



MAR IVANIOS COLLEGE (AUTONOMOUS)
THIRUVANANTHAPURAM

Reg. No.:

Name:

Third Semester B.Sc. Degree Examination, November 2015

First Degree Programme under CBCSS

Complementary Course: Zoology – III (for Botany)

AUZO331.2a: Functional Zoology

Time: 3 Hours

Max. Marks: 80

Instruction: Draw diagrams wherever necessary.

SECTION – A

Answer ALL questions in one or two sentences.

1. What is Pernicious Anaemia ?
2. What is Apnoea ?
3. What is PCV ?
4. What is ECG ?
5. What is SA Node ?
6. What is Proteinuria ?
7. What is rigor mortis ?
8. What is arteriosclerosis ?
9. Comment on Scurvy.
10. What is Myocardial infarction ?

(10 × 1 = 10 Marks)

SECTION – B

Answer any EIGHT questions, not exceeding a paragraph.

11. What is the difference between Marasmus and Kwashiorkor ?
12. Differentiate between fat soluble and water soluble vitamins.
13. What are anticoagulants ? Give few examples.
14. Comment on Hypercapnia and Hypocapnea.

1177

15. Comment on the structure of Haemoglobin.
16. Explain different types of Excretion.
17. What are the major causes of anaemia ?
18. Comment on Cardiac muscles ?
19. Explain *all or none law* of skeletal muscle contraction.
20. Explain Fatigue.
21. Write notes on Active and Passive immunity.
22. Differentiate between *diabetes mellitus* and *diabetes insipidus*.

(8 × 2 = 16 Marks)

SECTION – C

Short essay type : Answer any SIX questions.

23. Describe the chemical transmission across the synapses.
24. Discuss the cause and symptoms of Carbon monoxide poisoning.
25. Give brief account of functions of Blood.
26. Comment on haemophilia and thrombosis.
27. Write an account on AIDS.
28. Explain the mechanism of muscle contraction.
29. What are the physiological effects of smoking on human body ?
30. Briefly explain the cause and symptoms of Goitre, Cretinism, Gigantism and Acromegaly.
31. Briefly Explain Simple Muscle Twitch.

(6 × 4 = 24 Marks)

SECTION – D

Long essay type : Answer any TWO questions.

32. Describe the structure of neuron and mechanism of impulse transmission through neuron.
33. Write an essay on types of immunity & cells and organs of immune system.
34. Describe the structure of human nephron and urine formation.
35. Briefly explain the O₂ and CO₂ transport.

(2 × 15 = 30 Marks)

[**]**