(i) Printed Pages: 3 Roll No.

(ii) Questions :9 Sub. Code : 0 5 5 7

Exam. Code : 0 0 0 6

B.A./B.Sc. (General) 6th Semester (2054)

BIO-CHEMISTRY

Paper-B: Applied Bio-Chemistry-II

Time Allowed: Three Hours] [Maximum Marks: 45

Note:—Attempt FIVE questions in all, including Question
No. 1 which is compulsory and selecting ONE question
from each Unit. Students are advised to solve questions
in orderly manner and clearly mention its number and
its sub-parts.

- 1. Give answers of the following:
 - (1) Give the one function of antigen in immune system.
 - (2) What are antibodies?
 - (3) Write the names of two components of innate immunity.
 - (4) Write two functions of ELISA.
 - (5) What are the two types of immunity?
 - (6) Write the functions of Hemoglobin.

- (7) What is neuron?
- (8) Give names of two muscle proteins.
- (9) What are the Synapses?

 $9 \times 1 = 9$

UNIT-I

- 2. (a) Describe in brief about the non-specific immunity in human.
 - (b) Write about the Major Histocompatibility Molecules (MHC) and its functions. 5,4
- 3. (a) What is complement system? Write about the different roles of complement system.
 - (b) Describe in brief about the Immunoblotting technique. 5,4

UNIT—II

- 4. (a) Briefly describe the composition of blood.
 - (b) What is buffer system? Write about the acid-base equilibrium. 5,4
- (a) Explain in brief, how acid-base balance is maintained in lungs.
 - (b) Briefly describe about the various types of anti-coagulants in human. 5,4

UNIT—III

- 6. (a) Write about the structure of muscle cell.
 - (b) Make suitable diagram of cardiac muscle as seen by electron microscope. 5,4

- 7. (a) Give the sequence of events involved in excitation contraction coupling.
 - (b) Write the role of protein in muscle contraction. 5,4

UNIT-IV

- 8. (a) Write in brief about the mechanism of nerve impulse.
 - (b) Classify the functions of neuron. 4,5
- 9. (a) What is the synaptic potential?
 - (b) Briefly write about the Neurotransmitters. 5,4