

### Question: 1

(Judgment) Back propagation is a common method used to train artificial neural networks.

- A. TRUE
- B. FALSE

**Answer: A**

### Question: 2

What are the processing procedures included in image digitization? (Multiple choices)

- A. Binarization
- B. Quantification
- C. Grayscale transformation
- D. Sampling

**Answer: ABCD**

### Question: 3

How many brightness changes can a 4-bit image distinguish? (Single choice)

- A. 8
- B. 16
- C. 128
- D. 256

**Answer: A**

### Question: 4

Modifying the H component of the HSV color space will change the image? (Single choice)

- A. Hue
- B. Brightness
- C. Saturation
- D. Contrast

**Answer: D**

### Question: 5

(Judgment) The background difference method is to use the current frame in the image sequence and the background reference model for subtraction, which can realize the detection of moving objects in the image.

- A. TRUE
- B. FALSE

**Answer: A**

### Question: 6

(Judgment) The image filter operation is also called template operation. The commonly used template operations include template convolution and template sorting.

- A. TRUE
- B. FALSE

**Answer: B**

### Question: 7

What is the use process of ModelArts automatic learning? (Single choice)

- A. Deploy online -> Model training -> Data annotation
- B. Model training -> data annotation -> deployment online
- C. Data annotation -> model training -> deployment online
- D. Data annotation -> deployment online -> model training

**Answer: C**

### Question: 8

The image target detection algorithm needs to be completed? (Multiple choice)

- A. Calculation of target position

- B. Judgment of target category
- C. Calculation of confidence
- D. Calculation of target edge

**Answer: ABCD**

### Question: 9

(Judgment) Image feature extraction is a dimensionality reduction idea, which can effectively reduce the amount of image data.

- A. TRUE
- B. FALSE

**Answer: A**

### Question: 10

Convolve a pair of three-channel color images with two 3x3 convolution kernels. How many channels does the resulting feature map have? (Single choice)

- A. 1
- B. 2
- C. 3
- D. 4

**Answer: C**