

D3AZL1901

(2 Pages)

Name.....

Reg. No.....

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2020
ZOOLOGY
FZOL3C07 - PHYSIOLOGY

Time: Three Hours

Maximum Weightage: 30

Part A: Answer any *four* questions. Each carries *two* weightage.

1. What is the clinical significance of BMR?
2. What is renal clearance? What is the renal clearance value of glucose?
3. What is the importance of functional residual capacity in lung diseases?
4. What are the components of basal ganglia?
5. Write a note on pain receptors and their stimulation.
6. Comfort zone is subjective. Explain.
7. Differentiate cardiac muscle from skeletal muscle.

(4 × 2 = 8 weightage)

Part B: Answer any *four* questions. Each carries *three* weightage.

8. What is the role of hypothalamus in temperature regulation?
9. From the perspective of COVID-19 explain the importance of dead space.
10. Explain the onset of ischemic heart diseases with examples.
11. Explain the physiology of taste with the help of diagrams.
12. Describe the neural circuitry of the retina and visual pathways with supporting diagrams.
13. What are the components of motor cortex? Explain their functions.
14. Explain the importance of counter current system in urine formation.

(4 × 3 = 12 weightage)

(P.T.O.)

Part C: Answer any *two* questions. Each carries *five* weightage.

15. Explain gas transport in man. Add notes on the factors affecting oxygen transport and the role of brain stem in the regulation of respiration.
16. Discuss types of memory and the mechanisms memory formation. Add notes on senile dementia and Alzheimer's disease.
17. Explain the composition and formation of lymph and functions of lymph and lymphatic system.
18. Discuss the processes of digestion and absorption of carbohydrates, lipids and protein. Add a brief note on antioxidants.

(2 × 5 = 10 weightage)