

HCIA-AI (Artificial Intelligence)

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

- A. **True (Right Answers)**
- B. False

Answer: A

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

- A. **Alpha Go (Right Answers)**
- B. **Self-driving (Right Answers)**
- C. **Voice input (Right Answers)**
- D. **Huawei Mate mobile phone (Right Answers)**

Answer: ABCD

49. What operating systems does Python support? (Multiple Choice)

- A. **DOS (Right Answers)**
- B. **Linux (Right Answers)**
- C. **Mac OSX (Right Answers)**
- D. **Windows (Right Answers)**

Answer: ABCD

50. 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 (Right Answers)**
- 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

43. 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 (Right Answers)**
 - B. False
- Answer: A**

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 nominal characteristics of random variables
- D. The greater the expectation, the smaller the variance (Right Answers)**

Answer: D

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

- A. True (Right Answers)**
- B. False

Answer: A

46. Which of the following options is not a tensor attribute?

- A. Name (Logo)
- B. Shape (Dimensionality)
- C. Type (Type)
- D. Node (Node) (Right Answers)**

Answer: D

40. Which of the following conditions is not a condition that n-fold Bernoulli trials need 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 (Right Answers)**
- D. The results of each trial are independent of each other

Answer: C

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

- A. True
- B. False (Right Answers)**

Answer: B

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

- A. checkpoint file
- B. index file
- C. cpkt file
- D. metafile (RightAnswers)**

Answer: D

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

Answer: ABCD

38. The determinant of square matrix A is a scalar

- A. True (Right Answers)**
- B. False

Answer: A

39. 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 (Right Answers)**
- D. Random gradient descent is one of the commonly used optimization algorithms in deep learning algorithms

Answer: C

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

- A. It can be repeated under the same conditions (Right Answers)**
- B. There may be more than one possible outcome for each trial and all possible outcomes of the trial can be clarified in advance (Right Answers)**
- 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 (Right Answers)**

Answer: ABD

35. 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. (Right Answers)**
- D. The above is not correct

Answer: C

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

- A. L1 norm, L2 norm (Right Answers)**
- B. Data set enhancement (Right Answers)**
- C. Integration method (Right Answers)**
- D. Dropout (RightAnswers)**

Answer: ABCD

29. Which of the following data types does Tensor Flow not support?

- A. int8
- B. float32
- C. double64 (Right Answers)**
- D. bool

Answer: C

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

- A. True
- B. False (Right Answers)**

Answer: B

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

- A. Function (Right Answers)
- B. Module (Right Answers)
- C. Number (Right Answers)
- D. Character string (Right Answers)**

Answer: ABCD

32. Which of the following options belong to Tensor Flow concept? (Multiple Choice)

- A. Tensor (Right Answers)**
- B. Vanables (Right Answers)**
- C. Placeholder (Right Answers)**
- D. Operation (Right Answers)**
- E. Conversation (Right Answers)**

Answer: ABCDE

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

- A. True (Right Answers)**
- B. False

Answer: A

27. 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. $(A^T)^T = A$ (Right Answers)**
- B. $(A + B)^T = A^T + B^T$ (Right Answers)**
- C. $(kA)^T = kA^T$ (Right Answers)**
- D. $(AB)^T = A^T + B^T$

Answer: ABC

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

- A. Single quotes (Right Answers)**
- B. Double quotes (Right Answers)**
- C. Three quotes (Right Answers)**
- D. Four quotes

Answer: ABC

21. 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 (Right Answers)**

Answer: B

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

- A. Gridding
- B. Calculation Chart (Right Answers)**
- C. Dot Product
- D. Tensor (Right Answers)**

Answer: BD

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

- A. Machine translation
- B. Speech recognition
- C. Image style migration (Right Answers)**
- D. Text generation

Answer: C

24. Numerical calculations refer 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 (Right Answers)**
- B. Mathematical model (Right Answers)**
- C. Numerical calculation method (Right Answers)**
- D. Programming (Right Answers)**
- E. Computer calculation results (Right Answers)**

