Exercise 5: Read the following passage and choose the best answer for each question below.

Animation traditionally is done by hand-drawing or painting successive frame of an object, each slightly different than the proceeding frame. In computer animation, although the computer may be the one to draw the different frames, in most cases the artist will draw the beginning and ending frames and the computer will produce the drawings between the first and the last drawing. This is generally referred to as computer-assisted animation, because the computer is more of a helper than an originator.

In full computer animation, complex mathematical formulas are used to produce the final sequences of pictures. These formulas operate on extensive databases of numbers that defines the objects in the pictures as they exist in mathematical space. The database consists of endpoints, and color and intensity information. Highly trained professionals are needed to produce such effects because animation that obtains high degrees of realism involves computertechniques from three-dimensional transformation, shading, and curvatures.

High-tech computer animation for film involves very expensive computer systems along with special color terminals or frame buffers. The frame buffer is nothing more than a giant image memory for viewing a single frame. It temporarily holds the image for display on the screen.

A camera can be used to film directly from the computer's display screen, but for the highest quality images possible, expensive film recorders are used. The computer computers the positions and colors for the figures in the picture, and sends this information to the recorder, which captures it on film. Sometimes, however, the images are stored on a large magnetic disk before being sent to the recorder. Once this process is completed, it is replaced for the next frame. When the entire sequence has been recorded on the film, the film must be developed before the animation can be viewed. If the entire sequence does not seem right, the motions must be corrected, recomputed, redisplayed, and rerecorded. This approach can be very expensive and time – consuming. Often, computer-animation companies first do motion tests with simple computer-generated line drawings before selling their computers to the task of calculating the high-resolution, realistic-looking images.

Questions

1. What aspect of computer animation does the passage mainly discuss?

A. The production procession

B. The equipment needed

C. The high cost

D. The role of the artist

2. According to the passage, in computer-assisted animation the role of the computer is to draw the_____.

A. first frame   B. middle frames   C. last frame   D. entire sequences of frames

3. The word "they" in the second paragraph refers to .

A. formulas   B. objects   C. numbers   D. database

4. According to the passage, the frame buffers mentioned in the third paragraph are used to:

A. add color to the images

B. expose several frames at the same time

C. store individual images

D. create new frames

5. According to the passage, the positions and colors of the figures in high-tech animation are determined by .

A. drawing several versions

B. enlarging one frame at a lime

C. analyzing the sequence from different angles

D. using computer calculations

6. The word "captures" in the fourth paragraph is closest in meaning to .

A. separates   B. registers   C. describes   D. numbers

7. The word "Once" in the fourth paragraph is closest in meaning to …

A. before   B. since   C. after   D. while

8. According to the passage, how do computer-animation companies often test motion?

A. They experiment with computer-generated line drawings.

B. They hand-draw successive frames.

C. They calculate high-resolutions images.

D. They develop extensive mathematical formulas.

9. The word "task" in the fourth paragraph is closest in meaning to .

A. possibility   B. position C. time   D. job

10. Which of the following statement is supported by the passage?

A. Computers have reduced the costs of animation.

B. In the future, traditional artists will no longer be needed.

C. Artists are unable to produce drawings as high in quality as computer drawings.

D. Animation involves a wide range of technical and artistic skills.