

BIOLOGY	Intermediate Part-I (11th) (1st A 325)	Paper: I	First Group
Time: 2:40 Hours	SUBJECTIVE	Marks: 68	

Note: Section I is compulsory. Attempt any THREE (3) questions from Section II.

SECTION – I

2. Write short answers to any EIGHT (8) questions.

(2x8 = 16)

- Differentiate between nucleoside and nucleotide.
- What is Optimum pH? Give two examples of optimum pH of enzymes.
- Define Induced Fit Model. How it is more advantageous over Lock and Key Model.
- Why are some enzymes produced in inactive form?
- What are predator fungi? Give at least one example.
- Differentiate between spore and conidia with reference to fungi.
- Differentiate between ostia and osculum.
- Give importance of earthworm in soil fertility.
- Give any three basic characteristics of Chordates.
- What is Disinfestation? How disinfestation is carried out?
- What is Absorption Spectrum?
- What is Anaerobic Respiration? Name its types.

3. Write short answers to any EIGHT (8) questions.

(2x8 = 16)

- What is deductive reasoning? Give one example.
- How does Chemotherapy differ from Radiotherapy?
- Give functions of centrioles.
- What is Chromoplast? Give its function.
- How do flagellates obtain food?
- What are red algae? Give one example.
- Give any two points for the importance of algae.
- What is sleeping sickness? Write down the name of its causative agent.
- Why is anthocerospida considered as advanced than other bryophytes?
- Compare sporophyte with gametophyte.
- Write down names of the proteins present in plasma. Describe their function also.
- Differentiate between granulocytes with agranulocytes with one example.

4. Write short answers to any SIX (6) questions.

(2x6 = 12)

- Give the definition of hierarchy.
- Give postulates of Germ Theory.
- What are the symptoms of dyspepsia?
- Write down the comparison between nutrient and nutrition.
- How does digestion differ from egestion?
- What are the properties of respiratory surfaces?
- How and when is diving reflex activated in cetaceans?
- Give symptoms of emphysema?
- Discuss about parabronchi in birds?

SECTION – II

- Define Cloning. Explain its mechanism with the reference of Dolly sheep. (4)
 - How does Cohesion Tension Theory explain the phenomenon of Ascent of sap? (4)
- What is Nucleic acid? Differentiate between RNA and DNA. (4)
 - What do you know about Imperfect Fungi? How do they reproduce? (4)
- Describe various methods to control the microorganisms. (4)
 - Define Double Fertilization. Explain the process diagrammatically. What is its evolutionary importance? (1+2+1=4)
- What is Hepatitis? Discuss its different types. (4)
 - Describe the process of glycolysis. (4)
- Write down a comparison between Prokaryotic Cell and Eukaryotic Cell. (4)
 - Write down an account on Anorexia nervosa. (4)

Roll No. of Candidate : _____

BIOLOGY	Intermediate Part-I (11th) (1st A 325-I)	Paper: I	Second Group
Time: 20 Minutes	OBJECTIVE Code: 6462	Marks: 17	

1. You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that circle in front of the relevant question number. Use marker or pen to fill in the circles. Cutting or filling of two or more circles will result zero mark in that question.

