

BIOLOGY (Subjective) GROUP - I

Time: 02:40 Hours

Marks: 68

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

16

- (i) Lipids has double amount of energy as compared to same amount of carbohydrates. Why?
- (ii) At pH2 pepsin works while arginase does not work. Why?
- (iii) What are reversible inhibitors?
- (iv) Differentiate between prosthetic group and coenzyme.
- (v) What is candidosis?
- (vi) How genetic recombination occurs in imperfect fungi?
- (vii) Differentiate between ostia and osculum.
- (viii) Define polymorphism.
- (ix) What are beneficial insects?
- (x) What is syrinx and where it is situated?
- (xi) How entry of CO₂ into leaves is controlled?
- (xii) Calvin cycle is called C₃ pathway. Justify it.

3. Write short answers to any EIGHT parts.

16

- (i) What do you know about biome?
- (ii) Give the two advantages of tissue culture techniques.
- (iii) Differentiate between primary cell wall and secondary cell wall.
- (iv) Suggest any two functions of Golgi complex.
- (v) What do you know about kelps?
- (vi) How does locomotion take place in apicomplexans?
- (vii) What do you know about choanoflagellates?
- (viii) Give the special features of giant amoeba.
- (ix) Differentiate between protonema and paraphyses?
- (x) Explain the term double fertilization.
- (xi) Differentiate between symplast pathway and apoplast pathway.
- (xii) Suggest the location and function of coronary artery.

4. Write short answers to any SIX parts.

12

- (i) What are pocks?
- (ii) Define plasmids. How these are important?
- (iii) What is saliva? Give its ingredients.
- (iv) Compare saprophytic and parasitic mode of nutrition.
- (v) What are omnivores? Give example.
- (vi) Differentiate between epiglottis and glottis.
- (vii) What are spiracles? Give their function.
- (viii) Write two factors which affect transport of oxygen in blood.
- (ix) How does respiration occur in earthworm?

SECTION – II Attempt any THREE questions. Each question carries 08 marks.**5. (a)How can you solve biological problem with help of biological method?**

04

(b)Write a note on blood plasma.

04

6. (a)Write a note on importance of water.

04

(b)Discuss economic losses due to fungi.

04

7. (a)Illustrate various methods to control bacteria in home, industry as well as in medical fields.

04

(b)Write significance of alternation of generation in plants.

04

8. (a)What are small pox and herpes simplex diseases?

04

(b)Draw the sketch of electron transport chain and chemiosmosis, coupling ETC and formation of ATP by chemiosmosis.

04

9. (a)What are plastids? Describe their different types.

04

(b)Describe digestion of food in planaria.

04