(Pages : 2)   Reg. No..............................

                                                            Name...................:................

B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, OCTOBER 2016
Third Semester

Complementary Course—ZOOLOGY, HUMAN PHYSIOLOGY AND IMMUNOLOGY

(Common for all programmes having Zoology as Complementary Subject)

[2013 Admission onwards]

: Three Hours   Maximum : 60 Marks

Part A (Short Answer Questions)

Answer all questions.

1 *mark each.*

What do you mean by Osmoregulation ?

What is Blood Pressure ?

What are Antigens ?

Explain All *or* None law.

What is Right mortis ?

What are Haptens ?

Note on Memory Cells.

Note on Vitamin B_{12} or Cobalamin.

                                                            $(8 \times 1 = 8)$

Part B (Brief Answer Questions)

Answer any six questions.

2 *marks each.*

Note on Immunodeficiency diseases.

Explain Autoimmunity.

Give a brief note on Neurotransmitters.

Comment on Monoclonal antibodies.

Explain Vaccine.

What do you mean by O_2 debt ?

Explain Physiological effect of Smoking.

                                                            Turn over

16. Note on Cardiac muscles.

17. Explain Juxtaglomerular Apparatus.

18. Write the differences between Humoral and Cell Mediated Immunity.

$(6 \times 2 = 12)$

Part C (Problems/Derivations)

Answer any **four** *questions.*

4 marks each.

19. Explain transport of O_2.

20. With the help of a labelled diagram, explain the structure of Immunoglobulin.

21. Briefly describe Secondary Lymphoid Organs.

22. Describe clinical application of Antigen-Antibody reactions.

23. Explain the Impulse Transmission across the Synapse.

24. With the help of a diagram explain the structure of Skeletal Muscle.

$(4 \times 4 = 16)$

Part D (Long Answer/Problem Questions)

Answer any **two** *questions.*

12 marks each.

25. Explain on various cells of the Immune System.

26. Explain blood, its function and its composition.

27. Describe the process of Urine formation and mention Counter Current Exchanger System.

28. Give a brief account on various types of Immunity.

$(2 \times 12 = 24)$