Answer: ABCDE

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

- A. print
- B. Unicode
- C. import (Right Answers)**
- D. xrange

Answer: C

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

- A. VGGNet (Right Answers)
- B. ResNet (Right Answers)
- C. AlexNet (Right Answers)
- D. GoogleNet (RightAnswers) Answer: ABCD

17. 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 (Right Answers)**
- D. The larger the standard deviation, the slower the normal distribution curve

Answer: C

18. 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 (Right Answers)**

Answer: D

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

- A. **True (Right Answers)**
- B. False

Answer: A

20. What does not belong to supervised learning?

- A. Logistic regression
- B. Support vector machine
- C. Decision tree
- D. **Principal component analysis (Right Answers)**

Answer: D

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

- A. **Financial product recommendation (Right Answers)**
- B. **Predictive maintenance (Right Answers)**
- C. **Telecom customer retention (Right Answers)**
- D. **Retailer grouping (Right Answers)**

Answer: ABCD

13. 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 (Right Answers)**
- D. Assigning relevant code to a module can make your code better and easier to understand

Answer: C

14. 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 (Right Answers)**

Answer: D

15. 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 (Right Answers)**

Answer: B

9. Python tuples are identified by "0" and internal elements are separated by

- A. True
- B. **False (Right Answers)**

Answer: B

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

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

Answer: ABCD

11. What is the English abbreviation for AI?

- A. Automatic Intelligence
- B. Artificial Intelligence (Right Answers)
- C. Automatic Information
- D. Artificial Information

Answer: B

8. 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 (Right Answers)
- D. fetch

Answer: C

7. 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 (Right Answers)
- B. Robot with sensation (Right Answers)
- C. Robots that will think
- D. Intelligent robot (Right Answers)

Answer: ABD

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

- A. True
- B. False (Right Answers)**

Answer: B

3. What is wrong description of back propagation?

- A. The learning process of the back propagation algorithm consists of a forward propagation process and a back-propagation process
- B. The back propagation algorithm is a learning algorithm suitable for multi-layer neural networks, which is based on the gradient descent method
- C. The back propagation phase sends training inputs to the network to obtain an stimuli response (Right Answers)**
- D. The back propagation 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

4. 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 (Right Answers)**
- B. Dark green
- C. Ponder
- D. Blue sky

Answer: A

5. What are the service categories included in Huawei Cloud EI Enterprise Intelligence? (Multiple Choice)

- A. EI visual cognition (Right Answers)**
- B. EI online games
- C. EI speech semantics (Right Answers)**
- D. EI industry scene (Right Answers)**

Answer: ACD

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

- A. Beautiful (Right Answers)**
- B. Expensive
- C. Explicit (Right Answers)**
- D. Simple (RightAnswers)**

Answer: ACD

1. What is the subject of artificial intelligence?

- 1. Mathematics and Physiology
- 2. Psychology and Physiology
- 3. Linguistics
- 4. Comprehensive interdisciplinary and marginal disciplines (Right Answers)**

Answer: D

33. 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 describes the value rule of continuous random vanables
- C. Discrete random variables have no distribution function (Right Answers)**
- D. Distribution function describes the value rule of random variables

Answer: C

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

- A. The verification set can coincide with the test set. (Right Answers)**
- 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

99. Which of the following can optimization problem be classified according to the constraints? (Multiple choice)

- A. equality constraints (Right Answers)**
- B. Inequality constraints (Right Answers)**
- C. Unconstrained conditions (Right Answers)**
- D. Semi-constraint conditions

Answer: ABC

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

- A. Explanatory (Right Answers)**
- B. Process oriented
- C. Object-oriented (Right Answers)**
- D. Dynamic data type (Right Answers)**

