

MODEL PAPER BIOLOGY CLASS 10

NOTE: Attempt all questions of Section-A by filling the corresponding bubble on the **MCQs RESPONSE SHEET**. It is mandatory to return the attempted MCQs sheet to the Superintendent within given time

SECTION –A

Time: 20 Minutes

Marks: 12

1. During respiration plants release carbon dioxide which is used in:
 - A. Photosynthesis
 - B. Transpiration
 - C. Homeostasis
 - D. Guttation
2. The major cause of kidney stones is:
 - A. Drink plenty of water
 - B. Use of olive oil in food
 - C. Taking more calcium oxalate in food
 - D. Drink plenty of citrus juices
3. A neuron which takes impulses away from the central nervous system to effectors is:
 - A. Associative neuron
 - B. Sensory neuron
 - C. Motor neuron
 - D. Interneuron
4. When glucose level in the blood comes back to normal and pancreas stop the secretion of insulin, this is an example of:
 - A. Blood glucose concentration
 - B. Positive Feedback
 - C. Thermoregulation
 - D. Negative feedback
5. Pectoral girdle and pelvic girdle help in
 - A. movement.
 - B. brain protection.
 - C. muscles development.
 - D. breathing.
6. The national AIDS control programme of Pakistan is currently working to control:
 - A. HIV epidemic
 - B. Covid 19 epidemic
 - C. Polio cases
 - D. Hepatitis

7. Colocasia and garlic reproduce through:
- A. Stolon
 - B. Rhizome
 - C. Corm
 - D. Tuber
8. Which of the following is an example of discontinues variation?
- A. Skin colour
 - B. Height
 - C. Weight
 - D. Ear lobe
9. The structure and chemical makeup of soil in an area affect the types of plants that grow there. Little grasses often dominates area with:
- A. Wet soil
 - B. Dry soil
 - C. Sandy soil
 - D. Loamy soil
10. Major causes of air pollution are:
- A. Oxides of nitrogen and oil spills
 - B. Industrial effluent and oil spills
 - C. Oxides of sulphur and oil spills
 - D. Oxides of nitrogen and particulates
11. In continuous fermentation the exponential growth of microbes is maintained in the fermenter for:
- A. Prolonged periods of time
 - B. Short periods of time
 - C. Separation of products
 - D. Suitable environment
12. Which of the following drug is obtained from animals?
- A. Tincture of iodine
 - B. Fish liver oil
 - C. Streptomycin
 - D. Neomycin

SECTION-B

Time: 2 Hours 40 Minutes

Marks: 32

1. Attempt any **EIGHT** of the following short questions. Each question carries 4 marks.

i. Write **ONE** cause of each given disease.

Disease	Cause
Bronchitis	
Emphysema	
Asthma	
Lung cancer	

- ii. Find out the location of renal tubule in nephron. Also write names of its **THREE** parts.
- iii. Briefly explain skin as thermostatic organ with reference to its role in cold conditions.
- iv. Briefly explain **TWO** types of coordination in living organisms.
- v. Differentiate between nervous coordination and chemical coordination with reference to their modes of coordination, coordinators, effectors and carrier of message.
- vi. Briefly explain the location and movement of hinge joints. Also draw its diagram.
- vii. Write **ONE** function of the following seed parts.
a. Seed coat b. Hilum c. Plumule d. Micropyle
- viii. Briefly describe the composition of chromatin material in eukaryotes.
- ix. Differentiate mutualism and commensalism with one example of each.
- x. Define biotechnology and also write its **THREE** importance.
- xi. List any **FOUR** behavioural symptoms of drug addiction.

Result.pk

SECTION-C

Marks: 21

NOTE: Attempt any **THREE** of the following questions. Each question carries 7 marks.

2. i. Write down the contributions of Abul-Qasim and Al-Farabi in introducing the method of removing stone from the urinary bladder. 4
ii. Define hormone and where they are synthesized in animals? 3
3. i. Differentiate between bone and cartilage with reference to structure and function. 4
ii. Write environmental conditions necessary for germination of seed. 3
4. i. When two Japanese 4 O' clock plants crossed with each other. One of them has red colour flower (R) and other has white flower (r). What will be their F₁ and F₂ generation result? 4
ii. With the help of pyramid diagram shows the number of organisms at each trophic level in an ecosystem. 3
5. i. Discuss **FOUR** most significant uses of single-cell protein. 4
ii. Define hallucinogen. Also give **ONE** example of hallucinogen. 3