Paper Code Number: 2461	2023 (1st-A) INTERMEDIATE PART-I (11th Class)	Roll No: _____

BIOLOGY PAPER-I GROUP-I MTN-11-1-23

TIME ALLOWED: 20 Minutes	OBJECTIVE	MAXIMUM MARKS: 17

Q.No.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 bubble in front of that question number, on bubble sheet. Use marker or pen to fill the bubbles. Cutting or filling two or more bubbles will result in zero mark in that question.**

S.#	QUESTIONS	A	B	C	D
1	A large regional community primarily determined by climate is:	Biomass	Biosphere	Biome	None of these
2	Total number of amino acids in insulin is:	50	51	40	41
3	Which does structure act as a bridge between enzyme and its substrate?	Co-factor	Binding site	Apoenzyme	Inhibitor
4	The protein present in microtubule is:	Actin	Myosin	Tropomyosin	Tubulin
5	Pig could be the source of infection of hepatitis:	A	B	C	E
6	Important vector in a modern genetic engineering technique is:	Plasmid	Nucleoid	Ribosome	Mesosome
7	Based on molecular data, euglenoids are thought to be closely related to:	Brown algae	Diatoms	Zooflagellates	Green algae
8	Cell wall of Fungi is made up of:	Pectin	Murein	Cellulose	Chitin
9	A flower is a modified:	Root	Shoot	Leaf	Stem
10	Closed circulatory system first time appeared in:	Nematoda	Platyhelminthes	Annelida	Arthropoda
11	Nematocysts are the characteristics of phylum:	Annelida	Coelentrata	Nematoda	Platyhelminthes
12	Which of the following is related to phytol?	$C_{20}H_{39}$	$C_{39}H_{20}$	$C_{22}H_{40}$	$C_{40}H_{22}$
13	During Calvin Cycle, the carbon is fixed and reduced resulting in the synthesis of:	Fat	Protein	Sugar	Enzyme
14	Amoeba moves and obtains food by means of:	Cilia	Pseudopodia	Flagella	Tentacles
15	Breakdown of alveoli of lungs is called:	Asthma	Emphysema	Tuberculosis	Lung caner
16	Which is not an example of granulocyte?	Basophils	Eosinophils	Lymphocytes	Neutrophils
17	Uncontrolled production of white blood cells result in:	Asthma	Thalassemia	Odema	Leucaemia

INTERMEDIATE PART-I (11th Class)	2023 (1st-A)	Roll No: _____
BIOLOGY PAPER-I GROUP-I		
TIME ALLOWED: 2.40 Hours	SUBJECTIVE	MAXIMUM MARKS: 68

NOTE: Write same question number and its parts number on answer book, as given in the question paper.

SECTION-I MTN-11-1-23

2. Attempt any eight parts.		**8 × 2 = 16**
(i)	What are Conjugated Molecules? Give examples.	
(ii)	Differentiate between Competitive and Non-competitive inhibitors.	
(iii)	What are Holoenzymes?	
(iv)	Define Enzyme and Substrate.	
(v)	What is a Hypha? What is the advantage of having incomplete septa?	
(vi)	Differentiate between Ascospores and Ascus.	
(vii)	What is Spongocoel?	
(viii)	Give two important features of Mammals.	
(ix)	How insects are beneficial to man?	
(x)	What is Syrinx?	
(xi)	Differentiate between Grana and Stroma.	
(xii)	What do you know about Photosystems?	
3. Attempt any eight parts.		**8 × 2 = 16**
(i)	How did industrialization destroy our environment?	
(ii)	How did Biology helped mankind in better food production?	
(iii)	Give three functions of SER.	
(iv)	Differentiate between Microtubules and Microfilaments.	
(v)	What do you know about Amoebae?	
(vi)	What is Thallus?	
(vii)	Write the ecological importance of Dinoflagellates.	
(viii)	What is Chlorella? Give its importance.	
(ix)	Write the names of two plants belonging to family Poaceae.	
(x)	Define Seed.	
(xi)	What is Symplast pathway?	
(xii)	What are Isobilateral leaves?	
4. Attempt any six parts.		**6 × 2 = 12**
(i)	Describe term Provirus. Give one example.	
(ii)	Give structure of virion of HIV.	
(iii)	Write composition of Saliva.	
(iv)	Discuss Ulcer.	
(v)	Describe role of Large intestine.	
(vi)	What is Lung cancer?	
(vii)	How does partial pressure of O_2 effect formation and disassociation of oxyhaemoglobin?	
(viii)	Argue that animals having diving reflex have special body features.	
(ix)	Why it is necessary to have respiratory surface?	