Answer: ACD

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

- A. True (Right Answers)**
- B. False

Answer: A

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

- A. True
- B. False (Right Answers)**

Answer: B

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

- A. TRUE (Right Answers)**
- B. 0
- C. FALSE
- D. Null

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

- A. DistBelief (Right Answers)**
- B. PaleyFunction
- C. ConvexOne
- D. Infinity**

Answer: A

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

- A. **True (Right Answers)**
- B. False

Answer: A

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

- A. 0
- B. 0.5
- C. **1 (Right Answers)**
- D. -1

Answer: C

93. 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 (Right Answers)**
- B. False

Answer: A

94. 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 (Right Answers)**
- B. False

Answer: A

86. What model is not a cyclic neural network*?

- A. RNN
- B. LSTM
- C. **GBDT (Right Answers)**
- D. GRU

Answer: C

87. 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 shanng of massive data (Right Answers)**
- C. Efficient storage and access requirements for massive amounts of data
- D. High scalability and high availability requirements for relational analysis platforms

Answer: B

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

- A. **Mean variance (Right Answers)**
- B. **Sigmoid cross entropy (Right Answers)**
- C. **Soft max cross entropy (Right Answers)**
- D. **Sparse cross entropy (Right Answers)**
- E. **Weighted Sigmoid Cross Entropy (Right Answers)**

Answer: ABCDE

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

- A. open
- B. **delete (RightAnswers)**
- C. read
- D. write
- E. close

Answer: B

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

- A. **True (Right Answers)**
- B. False

Answer: A

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

- A. **True (Right Answers)**
- B. False

Answer: A

83 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 (Right Answers)**

Answer: D

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

- A. Unsupervised algorithm only processes "features" and does not process "tags" (Right Answers)**
- 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

85. 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 (Right Answers)**

Answer: D

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

- A. True
- B. False (Right Answers)**

Answer: B

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

- A. Action (Right Answers)**
- B. Perception (Right Answers)**
- C. Cognition (Right Answers)**
- D. None of the above

Answer: ABC

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

- A. True
- B. False (Right Answers)**

Answer: B

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

- A. TensorFlow (Right Answers)**
- B. Caffe (Right Answers)**
- C. Torch (Right Answers)**
- D. Theano (Right Answers)**
- E. Scikit-learn

Answer: ABCD

73. 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. $D(X+Y)=D(X)+D(Y)$ (Right Answers)**
- C. $D(CX)=C \cdot C \cdot D(X)$
- D. $D(XY)=D(X)D(Y)$ (Right Answers)**

Answer: BD

74. Vector is a number

- A. True
- B. False (Right Answers)**

Answer: B

75. About Bayesian formula $P(W|X)=P(X|W) \cdot P(W)/P(X)$ What is the correct description?

- A. $P(W|X)$ is a prior probability
- B. $P(X|W)$ is a conditional probability (Right Answers)**
- C. $P(W)$ is the posterior probability
- D. $P(X)$ is the posterior probability

Answer: B

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

- A. True
- B. False (Right Answers)**

Answer: B

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

- A. 2 (Right Answers)**
- B. -2
- C. -4
- D. 4 (Right Answers)**

Answer: AD

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

- A. True (Right Answers)**
- B. False

Answer: A

72. which of the following are the cloud services provided by Huawei Cloud EI Visual Cognition'? (Multiple choice)

- A. Text recognition (Right Answers)**
- B. Face recognition (Right Answers)**
- C. Image recognition (Right Answers)**
- D. Content detection (Right Answers)**
- E. Image processing (Right Answers)**

Answer: ABCDE

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

- A. Open source (Right Answers)**
- B. Convenience (Right Answers)**
- C. C Mature (RightAnswers)**
- D. Flexible (RightAnswers)**

Answer: ABCD

65. 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. (Right Answers)**
- B. The parameters need to be placed in parentheses (Right Answers)**
- C. The function content starts with a colon and needs to be indented (Right Answers)**
- D. Return the result with return and the function ends (Right Answers)**

