

Time Allowed: 03 Hours

Max: Marks:100

NOTE: i) Attempt only Five questions in all, All questions carry equal marks.

ii) candidate must draw Two straight lines (====) at the end to separate each question attempted in the answer books.

Q1. (a) Give an account the structure and Functions of the nucleus. (10)

(b) Differentiate between Mitosis and Meiosis. what are the various events of Meiosis. (10)

Q2. (a) what is Respiration? Discuss the Glycolysis and kreb cycle in the cell. (15)

(b) Give an account the Transportation of O₂ in animals. (10)

Q3. (a) what is excretion. Explain the various adaptation in the excretory structure in the animals in accordance to its environment. (10)

(b) Explain the various kinds of Neuron you have studied and discuss the nerve impulse. (10)

Q4. (a) what are endocrine gland, Enlist the glands you have studied and discuss in detail the Thyroid glands and pituitary gland. (10)

(b) Explain the process of Linkage and crossing over with help of suitable example. (10)

Q5. (a) Explain the Biochemical origin of life on the earth. (10)

(b) Describe the modern concept of Natural selection. (10)

Q6. (a) what is Biogeochemical cycle? Explain the N₂ cycle. (10)

(b) Explain the freshwater pond Ecosystem. (10)

Q7. (a) Give an account the concept of Ecosystem. (5)

(b) Explain the various Type of Chromosomal Aberration in the organisms. (10)

(c) Discuss the animals adaptation to their major Habitats. (5)