1. Which statement is not correct?

a) Sequencing is a basic molecular genetic method.

b) Sequencing allows the genetic information to be read.

c) Sequencing allows exact identification of the polymorphic site.

d) Sequencing is a method in which a specific section of DNA is isolated.

2. The composition of the sequencing reaction is very similar to that of a classical PCR reaction. But how does it differ?

a) the reaction is cyclic

b) only one primer is added

c) contains only classic dNTP

d) polymerase is part of the mixture

3. Sequencing is carried out in genetic analysers called sequencers. How do they work?

a) centrifugation

b) capillary electrophoresis

c) denaturing gradient gel electrophoresis

d) horizontal gel electrophoresis

4. The most widely used sequencing method is Sanger sequencing, which has many advantages. But what characteristic does not apply?

a) suitability for whole-genome sequencing

b) high accuracy and reliability

c) low total price

d) suitability for the detection of point mutations in known sequences

5. Sequencing techniques based on single molecule sequencing are called:

a) Sanger sequencing

b) 3rd generation sequencing

c) Multiplex PCR

d) NGS

6. Where can we find free whole genome sequencing results?

a) in genome databases

b) in private and company databases

c) in the database of the Police of the Czech Republic

d) printed in libraries

7. What is DNA barcoding?

a) DNA coding system

b) species identification based on DNA sequence

c) all the genetic material in the cell

d) the commercial label of a product containing animal DNA

8. In order to correctly determine the position of nucleotides in the DNA sequence under study, we need to add to the reaction:

a) distilled water

b) fluorescently marked end terminators

c) fluorescently labelled primers

d) fluorescently labelled dNTP

9. There are many instruments in the molecular genetic laboratory. One of them is the so-called vortex. What is it used for?

a) nucleic acid separation

b) centrifugation

c) mixing the individual components of the reaction mixture

d) genotyping

10. The automatic analyser needs different chemicals to operate. Choose which one is not one of them.

a) cathode buffer

b) polymerase

c) anode buffer

d) polymer