

A Charutar Vidya Mandal's Institution
V.P. & R.P.T.P. SCIENCE COLLEGE
(AUTONOMOUS) (Grant-in-Aid)
Affiliated to Sardar Patel University
VALLABH VIDYANAGAR-388120



B.Sc. Zoology, Semester-3 Internal Examination - 2025
US03MAZOO02, Physiology & Adaptation

Date: 24-09-2025, Wednesday

Time: 2:45 pm to 4:15pm

Total marks: 30

Q-1. MULTIPLE CHOICE QUESTIONS:

(6Marks)

1. Which hormone is responsible for stimulating gamete formation?
(a) LH (b) FSH (c) ACTH (d) TSH
2. Which hormone is responsible for maintain calcium & phosphate level in the blood?
(a) Adrenalin (b) Estrogen (c) T₃ & T₄ (d) Parathormone
3. In Human being the duration of cardiac cycle is
(a) 0.08 Sec. (b) 0.4 Sec (c) 0.8 Sec (d) 1.2 Sec
4. The name of "X" cranial nerve is
(a) Olfactory nerve (b) Optic nerve (c) Trigeminal nerve (d) Vagus nerve
5. Gaps between the myelin sheath on an axon is known as
(a) Neurolemma (b) Node of Ranvier (c) Synapse (d) Nissel bodies
6. What is the term for animals that have adaptations for digging?
(a) Volant (b) Arboreal (c) Fossorial (d) Cuesorial



Q-2 Describe the secretion and functions of Thyroid hormone.

(6Marks)

OR

Q-2 Describe the hormones and their functions secreted from Adenohypophysis.

(6Marks)

Q-3 Explain the mechanism of respiration in Human. (6Marks)

OR

Q-3 Describe the structure of Human heart with labelled diagram. (6Marks)

Q-4 Describe the Structure of nerve fiber with labelled diagram (6Marks)

OR

Q-4 Write a note on structure and function of Human fore brain. (6Marks)

Q-5 Write a note on Aquatic adaptation in animals. (6Marks)

OR

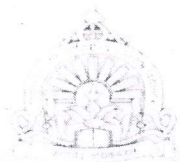
Q-5 Describe the Arboreal adaptation in animals. (6Marks)



No of printed pages: 01

Supervisor sign

Seat No.:



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B.Sc. (Semester -3) Quiz - 2025
US03MAZOO02 : PHYSIOLOGY & ADAPTATION

Date: 24-09-25, WEDNESDAY

Time: Maximum 20 minutes

Total marks :15

Q-1 Fill in the blanks with appropriate answer given in the bracket.

[08]

- (i) _____ hormone is responsible for reabsorption of water.[TSH/ADH]
- (ii) Glucocorticoids is synthesis from _____ gland.[Adrenal/ Pitutary]
- (iii) _____ of the brain regulates the respiratory process.[Medulla oblongata/Cerebellum]
- (iv) Most of the carbon dioxide produced in the tissues is transported to the lungs as _____
[carbonates/ bicarbonates]
- (v) The right and left halves of the cerebral hemispheres are connected to each other mainly by a bundle of neuron axons called the _____ [Thalamus/ Corpus callosum]
- (vi) _____ is the unit of Nervous system.[Brain/ Neuron]
- (vii) Moisture conservation is a characteristic of _____ adaptation. [Aerial/ Desert]
- (viii) Presence of single ovary is the characteristic of _____ adaptation. [Aerial / Terrestrial]

Q-2 Whether the following statement is true or false. Write your answer in the box

[07]

- (i) Endocrine glands secret products into the ducts and transfer it into body cavities. []
- (ii) Testosterone hormone is synthesis from Alpha cells. []
- (iii) The gaseous exchange in alveoli is a type of simple diffusion. []
- (iv) The white fatty substance that coats axons to increase signal speed is known as myelin sheath. []
- (v) The effects of sympathetic and parasympathetic neurons on the heart can best be described as antagonistic. []
- (vi) Electric organ present in the Scoliodon. []
- (vii) Bat is the example of Echolocation. []