Q. #	Questions	A	B	C	D
1	Community together with its non-living surroundings is termed as	Biome	Ecosystem	Biosphere	Niche
2	α-helix is one of the	Primary structure	Secondary structure	Tertiary structure	Quarternary structure
3	The inhibitor of Succinic Acid Dehydrogenase will be	Succinic acid	Malonic acid	Fumaric acid	All of these
4	These are involved in internal cell motion	Cytoskeleton	Microtubules	Microfilaments	Intermediate filaments
5	Point out the class of corn	Plantae	Poales	Angiospermae	Poaceae
6	All of these vaccines were developed by Pasteur, except	Rabies	Fowl cholera	Anthrax	Small pox
7	Acetabularia belong to phylum	Chrysophyta	Phaeophyta	Rhodophyta	Chlorophyta
8	The known species of fungi are approximately	50,000	100,000	150,000	200,000
9	Sub-division of horse tails is	Psilopsida	Lycopsida	Sphenopsida	Pteropsida
10	Circular muscles are absent in	Nematoda	Arthropoda	Echinodermata	Hemichordata
11	Amphioxus is a	Urochordata	Cephalochordate	Higher chordates	Hemichordata
12	Molecular formula of Phytol is	C ₃₀ H ₃₉	C ₂₄ H ₃₉	C ₂₁ H ₃₉	C ₂₀ H ₃₉
13	Total number of phases in Calvin Cycle is	Five	Two	Three	Four
14	Percentage of exhaled water vapours is	21 %	4 %	Saturated	Variable
15	Maximum root depth (i.e 50 meters) is present in	Prosopis tree	Mango tree	Palm tree	Both B & C
16	It is common among all the blood vessels	Outer layer	Middle layer	Endothelium	Material exchange
17	Puccinia is a parasitic fungi that destroys	Corn plants	Wheat plants	Seed plants	Weed plants

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Note: Section I is compulsory. Attempt any THREE (3) questions from Section II.

SECTION – I

2. Write short answers to any EIGHT (8) questions.

(2x8 = 16)

- i - How can you differentiate between Nucleoside and Nucleotide?
- ii - When and by whom the Lock and Key Model was proposed? What is its main point?
- iii - What is the effect of pH on enzyme activity?
- iv - How enzyme substrate complex is formed? What is the result of this?
- v - How are fungi adapted on land? Write any two characters.
- vi - What is fragmentation and budding?
- vii - How can you differentiate spiral and radial cleavages?
- viii - What do you know about coral reefs?
- ix - How aquatic animals adapted to live in water? Describe any two.
- x - Write down any four characters of Class Aves.
- xi - What is oxidative phosphorylation? Write down its mechanism.
- xii - What are the chemicals formed during light dependent and light independent reactions?

3. Write short answers to any EIGHT (8) questions.

(2x8 = 16)

- i - What is hydroponic culture technique? Write down its significance.
- ii - Define biological control with examples.
- iii - Differentiate between chromoplast and leucoplast.
- iv - What is nucleolus?
- v - Write down functions of two kinds of nuclei present in Ciliates.
- vi - What is Giant Amoeba? Write down its importance.
- vii - Write down evolutionary significance of Euglenoids.
- viii - What is pellicle? Write down its function.
- ix - What is overtopping and planation?
- x - Write down advanced characters of sporophyte of anthocerospida.
- xi - What is artificial pace maker?
- xii - Differentiate between antigens and antibodies?

4. Write short answers to any SIX (6) questions.

(2x6 = 12)

- i - Biologically classify the corn.
- ii - Find out the relationship between "Super Blue Green Algae" and "Complete Whole Food".
- iii - Determine the special methods of nutrition in plants.
- iv - Write down the name of main parts of digestive system in the direction of passage of food in man (at least four names).
- v - Describe the events which occur during swallowing.
- vi - Differentiate Calvin-Benson Cycle with photorespiration.
- vii - Write down the properties of respiratory surface in animal.
- viii - What do you know about lungs capacity?
- ix - Why the air cylinders are important for scuba diver descends in the sea?

SECTION – II

5 - (a) Discuss the molecular, organelles and cell levels of biological organization.

(2+2=4)

(b) Discuss stomatal transpiration with the help of diagram.

(4)

6 - (a) Compare Fibrous Proteins with Globular Proteins.

(4)

(b) Describe economic gains due to fungi.

(4)

7 - (a) Write physical and chemical methods to control bacteria.

(4)

(b) What is alternation of generation? Write down its significance.

(4)

8 - (a) Write down a comprehensive note on Acquired Immune Deficiency Syndrome.

(4)

(b) Oxygen evolved during photosynthesis comes from water; explain.

(4)

9 - (a) Write down the structure and function of Endoplasmic reticulum.

(4)

(b) Explain role of Pancreas in digestion.

(4)