

BIOLOGY (Subjective) GROUP - I

Time: 02:40 Hours

Marks: 68

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

16

- (i) Define specific heat capacity of water.
- (ii) Differentiate between cofactor and activator.
- (iii) What is feedback inhibition of enzymes?
- (iv) How substrate concentration affects enzyme activity?
- (v) What is nuclear mitosis? In which organisms it is found?
- (vi) Differentiate between ectomycorrhizae and endomycorrhizae.
- (vii) Differentiate between Radiata and Bilateria.
- (viii) What is mantle? Write its function.
- (ix) Differentiate the spiral and determinate cleavage.
- (x) What is Archaeopteryx? Write its reptilian and avian characters. (one each)
- (xi) What is compensation point?
- (xii) Define action spectrum and absorption spectrum.

3. Write short answers to any EIGHT parts.

16

- (i) How organelle is different from organ?
- (ii) What is the biological control? Give an example.
- (iii) Write first two salient features of cell theory.
- (iv) Define endocytosis and exocytosis.
- (v) How kingdom protista was created?
- (vi) Differentiate micronucleus and meganucleus in ciliates.
- (vii) Compare slime molds with fungi.
- (viii) Why brown algae are important?
- (ix) What is the importance of photorespiration?
- (x) It is said that "smokers invite Cancer". How?
- (xi) How artificial pace maker works?
- (xii) Differentiate antigen and antibody.

4. Write short answers to any SIX parts.

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- (i) Write the scientific name of brinjal and onion.
- (ii) What are super blue green algae? Give their importance.
- (iii) What is meant by phylogenetic system of classification?
- (iv) Why seed is considered a crucial adaptations for terrestrial life of plants?
- (v) Why bryophytes are called amphibious plants?
- (vi) What is meant by heterogamy?
- (vii) What is botulism? Give its cause.
- (viii) Can we live without large intestine? Comment.
- (ix) What do you know about detritivores? Give an example.

SECTION – II Attempt any THREE questions. Each question carries 08 marks.

5. (a) Explain the biological method for solving biological problems.
(b) Discuss mechanical aspects of breathing in man.
6. (a) Write an account on acylglycerol.
(b) Write characteristics of Basidiomycota.
7. (a) Write structure and function of cell wall.
(b) Write notes on (i) Food Poisoning (ii) Ulcer.
8. (a) Explain four viral diseases common in Pakistan.
(b) Describe the characteristics and functions of white blood cells.
9. (a) Discuss the habitat, structure and reproduction of nostoc.
(b) What is respiration? Explain the anaerobic respiration in detail.

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