

4. (a) What is meant by Protein-energy malnutrition. Discuss the different forms of PEM.
- (b) Explain underlying cause of association of a characteristic musty odour in urine, mental Retardation and albinism in a patient of phenylketonuria.
- (c) Discuss briefly about Hashimoto's thyroiditis disease. (5×3)
5. (a) What is the causative agent of the following diseases :
Influenza Tetanus Malaria Kala Azar
- (b) Write a detailed note on the different types of Vaccines.
- (c) Explain the life cycle of Mycobacterium Tuberculosis and mode of treatment. (4,5,6)
6. (a) What causes Scurvy? Elaborate on pathophysiology of Scurvy.
- (b) Why there is not an effective vaccine against HIV?
- (c) What are systemic diseases? Discuss any one in detail. (5×3)

(200)

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 5803

H

Unique Paper Code : 2494002005

Name of the Paper : Biochemical Correlation of Diseases (GE)

Name of the Course : B.Sc. (Hons.) Biochemistry

Semester : IV

Duration : 2 Hours

Maximum Marks : 60

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
 2. There are Six questions.
 3. Attempt any four questions.
 4. All questions carry equal marks.
 5. Question no. 1 is compulsory,
1. (a) Write a comment on the following statements :
(i) Excessive thirst may be observed in a patient of uncontrolled Diabetes Mellitus.

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- (ii) Urine sample of a patient of Alkaptonuria turns black on exposure to air.
- (iii) Deficiency of Vitamin A causes Anaemia.
- (iv) Increased HDL counters the atherogenic tendencies of LDL
- (v) Gaucher's disease is a lysosomal storage disease.
- (vi) Malarial chills are caused due to lysis of RBCs.

(b) Define the following terms :

- (i) Body Mass Index
- (ii) Toxin
- (iii) Epitope
- (iv) Systemic diseases
- (v) Inactivated Vaccine
- (vi) Chemotherapy

(9,6)

2. Write the biochemical basis and symptoms of the following diseases :

- (i) Von Gierke's disease
- (ii) Diabetes Insipidus

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- (iii) Cushing Syndrome
- (iv) Pellagra
- (v) Tetanus

(3×5)

3. (a) Write differences :

- (i) Grave's disease and Myasthenia Gravis
- (ii) Type I and Type II Diabetes Mellitus
- (iii) Exotoxin and endotoxin
- (iv) Glycogenolysis and Glycogenesis
- (v) Fat Soluble Vitamins and Water-Soluble Vitamins

(b) Identify the following :

- (i) Autoimmune disease resulting in Hyperthyroidism.
- (ii) Buildup of dark pigment in connective tissues such as skin and cartilage.
- (iii) A deficiency disease usually seen in alcoholics.
- (iv) Causing agent of sleeping sickness.
- (v) A retinoid required for rhodopsin formation.

(10,5)

P.T.O.