



THE ANSWERS MUST BE ATTEMPTED ON THE ANSWER SHEET PROVIDED

Q.1. Answer the following short questions: (15x2=30)

- i. What do know about speciation?
- ii. Describe the principle characteristics of the environment.
- iii. What connects muscle to the bone?
- iv. Explain why there is only one functional egg produced during oogenesis?
- v. Write functions of the parathyroid gland.
- vi. What are the three lines of defense that the body uses to protect itself from pathogens?
- vii. Why are mitochondria known as the powerhouse of the cell?
- viii. What are Paracytic and Diacytic stomata?
- ix. How does information flow between neurons?
- x. What do you know about homeostasis?
- xi. Write about the formation of the seed.
- xii. Write about the Sodium Potassium pump.
- xiii. Which cells are involved in innate immunity?
- xiv. Enlist the plant hormones that are essential for their growth and development?
- xv. What is the main concept of macroevolution?

Q.2. Answer the following questions.

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| 1 | (a) Differentiate between central and peripheral nervous system. | 6 |
| | (b) Discuss about excretion in plants? | 4 |
| 2 | (a) Give detail about animal tissues their types and their working. | 6 |
| | (b) Explain Action potential with Muscle contraction. | 4 |
| 3 | (a) What would happen to this ecosystem if forest were destroyed? | 4 |
| | (b) How the lymphatic system is related to the cardiovascular system? Explain. | 6 |