

1128

**B.A./B.Sc. (General) Fifth Semester
Biochemistry
Paper -B: Applied Biochemistry – I**

Time allowed: 3 Hours

Max. Marks: 45

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting one question from each Unit.

x-x-x

I. Attempt the following:-

- a) Name the coenzyme forms of vitamins Thiamine, Pyridoxine & Folic acid.
- b) What is Detoxification? Name any two enzymes involved in detoxification.
- c) Name the hormones secreted by anterior pituitary?
- d) Define SDA.
- e) What is antioxidant theory?
- f) What are Organophosphate pesticides (6x1½)

UNIT – I

- II. a) Explain the role of vitamin K in coagulation.
b) Explain the Biochemical function of Riboflavin, Niacin and Biotin. (4,5)
- III. Write short notes on:-
 - a) Role of Vitamin D
 - b) Role of Vitamin A (4,5)

UNIT – II

- IV. a) Write and Explain R.Q.
b) Starvation and obesity. (4,5)
- V. a) Explain BMR and various factors Affecting BMR.
b) Write a short note on Protein Energy Malnutrition (5,4)

P.T.O.

(2)

UNIT - III

VI. Write short notes on following:-

- a) Biochemical basis of carbamate toxicity
- b) Mechanism of Phase I Reactions involved in detoxification (4,5)

VII. a) What is meant by physiochemical properties? Explain the importance of physiochemical properties of toxic chemicals.

- b) Explain the various conjugation reactions involved in the metabolism of Xenobiotics. (4,5)

UNIT - IV

VIII. Write and explain:-

- a) General mechanism of steroidal hormones
- b) Mechanism and action of thyroid hormones (4,5)

IX. a) Explain the hormones secreted by pancreas

- b) Explain in brief PTH and calcitonin. (5,4)

x-x-x