

SECTION-A**Note:**

- 1) Attempting all MCQs is compulsory. This paper along with the OMR sheet must be returned to the superintendent after due time.
- 2) Fill the circle (A)(B)(C)(D) which one is correct with blue or black ball point, in this sheet as well as in separate OMR Sheet like ●
- 3) If more than one circle in the OMR sheet is filled then no credit will be given to such answer.

Which vitamin is fat-soluble _____.

- (A) Vitamin "A" ● Vitamin "B" (C) Vitamin "K" (D) Vitamin "D"

ATP is a: _____.

- Nucleotide (B) Lipid (C) Enzyme (D) Carbohydrate

Felis domestica is the scientific name of _____.

- (A) Lion (B) Dog ● Cat (D) Tiger

The number of fish water fish species in Pakistan are _____.

- (A) 179 (B) 189 (C) 190 (D) 195

The branch of biology which deals with the transmission of heredity from parents to offspring is called _____.

- (A) Biotechnology ● Genetics (C) Morphology (D) Physiology

In biological experiments testing of hypothesis is based on _____.

- (A) Conclusion ● Deduction (C) Data (D) Observation

A severe deficiency of vitamin "C" causes _____ disease.

- (A) Night blindness ● Scurvy (C) Beri Beri (D) Blindness

Ion to which oxygen is attached in the hemoglobin is _____.

- (A) Calcium (B) Sodium (C) Potassium ● Iron

In what phase of Mitosis Chromosomes become divide _____.

- (A) Prophase (B) Metaphase (C) Anaphase (D) Telophase

Study of insects is called _____.

- (A) Immunology (B) Parasitology ● Entomology (D) Paleontology

Blue green algae belongs to kingdom _____.

- (A) Protista (B) Fungi ● Monera (D) Proifera

Inside the nucleus, granular matter is _____.

- Cytoplasm (B) Protoplasm (C) Nucleoplasm (D) Cell sap

BIOLOGY (Fresh) 9th

Note: Time allowed for section B and C is 2 hours and 40 minutes.

SECTION "B"

Marks: 32

II. Attempt any EIGHT Parts out of the following. Each Part carries equal marks.

- i. Write note on the contribution of Abu Usman Umer Aljahiz.
- ii. Briefly discuss that Mathematics as integral part of Science.
- iii. Enlist the names endangered species of plants and animals of Pakistan.
- iv. Write down note on Golgi bodies.
- v. Describe Supporting tissues or Mechanical tissues of plant.
- vi. What is a cell cycle?
- vii. Write mechanism of enzyme action (Lock and key Model).
- viii. Write any four environmental hazards related to use of fertilizers.
- ix. Describe the causes of malnutrition.
- x. Explain the significance of Transpiration.
- xi. Write note on capillaries.

SECTION "C"

Marks: 21

Note: Attempt any THREE questions of the following. Each question carries equal Marks.

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| III. | (a) Define the terms Species, Population, Community and Ecosystem | 4 |
| | (b) Describe the Hypothesis of A.F.A king and Ronald Ross about Malaria. | 3 |
| IV. | (a) Discuss the causes and effects of deforestation. | 3 |
| | (b) Define cell. Explain the cell membrane and Nucleus of a cell. | 4 |
| V. | (a) What is Mitosis? Explain various phases of Mitosis in detail. | 4 |
| | (b) Explain Respiratory Electron transport Chain. | 3 |
| VI. | (a) Discuss the role of dietary fiber in balanced diet. | 3 |
| | (b) Explain Red Blood cells or Erythrocytes in blood. | 4 |