

CORE VI [PHYSIOLOGY : CONTROLLING AND COORDINATING SYSTEMS]

Answer the following question

1. Skeletal muscle fibre is

- a) Multinucleated
- b) uninucleated
- c) binucleated
- d) anucleated

2. Muscle of heart is known as

- a) Striated
- b) Cardiac
- c) voluntary
- d) Non striated

3. The number of bones in the appendicular skeleton is

- a) 206
- b) 80
- c) 120
- d) 126

4. Total number of bones in man

- a) 206
- b) 205
- c) 204
- d) 201

5. Number of vertebrae in man is

- a) 32
- b) 33
- c) 26
- d) 28

6. Alternative source of energy for muscle contraction is

- a) ATP
- b) creatine phosphate
- c) glycolysis
- d) all of these

7. Muscles are connected to the bones by

- a) ligament
- b) Tendons
- c) Cartilage
- d) Bone

8. Where do you find osteocytes

- a) Cartilage
- b) Blood
- c) Bone
- d) Liver

9. Which of the following is a freely movable joint?

- a) Ball and socket
- b) Fibrous joint
- c) cartilaginous joint
- d) both a and b

10. Elbow joint is a

- a) Saddle joint
- b) Ball and socket joint
- c) Pivot joint
- d) Hinge joint

Answers:

1. a) Multinucleated
2. b) Cardiac
3. d) 126
4. a) 206
5. c) 26
6. c) glycolysis
7. b) tendons
8. c) Bone
9. a) Ball and socket
10. d) Hinge joint

Answer the following question 2-3 sentences (1.5 marks).

1. What is a tissue? State its type.
2. What do you mean by ossification?
3. What is resorption?

4. Mention the types of tissues along with their origin.
5. Mention the function of epithelial tissues
6. What do you mean by diaphysis and epiphysis?
7. What is cartilage? State its types.
8. What do you mean by resting membrane potential?
9. What is reflex arc?
10. What is synapse? Mention its types.
11. Define neuromuscular junction
12. What is ovarian cycle?
13. What do you mean by seminiferous tubules? Mention its function.
14. Name some placental hormones.
15. What do you mean by puberty?
16. Explain classification of hormones.
17. Explain the structure of human eye.
18. Explain the structure of human ear.
19. Mention the hormones secreted by pineal and pituitary gland.
20. What is reflex action?

Answer the following questions in 75-100 words (2 marks).

1. Describe the structure of the bone.
2. Describe the structure / components of connective tissues.
3. Mention types of cartilage along with their examples.
4. Explain structure of neurone.
5. What do you mean by action potential?
6. What do you mean by nerve conduction? State its type.

7. Write down the methods of contraception in male .
8. Write down the methods of contraception in female.
9. Explain histology of pancreas.
10. Describe mechanism of hormone action.
11. Explain histology of testis.
12. Explain histology of ovary.
13. Mention the function of placental hormones.
14. What are neurotransmitters?
15. What do you mean by bone resorption?
16. State the histology of skeletal muscles.

Answer the following question in 500 words (6marks).

1. Describe the structure , function , classification and function of epithelial tissues.
2. Describe the structure , function, classification and function of connective tissue.
3. Describe the structure , function, classification and function of muscular tissue
4. Describe the structure , function, classification and function of nervous tissue.
5. Describe the ultrastructure of skeletal muscle .
6. Explain the molecular and chemical basis of muscle contraction.
7. Explain propagation of action potential across the non myelinated nerve fibers.
8. Describe synaptic transmission through neuromuscular junction.
9. Explain physiology of hearing .
10. Explain the physiology of vision.
11. Describe the physiology of male reproductive system.
- 12 .Describe the physiology of female reproductive system.
13. Explain the mechanism of hormone action .
14. Explain the mechanism of hormones secreted by pineal and pituitary glands .