

BIOLOGY (Subjective) GROUP - II

Time: 02:40 Hours

Marks: 68

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

16

- (i) Define heat capacity.
- (ii) What is lock and key model?
- (iii) Define apoenzyme.
- (iv) What is prosthetic group?
- (v) What is nuclear mitosis?
- (vi) Write the scientific name of yeast.
- (vii) What are gemmules?
- (viii) What is radula?
- (ix) What is nymph?
- (x) What do you know about flame cells?
- (xi) What are accessory pigments?
- (xii) What is compensation point?

3. Write short answers to any EIGHT parts.

16

- (i) Differentiate between molecular biology and biotechnology.
- (ii) Define community.
- (iii) What is Tay-Sachs's disease?
- (iv) Differentiate between chromoplast and leucoplast.
- (v) What are giant amoeba?
- (vi) How ciliates differ from protozoa?
- (vii) What are foraminiferans?
- (viii) What is kelp?
- (ix) Why bryophytes are called amphibians of plants?
- (x) Define alternation of generation.
- (xi) Define immunity.
- (xii) What is systemic circulation?

4. Write short answers to any SIX parts.

12

- (i) Compare prophage with provirus.
- (ii) What is ecological importance of bacteria?
- (iii) Differentiate between secretin and gastrin.
- (iv) Enlist the steps involved in holozoic nutrition.
- (v) Write only two functions of oral cavity.
- (vi) Define photorespiration.
- (vii) What are parabronchi? Give their function.
- (viii) Give a brief description of respiratory distress syndrome.
- (ix) Describe lung capacities.

SECTION – II

Attempt any THREE questions. Each question carries 08 marks.

5. (a) Write a note on cloning.

04

(b) Describe the composition of blood plasma.

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6. (a) Give composition and types of RNA in detail.

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(b) Describe loose smut of wheat in detail.

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7. (a) Describe different shapes of bacteria.

04

(b) Give adaptive characters of bryophytes to land habitat.

04

8. (a) Give lytic cycle of bacteriophage.

04

(b) Describe the process of glycolysis.

04

9. (a) Give structure and function of endoplasmic reticulum.

04

(b) Explain digestion in amoeba.

04