

SEAT No. _____

No. of Printed Pages : 2

[88]

Sardar Patel University
Fifth semester(TY.Bsc) ,Zoology
US05CZ0022(Physiology)

Date: 26.12.2020

Time: 2-4 pm

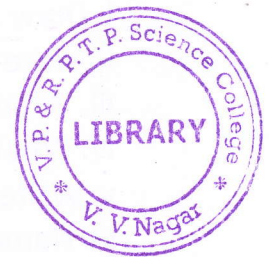
Day: Saturday

Marks: 70

Q.1. Multiple choice questions:

10

- i. Structural and functional unit of skeletal muscle is known as
(a) Sarcoplasm (b) Sarcomere
(c) Sarcoplasmic reticulum (d) Sarcolemma
- ii. Name of the sheath of the connective tissue that wraps around individual muscle fibers is?
(a) Perimysium (b) Epimysium
(c) tendon (d) endomysium
- iii. How many pairs of spinal nerves are there?
(a) 12 (b) 20
(c) 30 (d) 31
- iv. How many neurons are there in an adult brain?
(a) 100million (b) 10 billion
(c) 10 million (d) 100 billion
- v. Which part of the brain is known as emotional brain?
(a) Epithalamus (b) Limbic system
(c) Broca's area (d) Corpus callosum
- vi. A loop of nerve is called as?
(a) Cervical plexus (b) Branchial plexus
(c) Ansacervicalis (d) None of these
- vii. Olfactory receptors are also called as?
(a) Chemoreceptors (b) Mechanoreceptors
(c) Photoreceptors (d) None of these
- viii. The second layer of eye is called as?
(a) Sclera (b) Choroid layer
(c) Retina (d) None
- ix. Which of the following is a liquid soluble hormone?
(a) cortisol (b) Melatonin
(c) Prostaglandin (d) Secretin
- x. Which gland maintains the body biological clock?
(a) Pituitary (b) Parathyroid
(c) Adrenal (d) Pineal



[1]

[P.T.O.]

Q.2. Fill in the blanks:

[08]

- i. In muscle fibers.....is the oxygen binding protein.
- ii. Medulla oblongata controls.....function.
- iii.pairs of spinal nerves
- iv. Pancreases is a

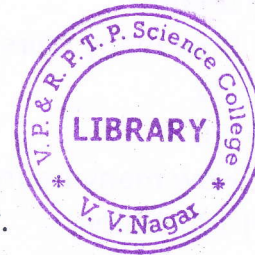
State true or false:

- v. Smooth muscle tissue has more power of regeneration than cardiac muscle.
- vi. Bipolar neurons are found in retina of eye and inner ear.
- vii. Spinal nerves are part of PNS.
- viii. Secretin hormone stimulates secretion of bile and pancreatic juice.

Q.3. Short answer questions. **Write any ten.**

[20]

- i. Draw and label cardiac muscle fiber.
- ii. write in brief creatine phosphate .
- iii. What is muscle fatigue?
- iv. What are neurotransmitters?Name any four.
- v. Write the functions of CSF.
- vi. Name the cranial nerves with their order number.
- vii. Define conditioned reflex.
- viii. List the name of organs receiving sympathetic nerves.
- ix. Write a note on special sense
- x. Draw T.S. Pancreases and label it.
- xi. List the functions of hormones.
- xii. Write the role of hormone receptors.



Q4. Long questions . Answer any four.

[8x4=32]

- i. Write a brief account of regeneration of muscle tissue.
- ii. Describe properties of muscle tissue.
- iii. Describe the structural classification of Neurons.
- iv. Describe the structure and functions of Medulla oblongata .
- v. Describe autonomous nervous system of mammals. Give diagram.
- vi. Write about Cataracts and Glaucoma disorders.
- vii. Describe hormonal disorder of thyroid glands.
- viii. Describe mechanism of hormone action.

-----X-----