

Exam.Code:0006
Sub. Code: 0557

1058

B.A./B.Sc. (General) Sixth Semester

Bio-Chemistry

Paper – B: Applied Bio-Chemistry – II

Time allowed: 3 Hours

Max. Marks: 45

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting one question from each Unit.

x-x-x

I. Answer the following:-

- a) Name a: Nerve gas and a neurotransmitter.
- b) Define co-transmitter and neuromodulator.
- c) What are different types of hemoglobin?
- d) Name different anemia.
- e) What are different muscle types? Give examples.
- f) What are: Immunoglobulins, epitope, Dendritic cell?
- g) The enzymatic process to dispose toxins by liver are
- h) What is xenobiotic toxicity?
- i) Deficiency of Calcium will lead to _____ (9x1)

UNIT – I

- II. a) What are cell mediated and humoral immune responses?
- b) Describe (i) complement system (ii) ELISA (5,4)
- III. a) Describe the structure and types of immunoglobulins. What can they be used for by the host?
- b) What are (i) Hemagglutination Method (ii) Antigens and complement (5,4)

UNIT –II

- IV. a) Describe the disorders of hemoglobin.
- b) Write notes on:-
 - i) Blood coagulation
 - ii) Biotransformation (5,4)

P.T.O.

(2)

- V. a) What role does the liver play in detoxification?
b) Describe: (i) Acid-base balance in body (ii) Role of kidney in acid/ base regulation.
(5,4)

UNIT - III

- VI. a) Describe the structure of muscle cell and its organization in fibre.
b) Write notes on:-
i) Muscle proteins
ii) Sliding filament theory
(4,5)
- VII. a) What do you understand by Muscle contraction & relaxation?
b) Discuss (i) Types of muscles (ii) Role of calcium in muscle activity
(5,4)

UNIT - IV

- VIII. a) Write notes on:-
i) Neuro muscular junction
ii) Nerve impulse.
b) What is the organisation of Central Nervous system and how does it work?
(5,4)
- IX. a) Discuss the biochemistry behind transmission of nerve impulse.
b) Write notes on:-
i) Synapse
ii) Nerve fibers.
(5,4)

x-x-x