

MAR IVANIOS COLLEGE (AUTONOMOUS) THIRUVANANTHAPURAM

Reg. No.:

Name:

Third Semester B.Sc. Degree Examination, November 2016

First Degree Programme under CBCSS

Complementary Course: Zoology – III (for Botany)

AUZO331.2a: Functional Zoology

(for 2014 Admissions – Improvement Only)

Time: 3 Hours

Max. Marks: 80

Instruction: Draw diagrams wherever necessary.

SECTION – A

Answer ALL questions in one or two sentences.

- 1. Distinguish between autotrophy and heterotrophy.
- 2. What is malnutrition ?
- 3. Differentiate Hypo and Hypercapnia.
- 4. Comment on ECG.
- 5. What is uremia ?
- 6. Comment on hypersensitivity.
- 7. Name two thyroid disorders.
- 8. Comment on anticoagulants.
- 9. What is rigor mortis ?
- 10. Define Osmoregulation.

(10 × 1 = 10 Marks)

SECTION – B

Answer any **EIGHT** questions, not exceeding a paragraph.

- 11. Write short note on neurotransmitters.
- 12. Comment on respiratory pigments.
- 13. Distinguish between neurogenic and myogenic heart.

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- 14. Explain all or none law.
- 15. What is a muscle twitch ?
- 16. Comment on Saltatory transmission.
- 17. Differentiate between diabetes mellitus and diabetes insipidus.
- 18. What is oxygen debt ?
- 19. Briefly explain the immunization programmes.
- 20. What is dialysis ?
- 21. Comment on carbon monoxide poisioning.
- 22. What is EEG?

 $(8 \times 2 = 16 \text{ Marks})$

SECTION – C

Short essay type : Answer any SIX questions.

- 23. Explain the oxygen and carbon dioxide transport mechanism in the body.
- 24. Comment on cardiovascular disorders.
- 25. Write an account on the physiological effects of smoking.
- 26. Explain the mechanism of urine formation.
- 27. Give an account on the types of immunity.
- 28. Describe the pathways of blood clotting mechanism.
- 29. Explain synaptic transmission.
- 30. Describe the hormonal control of renal function.
- 31. Comment on the etiology of AIDS and its control measures.

(6 × 4 = 24 Marks)

SECTION – D

Long essay type : Answer any **TWO** questions.

- 32. Describe the physiological role of major class of vitamins and their deficiency disorders.
- 33. Explain the role of hormones in reproductive cycles.
- 34. Give an account on the ultra structure of skeletal muscle and explain the mechanism of muscle contraction.
- 35. Explain the structure and functions of different classes of immunoglobulins.

 $(2 \times 15 = 30 \text{ Marks})$