

**D 43547**

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Name.....

Reg. No.....

**SECOND SEMESTER M.Sc. DEGREE EXAMINATION, JUNE 2018**

(CUCSS)

Zoology

**ZO 2CT 04 – PHYSIOLOGY**

(2016 Admissions)

Time : Three Hours

Maximum : 36 Weightage

**Part A**

*Answer all questions.*

1. What is expiratory reserve volume?
2. What is cerebrospinal fluid? Mention its functions.
3. What is micturition reflex?
4. Write notes on renal clearance.
5. Comment on gastric motility and emptying.
6. What is somatosensory cortex?
7. Write notes on yellow spot and blind spot.
8. What is inverse stretch reflex?
9. Write notes on the role of surfactant in alveolar ventilation.
10. What are the causes of Obesity?
11. Distinguish between Vital capacity and Total lung capacity.
12. What is reflex arc?
13. Write notes on neural cell types.
14. What are antioxidant nutrients?

(14 × 1 = 14 weightage)

**Part B**

*Answer any seven of the following.*

15. Explain the functions of autonomic nervous system.
16. Describe the counter current multiplier system in human kidney.
17. Write an account on Ischemic heart diseases.

**Turn over**

18. Explain excretion in invertebrates.
19. Describe the mechanisms of pulmonary ventilation.
20. Comment on respiratory centres and factors affecting respiration.
21. Explain the pain receptors and their stimulation.
22. Comment on the organization and functions of diencephalon.
23. Discuss thermoregulation under hot conditions.
24. Explain the role of hormones in the control of gastrointestinal motility.

(7 × 2 = 14 weightage)

### Part C

*Answer any two of the following.*

25. Give an account on the physiology of urine formation.
26. Explain the exchange of gases in lungs and tissues.
27. Describe the structural organization of human brain.
28. Give an account on physiological anatomy of cardiac muscle.

(2 × 4 = 8 weightage)