Answer: ABCD

66. About Python correct tuple which is correct description1? (Multiple choice)

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

Answer: ABCD

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

- A. Natural language processing (Right Answers)**
- B. Computer Vision (Right Answers)**
- C. Machine learning (Right Answers)**
- D. Speech recognition (Right Answers)**

Answer: ABCD

68. TensorFlow supports multi-TPU cluster computing

- A. True (Right Answers)**
- B. False

Answer: A

59. 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 (Right Answers)**
- B. False

Answer: A

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

- A. True (Right Answers)**
- B. False

Answer: A

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

- A. Probability theory (Right Answers)**
- B. Linear transformation
- C. Matrix theory
- D. Vector space

Answer: A

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

- A. True (Right Answers)**
- B. False

Answer: A

63. 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. $n=p$ (Right Answers)**
- C. $m=n$
- D. $p=q$

Answer: B

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

- A. sigmoid (Right Answers)**
- B. tanh (Right Answers)**
- C. relu (Right Answers)**
- D. danish

Answer: ABC

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

- A. sigmoid (Right Answers)**
- B. tanh (Right Answers)**
- C. relu (RightAnswers)**
- D. danish

Answer: ABC

56. 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 (Right Answers)**
- D. Convolutional neural networks are a type of deep learning

Answer: C

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

- A. Linux
- B. Mac OS
- C. Docker
- D. OpenStack (RightAnswers)**

Answer: D

58. Deep learning is a branch of machine learning

- A. True (Right Answers)**
- B. False

Answer: A

51. 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 (Right Answers)**

Answer: B

52. Which of the following does not belong to automatic hyper parameter optimization algorithm?

- A. Grid search
- B. Random gradient descent (Right Answers)**
- C. Random search
- D. Model-based hyper parameter optimization

Answer: B

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

- A. legibility (RightAnswers)**
- B. Simplicity (Right Answers)**
- C. Rapidity
- D. Scalability (RightAnswers)**

Answer: ABD

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

- A. 1
- B. 2
- C. 4 (Right Answers)**
- D. 8

Answer: C

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

- A. numbers (Right Answers)**
- B. string (Right Answers)**
- C. list (Right Answers)**
- D. tuple (Right Answers)**
- E. dictionary (Right Answers)**

Answer: ABCDE

144. 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 (RightAnswers)**
 - C. A+B
- Answer: B**

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

A. True (Right Answers)

B. False

Answer: A

146. Which description is wrong about the hyper parameter'?

A. Hyper parameters are parameters that set values before the algorithm begins learning

B. Most machine learning algorithms have hyper parameters

C. Hyper parameters cannot be modified (Right Answers)

D. The value of the hyper parameter is not learned by the algorithm itself

Answer: C

147 Which of the following is not a module in the Tensor Flow library?

A. tf.nn

B. tf.layers

C. tf.boost (Right Answers)

D. tf.contrib

Answer: C

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

1 2 4 5 7 8 3 6 9 A =

A. 24

B. 18

C. -24

D. 0(RightAnswers)

Answer: D

140. Which is wrong with the Python module time introduction method 9

0 import time

1 from time import *

2 import time as t

3 from time (Right Answers)

Answer: D

141. 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 (Right Answers)**

Answer: D

142. 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 (Right Answers)**

Answer: D

143. 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 (Right Answers)**
- D. Von Neumann

Answer: C

135. 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. (Right Answers)**

Answer: D

136. Which is not a deep learning algorithm?

- A. Self-encoder
- B. Convolutional neural networks
- C. Recurrent neural networks
- D. Support vector machine (Right Answers)**

Answer: D

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

- A. True
- B. False (Right Answers)**

Answer: B

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

- A. Symbolism
- B. Connectionism (Right Answers)**
- C. Behaviorism
- D. None of the above

Answer: B

139. 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 (Right Answers)**
- B. Integration method (Right Answers)**
- C. Increase regulanzation (Right Answers)**
- D. Feature Engineering (Right Answers)**

