

[20/A-15]

SEAT No. _____

No. of Printed Pages: 02

SARDAR PATEL UNIVERSITY
S.Y.B. Sc. Semester- IV (Under CBCS)
US04CBCH01 –Biochemistry of Biomolecules -II

Date: 09/04/2019, Tuesday

Time: 10:00am to 01:00pm

Marks: 70

Q-1 Select the Right Answer

[10]

1. Haemoglobin hasstructure.
 - a) Primary
 - b) Tertiary
 - c) Secondary
 - d) Quartarnary
2.is the Protein of Skin and hair.
 - a) Albumin
 - b) Collagen
 - c) Keratin
 - d) Globulin
3. A dipeptide has peptide bonds.
 - a) One
 - b) two
 - c) Three
 - d) Four
4. Which of the following is not an essential Fatty acid?
 - a) Linolic
 - b) Linolenic
 - c) Arachidonic
 - d) Capric
5. Physical state of fat at room temperature is _____.
 - a) Solid
 - b) Liquid
 - c) Gas
 - d) Plasma
6. Which base is absent in DNA?
 - a) Cytosine
 - b) Uracil
 - c) Thymine
 - d) Adenine
7. Which type of sugar is found in DNA?
 - a) Pentose
 - b) Tetrose
 - c) Triose
 - d) Hexose
8. There are _____ major classes of Enzymes.
 - a) 2
 - b) 6
 - c) 4
 - d) 8
9. E.C number of Enzyme comprises..... digits.
 - a) One
 - b) Two
 - c) Three
 - d) Four
10.is also known as Organic cofactor.
 - a) Coenzyme
 - b) Apoenzyme
 - c) Holoenzyme
 - d) Metalloenzyme

①

(P.T.O)

Q-2 Answer the following in brief (Any Ten)

[20]

- 1) What are Conjugated proteins? give example.
- 2) Briefly discuss Formation of Peptide bond of Protein.
- 3) Define : a)Salting in b) Salting out.
- 4) What is Saponification number ? Explain.
- 5) What are MUFA and PUFA.? give examples.
- 6) Write a note on Antioxidants.
- 7) What is Complementary base pairing?
- 8) Differentiate between : Nucleotide and Nucleoside.
- 9) What is Plasmid? Write its Characteristics.
- 10) Define: a)Catalytic site of enzyme b) Isoenzymes.
- 11) Differentiate between Coenzyme and Cofactor.
- 12) Give Classification of Coenzymes.

- Q-3** A Discuss denaturation of proteins in detail [06]
B Give Functional classification of Proteins with suitable Examples. [04]

OR

- A Give a detailed note on: Structure of Haemoglobin. [06]
B Discuss Secondary structure of protein. [04]

- Q-4** A Write about Phospholipids and Give its significance. [05]
B Write short note on Cholesterol. [05]

OR

- A Give a detailed note on: Bloor's Classification of Lipids. [05]
B Discuss in detail about Lipoprotein and give its functions [05]

- Q-5** A Discuss Avery, Macleod, McCarty transformation experiment. [05]
B Write a note on: Tertiary structure of DNA. [05]

OR

- A Discuss Hershey and Chase experiment to confirm DNA as a genetic material. [05]
B Draw the structure and Give detailed note on: Types of RNA. [05]

- Q-6** A Discuss in detail: IUB classification of Enzymes. [06]
B Explain various types of specificity of Enzymes. [04]

OR

- Give a detailed note on factors affecting Enzyme activity. [10]

*****X*****

(2)