

BIOLOGY SAMPLE TEST 3

1. Spinal nerves contain
 - A. sensory fibers
 - B. motor fibers
 - C. none of them
 - D. both sensory and motor fibers
 - E. blood vessels
2. Which statement is true about rods?
 - A. They are responsible for the detection of dim light
 - B. They are responsible for color vision
 - C. They are found in the cochlea
 - D. Their amount is about 6,5 millions in the retina
 - E. They are found in the olfactory epithelium
3. Crossing over occurs
 - A. in mitosis
 - B. in the first meiotic prophase
 - C. in the second meiotic prophase
 - D. during translation
 - E. during transcription
4. Bile is produced
 - A. in the gall bladder
 - B. in the liver
 - C. in the jejunum
 - D. in the pancreas
 - E. in another organ, not mentioned above
5. Human red blood cells
 - A. contain nucleus
 - B. are responsible for blood clotting
 - C. are important cells of the immune system
 - D. contain hemoglobin
 - E. are produced in the thymus
6. The number of chromosomes in a human diploid cell is
 - A. 23
 - B. 44
 - C. 46
 - D. 1
 - E. 2

7. The number of DNA molecules in a human diploid cell during G1 phase is

- A. 23
- B. 44
- C. 46
- D. 1
- E. 2

8. The hormone that decreases blood glucose level is

- A. adrenaline
- B. cortisol
- C. glucagon
- D. insulin
- E. estrogen

9. Which statement is false about meiosis?

- A. it is for gamete production
- B. It consists of two divisions
- C. Cells become haploid by the end of Meiosis I.
- D. Sister chromatids separate in Anaphase I.
- E. The homologous chromosomes form tetrads in Prophase I.

10. Influenza is caused by

- A. a bacterium
- B. a virus
- C. a protozoa
- D. yeast
- E. prions

11. Which statement is true about Golgi complex?

- 1. It synthesizes proteins
- 2. It does protein sorting
- 3. It does covalent modifications on certain proteins
- 4. It has ribosomes on the surface
- 5. It does packaging of proteins

- A. 1,2,3 B. 1,4 C. 2,3,5 D. 1,2,3,5 E. 2.

12. Which statement is true about rough endoplasmic reticulum?

1. secretory proteins are synthesized here
2. cell membrane proteins are synthesized here
3. lysosomal proteins are synthesized here
4. DNA-polymerase is synthesized here
5. RNA-polymerase is synthesized here

A. 2. B. 4,5. C. 1,2,3 D. 3. E. 1,3

13. Which statement is true about the pituitary gland?

1. It consists of anterior and posterior lobes
2. The anterior lobe is connected to the hypothalamus via nerves
3. Cells of the anterior lobe produce growth hormone
4. Cells of the anterior lobe produce oxytocin.
5. It is located below hypothalamus.

A. 5. B. 1,2,3 C. 1,3,5 D. 3,4,5 E. 2,4

14. Which statement is true about connective tissue?

1. red blood cells are cells of the connective tissue
2. lymphocytes are cells of the connective tissue
3. fat cells are cells of the connective tissue
4. neurons are cells of the connective tissue
5. osteocytes are cells of the connective tissue

A. 1,2,3,4 B. 1,2 C. 4 D. 1,2,3,5 E. 3,5

15. Which expressions are correct for Turner syndrome?

1. triploidy
2. monoploidy
3. monosomy
4. gonosomal
5. aneuploidy

A. 1,4 B.3,4,5 C.2,4,5 D. 3,4.

16. Which expressions (statements) are correct for Klinefelter syndrome?

1. triploidy
2. trisomy
3. aneuploidy
4. autosomal
5. one inactive X in the nucleus

A.2,3,4 B.2,3,5 C.1. D.1,2,3,4,5.

17. A person with blood group AB+ can have parents whose blood group is

1. AB+ and AB+
2. A + and B+
3. B+ and O+
4. AB+ and O+
5. AB- and O-

A. 1,2 B. 1,2,4 C. 1.2.3.4 D. 2. E.5.

18. Hormones that help to cope with stress are

1. insulin
2. cortisol, ACTH
3. glucagon
4. ACTH, glucagons
5. insulin, glucagon

A. 1,3 B. 2 C. 1.2.3 D. 4 E. 5.

19. Macrophages are

1. white blood cells
2. red blood cells
3. thrombocytes
4. cells for immune defense
5. cells that do phagocytosis.

A. 2. B. 3. C. 4,5. D. 4,5 E. 1,4,5.

20. Which are the final products of cellular respiration in human liver cells?

1. Oxygen
2. Carbon-dioxide
3. Nitrogen
4. water
5. ATP

A. 2. B. 1. C. 4,5 D. 1,4 E. 2,4,5.