Answer: ABCD

134. 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. $E(XY) = E(X)E(Y)$ (RightAnswers)**

Answer: D

133. 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 (Right Answers)**

Answer: B

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

- A. Convolutional neural network (Right Answers)**
- B. Recurrent neural network (Right Answers)**
- C. Fully connected neural network
- D. All of the above

Answer: AB

127. The TensorFlow framework does not support Windows systems

- A. True
- B. False (Right Answers)**

Answer: B

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

- A. Deep feedforward network is a kind of neural network (Right Answers)**
- 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

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

- A. True (Right Answers)**
- B. False

Answer: A

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

- A. CNTK
- B. Keras
- C. BAFA (Right Answers)**
- D. MXNet

Answer: C

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

- A. Speech recognition (Right Answers)**
- B. Face recognition (Right Answers)**
- C. Image style changes (Right Answers)**
- D. Autopilot (Right Answers)**

Answer: ABCD

123. Self-encoder is an unsupervised learning algorithm

- A. True (Right Answers)**
- B. False

Answer: A

124. The number or matrix is stored in the tensor

- A. True
- B. False (Right Answers)**

Answer: B

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

- A. Can be used to process sequence data (Right Answers)**
- 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

126. 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 (Right Answers)**

Answer: B

118. 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 (Right Answers)**
- C. Neural Network
- D. Natural language processing

Answer: B

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

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

Answer: ABCD

120. 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 rich library of machine learning algorithms.

machine learning program is intuitive and easy to use

Distributed and scalable big data computing engine

Support for the R language, but does not support the Python language (Right Answers)

Answer: D

121. 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 (Right Answers)**
- B. Feature Engineering (Right Answers)**
- C. Reduce regularization parameters
- D. Add features (Right Answers)**

Answer: ABD

122. Which of the following is not a way for the Tensor Flow program to read data4?

- A. Preload data
- B. Feeding data
- C. Read from the file
- D. Write a file format reader (Right Answers)**

Answer: D

113. 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. (Right Answers)**

Answer: D

114 Which of the following is the computing model of TensorFlow?

- A. Calculation chart (Right Answers)
- B. Tensor
- C. Conversation
- D. Variable

Answer: A

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

- A. TPU (Right Answers)**
- B. GPU (RightAnswers)**
- C. FPGA (Right Answers)**
- D. Large-scale distributed cluster (Right Answers)**

Answer: ABCD

116. 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. (Right Answers)**
- B. Python is purely free software and the source code follows the GPL (GNU General Public License) protocol (Right Answers)**
- C. Python syntax is simple and clean One of the features is to force blank characters to be used as statement indentation (Right Answers)**
- D. Python is often nicknamed glue language, which can easily connect various modules made in other languages (Right Answers)**

Answer: ABCD

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

- A. Memory door (Right Answers)**
- B. Forget the door
- C. Input door
- D. Output door

Answer: A

110. What are the advantages of Python? (Multiple choice)

- A. Simple (Right Answers)**
- B. Free (RightAnswers)**
- C. High-level language (Right Answers)**
- D. Rich library (Right Answers)**

Answer: ABCD

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

- A. True (Right Answers)**
- B. False **Answer: A**

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

- A. Inheritance (RightAnswers)**
- B. Heavy load (Right Answers)**
- C. Derived (Right Answers)**
- D. Multiple mhentance (Right Answers)**

Answer: ABCD

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

- A. 1946
- B. 1960
- C. 1916
- D. 1956 (RightAnswers)**

Answer: D

106. 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 (Right Answers)**
- C. Poisson distribution has no relationship with binomial distribution
- D. Poisson distribution can replace binomial distribution

Answer: B

107. Which of the following is not an artificial intelligence school?

- A. Symbolism
- B. Statistichsm (RightAnswers)**
- C. Behaviorism
- D. Connectionism

