Online test VLA Clinical genetics - sample

1. What is a genome?

a) all genetic material of an organism (DNA)

b) all genetic material of nucleus

c) all coding sequences of DNA

d) all non-coding sequences of DNA

2. What is the lifelong risk of developing breast cancer in a woman who is the carrier of the *BRCA2* gene mutation?

a) up to 44%

b) up to 66%

c) up to 88%

d) up to 99%

3. "Café au lait spots" are a typical symptom of which of these diseases?

a) Vitiligo

b) Nefroblastoma

c) Neurofibromatosis type I

d) Neuroblastoma

4. What does predictive testing mean?

a) Examination of so far healthy members of the family whose relatives are carriers of known pathological variant of the gene

b) Embryo examination if it carries a pathological variant of a gene

c) Screening of a healthy person for not having any of the frequent pathological variants of the gene that occur in the population

d) Examining partners who want to have a baby if they are not carriers of some of the autosomal recessive diseases

5. Evolution of cancer cells´ population is molecularly supported by:

a) passenger mutations

b) driver mutations

c) both a) and b)

d) driver mutations more than passenger mutations

6. Cancer process (pre-malignant lesions) begins with the presence of:

a) DNA double strand breaks

b) activated oncogenes or lost tumor-suppressor genes

c) unscheduled replication

7. The pattern of inheritance for Cystic fibrosis:

a) Autosomal recessive

b) Autosomal dominant

 c) X- recessive

8. Gene mutations which are inherited from a parent and are present throughout a person's life in virtually every cell in the body. They are present in germ cells. These mutations are called:

a) germline

b) somatic

c) acquired

9. The determination of the pattern of genes expressed, at the level of transcription, under specific circumstances or in a specific cell to give a global picture of cellular function. This analysis is performed on the level:

a) DNA

b) RNA

c) protein