



Inter (Part-I)-A-2021

Roll No. _____ (To be filled in by candidate)

(For all sessions)

Paper Code	6	4	6	1
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Biology (Objective Type)

RWP-21

Time: 20 Minutes

Marks: 17

NOTE: Write answers to the questions on the objective answer sheet provided. Four possible answers

A, B, C and D to each question are given. Which answer you consider correct, fill the corresponding circle A, B, C or D given in front of each question with Marker or pen ink on the answer sheet provided.

1.1. Plants having foreign DNA incorporated into their cells are known as:

- (A) Transformation (B) Transgenic (C) Transgender (D) Translation

2. Heterogenous group of compounds related to fatty acids are:

- (A) Nucleic acids (B) Protein (C) Lipids (D) Carbohydrates

3. Which inhibitors have structural resemblance with substances?

- (A) Irreversible (B) Competitive (C) non competitive (D) Co-enzyme

4. Infoldings of inner membrane of mitochondria are called:

- (A) Cristae (B) Cisternae (C) F₁ particles (D) SER

5. Enzyme released from the tail of bacteriophage which dissolves cell wall:

- (A) Lipase (B) Pepsin (C) amylase (D) Lysozyme

6. Reserve food material in cyanobacteria is:

- (A) Glycogen (B) Starch (C) Lipids (D) Protein

7. Feeding stage of slime molds is called:

- (A) Plasmodesmata (B) Plasmodium (C) Plasmolysis (D) Plasma

8. Asexual reproduction in penicillium takes place by:

- (A) Spores (B) Budding (C) Conidia (D) Fragmentation

9. Integumented, indehiscent megasporangium is called:

- (A) Ovary (B) Ovule (C) Megaspore (D) microspore

10. Larva produced during the life cycle of annelids, is:

- (A) Trochophore (B) Bipinnaria (C) Tad pole (D) Brachiolaria

11. A blue coloured respiratory pigment present in mollusc is:

- (A) Haemoglobin (B) Haemocyanin (C) Myoglobin (D) Phycoerythrin

12. Second phase of calvin cycle is:

- (A) Carbon fixation (B) Reduction
(C) Regeneration of CO₂ acceptor (D) Glycolysis

13. Chemical formula of chlorophyll 'b' is:

- (A) C₅₄H₇₂O₅N₄Mg (B) C₅₄H₇₀O₄N₅Mg (C) C₅₅H₇₂O₅N₄Mg (D) C₅₅H₇₀O₆N₄Mg

14. Botulism is caused by:

- (A) Salmonella (B) Campylobacter
(C) Pseudomonas (D) Clostridium botulinum

15. A sheet of muscles which act as floor of chest cavity is called:

- (A) Pleura (B) diaphragm (C) Intercostal muscles (D) Lungs

16. Starch Sugar hypothesis was proposed by:

- (A) H. Van Mohl (B) Ernst Munch (C) Ernst Hackel (D) Louis Pasteur

17. Attraction among water molecules, which holds the water molecules together, is:

- (A) Tension (B) Cohesion (C) Adhesion (D) Transpiration

Roll No. _____ (to be filled in by the candidate)

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RWP-21

Biology (Essay Type)

Time: 2:40 Hours

Total Marks:68

Section - I

2. Write short answers of any eight parts from the following.

2x8=16

- What are enzymes? Give one example.
- Differentiate between Anabolic and catabolic reactions.
- Define irreversible inhibitors.
- Give two properties of Enzymes.
- Define lichens and give one example.
- What is parasexuality?
- Define kingdom Animalia.
- How asexual reproduction takes place in poriferans?
- What are prototheria? Give one example.
- Which types of Muscles are found in the body wall of Annelids?
- What is Bioenergetics?
- Write complete equation of Lactic acid fermentation.

3. Write short answers of any eight parts from the following.

2x8=16

- Differentiate between deductive and inductive reasoning with examples.
- Give three basic components of human circulatory system.
- Give importance of mitochondria.
- Define Parasitology.
- Write a note on euglenoids.
- What do you know about water molds?
- How brown algae differ from red algae?
- Write down two functions of Golgi complex.
- Write a note on parasitic flagellates.
- Why tracheophytes are successful group of land plants?
- Give four functions of blood.
- Differentiate between microphyll and megaphyll leaves.

4. Write short answers of any six parts from the following.

2x6=12

- Which changes cause inspiration?
- What are Bacilli? Give their types.
- How Venus flytrap catches insect?
- Give structure and position of lungs in chest cavity.
- How oral cavity helps in selection of food?
- Mention three ways of gaseous exchange in plants.
- Write roles of ventilation and capillary network in respiratory surface.
- Draw labelled diagram of human immunodeficiency virus(HIV).
- What is meant by absorption and assimilation of food?

Section - II

NOTE: Answer any three questions from the following.

8x3=24

- (a) Discuss how the science of Biology is helping mankind in different ways. 4
(b) Discuss the composition of blood Plasma. 4
- (a) What are proteins? Describe primary structure of proteins. 4
(b) Describe different methods of asexual reproduction in fungi. 4
- (a) Write a note on nutrition in bacteria. (b) Write in detail the life cycle of Angiospermic plant. 4+4
- (a) Describe any four viral diseases. (b) Write a note on noncyclic phosphorylation with diagram. 4+4
- (a) Describe the structure and function of Golgi apparatus. 4
(b) Give an account of nutrition in insectivores plants. 4