Answer: B

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

- A. Convolutional layer
- B. Pooling layer
- C. Loop layer (Right Answers)**
- D. Fully connected layer

Answer: C

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

- A. Softminus function
- B. Softplus function
- C. Soft max function (Right Answers)**
- D. Softmin function

Answer: C

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

- A. Algorithm (Right Answers)**
- B. Computing power (Right Answers)**
- C. Data (Right Answers)**
- D. Scene (Right Answers)**

Answer: ABCD

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

- A. Knowledge map
- B. Machine translation
- C. Riemann geometry (Right Answers)**
- D. Semantic understanding

Answer: C

103. 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 (Right Answers)**
- 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 $j\pi$ or $-j\pi$ (Right Answers)**
- D. Underflow occurs when a large number of levels are approximated as π or $-\pi$

Answer: AC

104. 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. (Right Answers)**

Answer: D

171. 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 (Right Answers)**

Answer: D

169. What is not the optimization method in deep learning?

- A. Random gradient descent
- B. Back propagation algorithm
- C. Principal component analysis (Right Answers)**
- D. Momentum

Answer: C

170. 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 (Right Answers)**

Answer: D

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

- A. True
- B. False (Right Answers)**

Answer: B

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

- A. Stand-alone mode (Right Answers)**
- B. Distributed mode (Right Answers)**
- C. Reverse mode
- D. Forward mode

Answer: AB

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

- A. Any Python statement
- B. while loop statement (Right Answers)**
- C. for loop statement (Right Answers)**
- D. Nested loop statement (Right Answers)**

Answer: BCD

167. TensorFlow only supports Python and R language

- A. True
- B. False (Right Answers)**

Answer: B

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

- A. Random gradient descent (Right Answers)**
- B. Adadelata (Right Answers)**
- C. Adagrad (Right Answers)**
- D. momentum (RightAnswers)**
- E. RMSProp (Right Answers)**

Answer: ABCDE

159. 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 (Right Answers)**
- B. False

Answer: A

160. The Python dictionary is identified by and the internal data consists of the key and its corresponding value

- A. True (Right Answers)**
- B. False

Answer: A

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

- A. Machine learning (Right Answers)**
- B. Deep learning (Right Answers)**
- C. Graph engine (Right Answers)**
- D. Batch processing (Right Answers)**

Answer: ABCD

162. 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 (Right Answers)**
- B. 2
- C. 3
- D. 4

Answer: A

163. "print" in Python 3 must be used with "Q"

- A. True (Right Answers)**
- B. False

Answer: A

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

- A. Intelligent Logistics (Right Answers)**
- B. Intelligent Water (Right Answers)**
- C. Intelligent transportation (Right Answers)**
- D. Intelligent Finance (Right Answers)**
- E. E Intelligent manufacturing (Right Answers)**

Answer: ABCDE

156. 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 (Right Answers)**
- B. Linear independence
- C. $a_1+a_2+a_3=0$
- D. $2a_1+a_2+a_3=0$

Answer: A

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

- A. Artificial intelligence (Right Answers)**
- B. web development (Right Answers)**
- C. Game development (Right Answers)**
- D. Hardware development

Answer: ABC

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

- A. Index from left to right defaults from 0 (Right Answers)**
- B. Index from left to right defaults from 1
- C. Index from right to left defaults from -1 (Right Answers)**
- D. Index from right to left defaults from 0

Answer: AC

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

- A. CNN (Right Answers)**
- B. ZNN
- C. RNN (Right Answers)**
- D. HUT

Answer: AC

152. Which is not a Python operator?

- A. arithmetic operator
- B. Reasoning operator (Right Answers)**
- C. Logical operator
- D. Comparison operator

Answer: B

153. 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 (Right Answers)**

Answer: D

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

- A. Big data
- B. Computing ability
- C. Algorithm theory
- D. Blockchain (RightAnswers)**

Answer: D