



UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program :Third Semester – 2020

Paper: Zoology-III (Biochemistry)

Course Code: ZOOL-201/ZOL-21302Part – I (Compulsory) Time: 15Min. Marks: 10

Roll No. in Fig.

Roll No. in Words.

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.

Signature of Supdt.:

Q.1. Encircle the right answer cutting and overwriting is not allowed. (10x1=10)

1. All the members of a species that live in area make up
 - A. An ecosystem
 - B. A habitat
 - C. Population
 - D. A community
2. A community and its abiotic environment constitutes a
 - A. Biosphere
 - B. Habitat
 - C. Ecosystem
 - D. Food web
3. Genetic drift is found in
 - A. Small population with or without mutated genes
 - B. Large population with random mating
 - C. Plant population
 - D. Animal population
 - E. None of these
4. The important evidence in the favour of organic evolution is the occurrence of
 - A. Homologous and analogous organs
 - B. Homologous organs only
 - C. Homologous and vestigial organs
 - D. Analogous and vestigial organs
 - E. None of these
5. A keto pentose will have _____ stereoisomers
 - A. 4
 - B. 8
 - C. 6
 - D. 10
 - E. None of these
6. Which of the following is a keto triose?
 - A. Dihydroxyacetone
 - B. Glyceraldehyde
 - C. Ribulose
 - D. Erythrose
 - E. All of above
7. A tripeptide has
 - A. 3 amino acids and 1 peptide bond
 - B. 3 amino acids and 2 peptide bonds
 - C. 3 amino acids and 3 peptide bonds
 - D. 3 amino acids and 4 peptide bonds
8. Which of the following is not the classified form of conjugated proteins?
 - A. Lipoproteins
 - B. Glycoproteins
 - C. Metalloproteins
 - D. None of these
9. The melting point of fatty acids depends upon chain length and _____
 - A. The shape of the fatty acids
 - B. The position of the double bond
 - C. Charge on the carbon
 - D. Degree of unsaturation
10. Which of the following form of lipids are also referred as neutral lipids?
 - A. Triacylglycerol
 - B. Steroid
 - C. Phospholipids
 - D. Wax



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Part – II

Time: 2 Hrs. 45 Min. Marks: 50

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Q.2. Give short answers of the following:

(10x2=20)

- i. Write about molecular evidence about evolution.
- ii. Write about energy variation with increasing tropic levels.
- iii. What is meant by ecosphere and lithosphere?
- iv. What you know about origin of life?
- v. Write about irreversible and reversible enzyme inhibitors.
- vi. How three dimensional structure of protein is formed?
- vii. What is difference between homo and hetero-polysaccharides?
- viii. Under what condition(s), lipid store in the body.
- ix. Differentiate between isoprenoids and terpenoids
- x. Write about globular protein.

Q.3. Answers the following questions.

(3x10=30)

- I** Write a comprehensive note on population ecology.
- II** Explain factors initiating elementary evolutionary changes in detail.
- III** What is meant by lipids? Write in detail about structural lipids in membranes.