(Pages: 2)

Name:.... Reg. No:....

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2019

(Regular/Supplementary/Improvement)

(CUCSS - PG)

CC17P ZO2 C04 - PHYSIOLOGY

(Zoology)

(2017 Admission onwards)

Time: Three Hours

Maximum: 36 Weightage

I. Answer *all* questions:

- 1. What is meant by physiological fuel value of food stuffs?
- 2. Describe the histology of respiratory membrane.
- 3. What is Parkinsons disease?
- 4. Explain Sinu-atrial node.
- 5. Enumerate the functions of CSF.
- 6. Mention the role of 2, 3 DPG in oxygen transport.
- 7. Describe the structure of a taste bud.
- 8. Comment on the responses of the body when exposed to extremes of hot.
- 9. Write a note on functions of lymph.
- 10. Write an account on Brodman map.
- 11. Explain Henle's loop as counter current multiplier system?
- 12. Mention the pressures that promote and oppose glomerular filtration.
- 13. Comment of short term memory.
- 14. Write notes on the stimulation of nociceptors.

(14 x 1 = 14 Weightage)

- II. Answer any seven of the following.
 - 15. Write a brief account on reflex action.
 - 16. Explain the formation and flow of lymph.
 - 17. Describe the respiratory volumes and capacities.
 - 18. Explain behavioural and hormonal regulation of body temperature.
 - 19. Define Basal Metabolic Rate. Write on the factors influencing it.
 - 20. How do meninges and BBB protect the brain?
 - 21. Describe the routes and mechanisms of renal tubular reabsorption and secretion.
 - 22. Write notes on JG apparatus and its function.
 - 23. Describe the structure and functions of brain stem.
 - 24. Describe the physiology of colour vision.

(7 x 2 = 14 Weightage)

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III. Answer any *two* questions.

- 25. Write an essay on the functional areas of cerebral cortex and their functions.
- 26. Discuss the coronary circulation.
- 27. Explain the physiology of olfaction.
- 28. Explain renal regulation of acid-base balance and electrolyte balance.

(2 x 4 = 8 Weightage)
