

Department of Life Sciences
UNIVERSITY OF CALICUT

Physiology M.Phil Entrance examination, Month, Year.

Time: 3 hours

A. Answer all in one word.

15 X 2 = 30 marks

1. Which is known as the antihaemorrhagic vitamin?
2. The salivary gland situated at the region of ear is -----
3. The HCl present in gastric juice is secreted by -----
4. Pancreatic duct joins the bile duct before it enters the duodenum and is slightly swollen known as -----
5. Brunner's glands are present in
6. The process of swallowing of food in to the stomach is known as -----
7. The hormone secreted by intestinal mucosa, which inhibit the secretion of gastric juice is ---
8. A small amount of CO₂ entering the RBC combines chemically with hemoglobin to form ---
9. The difference between systolic and diastolic blood pressure is called -----
10. Cells that electrically insulate axons in the CNS are -----
11. The branch of the ANS that induces the "fight or flight" response is the -----division.
12. Intercalated discs are present in which tissue?
13. The functional unit of skeletal muscle fibre is called the -----
14. The hormones FSH and LH are called -----
15. Cluster of neuron cell bodies usually outside the CNS is called -----

B. Answer any six.

6 X 5 = 30 marks

16. Describe the propagation of an action potential. Contrast this with myelinated and unmyelinated neurons.
17. List the functions of hypothalamus. How does it regulates body temperature?
18. Distinguish working memory from long term memory and explain the relationship between them.
19. Write on reflex action.
20. Describe the physical state of muscle fibre in rigor mortis and the conditions that produce this state.
21. What is Hamberger phenomenon? Explain how CO₂ is transported through blood?

22. How is the clotting cascade initiated? How does the extrinsic pathway recruit the intrinsic pathway?
23. Describe the major causes, types and symptoms of epilepsy.
24. Properties of sensory receptors.

C. Answer any two.

2 X 20 = 40 marks

25. Describe the major causes, signs, and symptoms of Parkinson's disease. Add note on latest trends in the management of Parkinsonism.
26. Explain the impact of diet and exercise on health and diseases?
27. Explain the hormonal regulation of blood glucose level.