUESTION NO: 170

Which of the following are the characteristics of TensorFlow? (Multiple choice)

A. Open source

B. Convenience

C. Mature

D. Flexible

Answer: ABCD

QUESTION NO: 171

Deep learning is a branch of machine learning.

A. True

B. False

Answer: A

QUESTION NO: 172

Which of the following description of the number of rows and columns of the matrix is correct?

A. The number of rows is greater than the number of columns

B. The number of rows is equal to the number of columns

C. The number of rows is less than the number of columns

D. The number of rows has no relationship with the number of columns.

Answer: D

QUESTION NO: 173

TensorFlow supports multi-TPU cluster computing.

A. True

B. False

Answer: A

QUESTION NO: 174

Which of the following neural network structures will share weights? (Multiple choice)

A. Convolutional neural network

B. Recurrent neural network

C. Fully connected neural network

D. All of the above

Answer: AB

QUESTION NO: 175

Which of the following descriptions about Python program are correct? (Multiple choice)

- A. The program consists of modules
- B. Module contains statements
- C. statement contains an expression
- D. Expressions create and process objects

Answer: ABCD

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