



UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program / Eighth Semester – 2020

Paper: Bio Chemistry (Sp. Theory-I)

Course Code: CHEM-437 Part – I (Compulsory)

Time: 15 Min. Marks: 10

Roll No. in Fig.

Roll No. in Words.

Signature of Supdt.:

ATTEMPT THIS PAPER ON THIS QUESTION SHEET ONLY.

Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

Q.1. Encircle the correct option.

(10x1=10)

1. Proteins are digested by all the enzymes except:

- (a) Tyrosine (b) Lipase (c) Aminopeptidase (d) Chymotrypsin**

2. Amino acids are absorbed at:

- (a) Colon (b) Stomach (c) Duodenum (d) Jejunum and ileum**

3. Amino acid which participates in transamination is:

- (a) Proline (b) Aspartate (c) Threonine (d) Lysine**

4. The major source of ammonia in the kidney is:

- (a) Glutamine (b) Aspartate (c) Urea (d) None of them**

5. Hypercalcemia occurs in:

- (a) Milk-alkali syndrome (b) Vitamin-D excess (c) Hyperparathyroidism (d) All of them**

6. The hormone that inhibits renal tubular reabsorption of phosphates:

- (a) Calcitonin (b) Thyroxine (c) Parathormons (d) Calcitriol**

7. The magnesium requirement for a day is:

- (a) 100 mg (b) 200 mg (c) 400 mg (d) 600 mg**

8. Iron absorption is decreased by:

- (a) Succinic acid (b) Cysteine (c) Ascorbic acid (d) Phytic acid**

9. β -amino isobutyrate is the product from catabolism of:

- (a) Hypoxanthine (b) Thymine (c) Cytosine (d) Uracil**

10. All of the following drugs inhibit purine De Novo synthesis, except:

- (a) Puromycin (b) Beta mercaptopurine (c) Diazo norleucine (d) Azaserine**



ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Q.2. Give short answers to the following questions. (10x2=20)

1. Write the names of enzymes involved in degradation of proteins.
2. Describe briefly the sources and fates of amino acid pool.
3. What do you mean by ammonia toxicity?
4. ~~What is gout?~~
5. Describe briefly Solvage's pathway of purines.
6. Give the importance of iron in the body.
7. Give the importance of copper in the body.
8. Describe the role of Na, K and Cl in the body.
9. What is the importance of Mn in the human body?
10. Write down the uses of Ethanol.

Q.3. Answers to the following questions. (3x10=30)

1. (a) Describe the various sources of ammonia in the body. Discuss the fate of ammonia in the liver. (5)
(b) Describe the summary of biosynthetic steps of purine nucleotides. (5)
2. (a) Discuss use of bacteria in processing and preserving milk and meat. (5)
(b) Discuss decarboxylation and transamination reactions of amino acids. (5)
3. (a) What is Creatine and Creatinine? Give their synthesis and importance. (5)
(b) Give the sources, absorption, distribution and function of Sulphur in human body. (5)