

Time Allowed: 3 Hrs

Marks: 65

Note: There are **Three Sections** in this paper i.e. A, B and C. Attempt Section A and return it to the Superintendent within the given time. No marks will be awarded for **Cutting, Erasing and Overwriting**.

Mobile Phone is strictly prohibited in Examination Hall.

Time: 20 Minutes

**SECTION "A"**

Marks: 12

Q.1. Choose the correct option and shade one of (A, B, C, D) in the given **Bubble Answer Sheet**.

- i. Genes controlling ear lobe in human is an example of:  
(A) Continuous variations (B) Discontinuous variations (C) Environmental variations (D) Non environmental variations
- ii. The broadest level of ecological organization is:  
(A) Specie (B) Population (C) Community (D) Biosphere
- iii. If primary consumers decrease sharply, the immediate effect will be seen on:  
(A) Producers (B) Plants (C) Secondary consumers (D) Decomposers
- iv. High Nucleic Acid content in Single Cell Protein can cause:  
(A) Anemia (B) Kidney stones (C) Blindness (D) Paralysis
- v. The EPI aims to vaccinate children between the ages of zero and:  
(A) 7 months (B) 9 months (C) 11 months (D) 13 months
- vi. A chemical in cigarette that causes blood cancer is:  
(A) Nicotine (B) Benzene (C) Carbon monoxide (D) Tar
- vii. Plants living in habitats with salty water are called:  
(A) Xerophytes (B) Mesophytes (C) Hydrophytes (D) Halophytes
- viii. Myelin sheath is fatty material whose function is to provide:  
(A) Energy to axon (B) Insulation to axon (C) Movement to axon (D) Strength to axon
- ix. High blood pressure and clots that cause blood vessels to rupture in the brain result in:  
(A) Coma (B) Epilepsy (C) Paralysis (D) Heart attack
- x. Specialized cells that make up cartilage are known as:  
(A) Chondrocytes (B) Osteocytes (C) Muscle cells (D) Nerve cells
- xi. Almond, plum and cherry trees are most commonly propagated through:  
(A) Cutting (B) Budding (C) Grafting (D) Cloning
- xii. According to the 2015 UN AIDS report, AIDS in Pakistan is most prevalent among people who:  
(A) Inject drugs (B) Do not take bath (C) Are poor (D) Eat contaminated food

ESKPX-XXVI (I)

SSC-(P-II)

BIOLOGY – 10<sup>th</sup>

Time: 2 Hours 40 Minutes

SECTION "B"

Marks: 32

**Q.2. Attempt any EIGHT (08) questions. All questions carry equal marks.**

- |                                                                                                                         |         |
|-------------------------------------------------------------------------------------------------------------------------|---------|
| i. Illustrate carcinogens as a major cause of lung cancer. Also state any two treatment strategies for lung cancer.     | 2+2     |
| ii. List any four different plants/trees and name the specific waste substance each excretes through special pores,     | 1+1+1+1 |
| iii. Clarify the terms renal tubule and renal corpuscle.                                                                | 2+2     |
| iv. What are gonads? Briefly describe both male and female gonads.                                                      | 2+1+1   |
| v. Show how is grey matter different from white matter in brain. Also state the size and shape of pituitary gland.      | 2+1+1   |
| vi. Enumerate middle ear bones and neck bone in human.                                                                  | 3+1     |
| vii. Define asexual reproduction in animals. Also state any three types of asexual reproduction.                        | 1+3     |
| viii. Define a hybrid? Also describe a dominant trait.                                                                  | 2+2     |
| ix. Compare ectoparasites with endoparasites in terms of definition and examples.                                       | 2+2     |
| x. State any four reasons why is the environment inside a fermenter suitable for microorganisms.                        | 1+1+1+1 |
| xi. Briefly describe the terms euphoria and day dreaming caused by narcotics. Also state any two examples of narcotics. | 2+2     |

SECTION "C"

Marks: 21

**Note: Attempt any THREE (03) questions. All questions carry equal marks.**

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|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Q.3. a) Relate oxalate-rich foods to stone formation. Also name two such foods.                                                                | 2+2               |
| b) Define the term blind spot and fovea.                                                                                                       | 1.5+1.5           |
| Q.4. a) Describe ball and socket joint as an example of freely movable joints. Also give any two examples of such joints.                      | 2+2               |
| b) Explain the adaptations of wind pollinated flowers in case of pollen grains and stigma.                                                     | 2+2               |
| Q.5. a) Identify two new phenotypes appearing in F <sub>2</sub> generation. Explain their appearance with reference to independent assortment. | 2+2               |
| b) Define garbage, rubbish, trash and medical wastes. Also state how do they cause land pollution.                                             | 0.5+0.5+0.5+0.5+1 |
| Q.6. a) Why is fermentation considered a useful biological process in food industry? Give any two proofs.                                      | 2+2               |
| b) State one physical, one behavioral and one psychological symptom of drug addiction.                                                         | 1+1+1             |