



### Sample Test – v.4

- ❖ Indicate the correct answers on the answer sheet with “×”.
- ❖ For each question there is only one correct answer. Multiple answers will be scored as incorrect.

1. The only major type of tissue specialized for movement is the \_\_\_\_\_ tissue.
  - A. Nervous
  - B. Epithelial
  - C. Muscle
  - D. Connective
2. The contraction of the myocardium of the heart atria and ventricles is called:
  - A. Diastole
  - B. Heart beat
  - C. Systole
  - D. Cardiac output
3. Striated muscle is also called:
  - A. Cardiac muscle
  - B. Smooth muscle
  - C. Skeletal muscle
  - D. Involuntary muscle
4. Which type of tissue builds glands?
  - A. Connective
  - B. Nervous
  - C. Muscle
  - D. Epithelial
5. Ligaments and tendons are formed of:
  - A. Epithelial tissue
  - B. Muscle tissue
  - C. Cartilage
  - D. Connective tissue
6. What type of tissue is found in the iris, hair follicle, and anus?
  - A. Skeletal tissue
  - B. Cardiac muscle tissue
  - C. Smooth muscle tissue
  - D. All of the above
7. The oxygen transport from the lungs to all cells of the organism is a function of the:
  - A. Platelets
  - B. Red blood cells
  - C. White blood cells
  - D. Leucocytes
8. Which muscle tissue is multinucleated and bears striations?
  - A. Skeletal muscle.
  - B. Smooth muscle.
  - C. Multiunit smooth muscle.
  - D. Cardiac muscle.
9. The heart has \_\_\_\_\_ chambers.
  - A. 2
  - B. 4
  - C. 6
  - D. 3
10. The longest bone in the body is the:
  - A. Spine
  - B. Femur
  - C. Humerus
  - D. Ulna
11. Homeostasis in the human body is a condition of:
  - A. Constant temperature
  - B. Constant concentration of the salts dissolved in the blood
  - C. Dynamic equilibrium
  - D. Dynamic gas exchange
12. The blood serum:
  - A. Contains white blood cells
  - B. Does not contain fibrinogen
  - C. Contains erythrocytes
  - D. Does not contain water

**13. Which is the first digestive juice secreted in the alimentary canal?**

- A. Hydrochloric acid
- B. Saliva
- C. Pancreatic digestive juice
- D. Bile

**14. The membrane on the surface of a lung is called the:**

- A. Viscera
- B. Pleura
- C. Pericardium
- D. Periosteum

**15. Anterior and posterior lobes are found in:**

- A. Thyroid gland
- B. Parathyroid glands
- C. Pituitary gland
- D. Adrenal glands

**16. This vessel carries de-oxygenated blood from the heart to the lungs.**

- A. Aorta
- B. Main Pulmonary Artery
- C. Upper Vena Cava
- D. Portal vein

**17. Fluid part of blood after removal of corpuscles is:**

- A. Plasma
- B. Lymph
- C. Water
- D. Vaccine

**18. A type of nucleated blood cells are the:**

- A. Red blood cells
- B. Hepatocytes
- C. Platelets
- D. Monocytes

**19. Physical and chemical changes or reactions that occur within the body are collectively known as:**

- A. Metabolism
- B. Physiology
- C. Assimilation
- D. Excretion

**20. In terms of biochemistry, what type of process is the breakdown of glucose to H<sub>2</sub>O and CO<sub>2</sub> ?**

- A. Anabolic
- B. Autotrophic
- C. Catabolic
- D. Aerobic

**21. DNA transcription results in:**

- A. RNA molecule
- B. 2 DNA molecules that each contains a strand of the original one
- C. 1 new DNA molecule and 1 RNA molecule
- D. Polypeptide molecule

**22. A homozygous diploid organism has two \_\_\_\_\_ of a gene.**

- A. identical alleles
- B. maternal molecules
- C. identical codons
- D. different alleles

**23. When a dominant allele is present the offspring will show \_\_\_\_\_ characteristics.**

- A. Recessive
- B. Dominant
- C. Homozygous
- D. Heterozygous

**24. In \_\_\_\_\_, centromeres part and one set of chromosomes is pulled to each end of the cell.**

- A. Prophase
- B. Metaphase
- C. Anaphase
- D. Telophase

**25. The endoplasmic reticulum is best described as a:**

- A. Formless liquid
- B. Cellular inclusion
- C. Network of interconnected membranes
- D. Membranous sac

**26. Organelles called \_\_\_\_\_ provide energy from the products of digestion.**

- A. Endoplasmic reticulum
- B. Mitochondria
- C. Lysosomes
- D. Golgi complex

**27. The fundamental units of life are:**

- A. Genes

- B. Alleles
- C. Chromosomes
- D. Cells

**28. Which substance breaks down the bonds between amino acids?**

- A. Amylase
- B. Pepsin
- C. Lipase
- D. All of the above

**29. Which of the following nitrogen bases is a component of ATP:**

- A. adenine
- B. cytosine
- C. thymine
- D. guanine

**30. What substance is stored in the nucleus?**

- A. DNA
- B. ATP
- C. Enzymes
- D. Protein

**31. When is DNA copied?**

- A. Metaphase
- B. Interphase
- C. Anaphase
- D. First phase

**32. Oxidative phosphorylation is a process in which:**

- A. Is synthesized organic compounds
- B. Energy is temporarily stored in an usable form
- C. Metabolites are transported
- D. Alleles are assorted

**33. The allele that masks the effects of the other is \_\_\_\_\_ and the masked allele is \_\_\_\_\_.**

- A. Homozygous, heterozygous
- B. Homozygous, recessive
- C. Dominant, recessive
- D. Dominant, incomplete

**34. Crossing over takes place during \_\_\_\_\_.**

- A. meiosis
- B. mitosis
- C. segregation

D. linkage

**35. If a father have type A blood and the mother has type AB, they would NOT have a child with which of the following blood types?**

- A. O
- B. A
- C. B
- D. AB

**36. Down's syndrome is caused by \_\_\_\_\_ of the number \_\_\_\_ chromosome.**

- A. monosomy, 23
- B. deletion, 21
- C. trisomy, 21
- D. trisomy, 23

**37. Color blindness, a sex linked trait, appears more often in \_\_\_\_\_ than in \_\_\_\_\_.**

- A. males, females
- B. females, males
- C. dogs, cats
- D. neither

**38. Which of the following human traits is not a polygenic trait?**

- A. skin color
- B. eye color
- C. height
- D. ABO blood type

**39. The inheritance of human blood types is controlled by \_\_\_\_\_ alleles.**

- A. different
- B. same
- C. one
- D. multiple

**40. In a monohybrid cross between a homozygous dominant parent and a homozygous recessive parent, the F1 offspring will all have \_\_\_\_\_ genotypes, and the F1 phenotypes will resemble the \_\_\_\_\_ parent.**

- A. heterozygous, dominant
- B. heterozygous, recessive
- C. homozygous, dominant
- D. homozygous, recessive