

BIOLOGY (Subjective) GROUP - II

Time: 02:40 Hours

Marks: 68

SECTION – I**2. Write short answers to any EIGHT parts.**

16

- (i) Define excretophore and anhydrobiosis.
- (ii) Define panting with an example.
- (iii) Compare osmoregulation in marine fishes and fresh water fishes.
- (iv) Define moulting. Give the hormone involved.
- (v) Give the structural composition of synovial joint.
- (vi) What is osteomalacia and cleft palate?
- (vii) Give the mechanism of invitro fertilization.
- (viii) Define parthenocarpy and seed dormancy.
- (ix) Give the layering feature of grassland.
- (x) Write scientific names of any two animals of temperate deciduous forest.
- (xi) Define greenhouse effect. Give its causes.
- (xii) Define deforestation and afforestation.

3. Write short answers to any EIGHT parts.

16

- (i) Write any four junctions of cytokinins.
- (ii) Differentiate between photoreceptors and thermoreceptors.
- (iii) Write a note on Parkinson's disease.
- (iv) Differentiate between genotype and phenotype.
- (v) What do you understand by independent assortment of alleles?
- (vi) Write a note on codominance.
- (vii) What are palindromic sequences?
- (viii) What is a nectar in biotechnology? Give its role.
- (ix) What is gene pharming?
- (x) Differentiate between ecosystem and biosphere.
- (xi) Define food chain and food web.
- (xii) What is denitrification?

4. Write short answers to any SIX parts.

12

- (i) Differentiate between primary and secondary growth.
- (ii) Define teratology.
- (iii) Write the function of DNA polymerase III.
- (iv) What is meant by karyotype?
- (v) Give the structure of typical nucleotide.
- (vi) Differentiate between benign tumor and malignant tumor.
- (vii) What is tetrad?
- (viii) State theory of special creation.
- (ix) What are vestigial organs?

SECTION – II Attempt any THREE questions. Each question carries 08 marks.**5. (a) Write a note on adaptations in plants to low and high temperature.**

04

(b) What is predation? Write significance of predation.

04

6. (a) What are turgor movements? Describe their types.

04

(b) Describe the replication process of DNA.

04

7. (a) What are neurons? Explain their different types with the help of diagrams.

04

(b) Describe acid rains. Describe their adverse effects.

04

8. (a) Write a note on test tube babies and identical twins.

04

(b) Describe and explain multiple alleles with the help of example.

04

9. (a) Discuss any four factors affecting gene frequency.

04

(b) Write a note on regeneration.

04