SECTION-II

NOTE: Attempt any three questions.		**3 × 8 = 24**
5.(a)	How Drug treatment/genetharapy is used for disease control?	4
(b)	What do you know about Cohesion Tension Theory?	4
6.(a)	Describe characteristics of Monosaccharides.	4
(b)	Explain why did fungi separate from plant kingdom.	4
7.(a)	Describe the nutrition in Bacteria.	4
(b)	Explain the life cycle of angiospermic plant. (Only description).	4
8.(a)	How have we moved from two to five kingdom system of classification?	4
(b)	Explain the phenomenon of non-cyclic phosphorylation.	4
9.(a)	Elaborate the structure and function of mitochondria.	4
(b)	Write a note on digestion in planaria.	4

Paper Code Number: 2464	2023 (1st-A) INTERMEDIATE PART-I (11th Class)	Roll No: _____
BIOLOGY PAPER-I GROUP-II MTN-11-2-23		
TIME ALLOWED: 20 Minutes	OBJECTIVE	MAXIMUM MARKS: 17

Q.No.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 bubble in front of that question number, on bubble sheet. Use marker or pen to fill the bubbles. Cutting or filling two or more bubbles will result in zero mark in that question.**

S.#	QUESTIONS	A	B	C	D
1	Reindeer moss is a/an:	Lichens	Algae	Fungi	Bryophyte
2	When egg and male gamete in angiosperm fuse, they form:	Zygospore	Ascospore	Oosphere	Oospore
3	The beginning of swallowing action in man is:	Voluntary	Involuntary	Automatic	Reflex action
4	Air entering nasal cavity is:	Filtered	Moistened	Warmed	All of these
5	Phytol is attached to:	2 pyrrole rings	3 pyrrole rings	Only one of pyrrole ring	4 pyrrole rings
6	Which of the following do not take part in respiratory chain?	Coenzyme	Cytochrome	Molecular oxygen	Plastocyanin
7	Circular muscles are absent while longitudinal muscles are present in:	Platyhelminthes	Flatworm	Roundworm	Cnidarian
8	Average life span of RBCs is:	4 months	One year	6 years	Whole life
9	A foreign substance often a protein which stimulates formation of an antibody is:	B-Lymphocytes	T. Lymphocytes	Antigen	Serum
10	Process of shedding of exoskeleton in arthropods is called:	Excretion	Ecdysis	Lysis	Splitting
11	Cloning could not be used to make:	Multiple copies of desired organism	Used to produce genetically identical cattle	Commercial production of valuable animals	In research
12	All of following have chains of glucose except:	Chitin	Glycogen	Cellulose	Starch
13	Coenzyme is related to:	Proteins	Fats	Vitamins	Lipids
14	Single membrane bound organelle is:	Chloroplast	Mitochondria	Nucleus	Lysosomes
15	Which part of virus is produced in multiple copies inside host cells?	Virus genome	Capsid	Envelop	All of these
16	Structure involved in reclamation of alkaline soils are:	Akinetes	Heterocysts	Cysts	Hormogonia
17	One of the following represents protozoans:	Dinoflagellates	Diatoms	Apicomplexans	None of these

INTERMEDIATE PART-I (11th Class)	2023 (1st-A)	Roll No:
BIOLOGY PAPER-I GROUP-II MTN-11-2-23		
TIME ALLOWED: 2.40 Hours	SUBJECTIVE	MAXIMUM MARKS: 68

NOTE: Write same question number and its parts number on answer book, as given in the question paper.

SECTION-I

2. Attempt any eight parts. $8 \times 2 = 16$

(i)	Draw the complete structure of ATP.
(ii)	Why some enzymes are manufactured in inactive form?
(iii)	Why some enzymes need a cofactor?
(iv)	Define inhibitors with examples.
(v)	Write down names of four animal diseases caused by Fungi.
(vi)	Define parasexuality and give its importance.
(vii)	Differentiate between Polyps and Medusae.
(viii)	Write down four harmful insects name and their relevant diseases.
(ix)	Why Reptiles are different from Amphibians?
(x)	Enlist Reptile like characters of Archaeopteryx.
(xi)	What is compensation point? When it occurs?
(xii)	Define carotenoids and give their importance.

3. Attempt any eight parts. $8 \times 2 = 16$

(i)	Differentiate between Deductive and Inductive hypothesis.
(ii)	What is Hydroponic Culture Technique? Give use of this technique.
(iii)	How Glyoxysomes differ from Peroxisomes.
(iv)	What are storage diseases? Name two storage diseases in man.
(v)	Give importance of Chlorella.
(vi)	For what study plasmodial slime mold used as model organism?
(vii)	Write down ecological importance of Dinoflagellates.
(viii)	Green algae are considered ancestral organism of green land plants why?
(ix)	Why are Bryophytes called Amphibians plants?
(x)	Differentiate between Monocot and Dicot plants.
(xi)	What are essential and non-essential parts of flower?
(xii)	What is Cardiac Cycle?

4. Attempt any six parts. $6 \times 2 = 12$

(i)	Write the botanical names for amaltas and tomato.
(ii)	Differentiate between lag phase and log phase.
(iii)	Explain Scraping type of feeding.
(iv)	What is the role of nematocysts in the life of coelenterates?
(v)	How peristalsis is different from antiperistalsis?
(vi)	How does breathing differ from respiration?
(vii)	Explain briefly Asthma.
(viii)	How much CO_2 is present in venous and arterial blood.
(ix)	Lung cancer is more frequent in smokers. Comments your own.

SECTION-II

NOTE: Attempt any three questions. $3 \times 8 = 24$

5.(a)	Define Cloning. What is its mechanism and products?	$1 + 3 = 4$
(b)	Why transpiration is considered as a necessary evil?	4
6.(a)	Describe functions of proteins.	4
(b)	Discuss different methods of asexual reproduction in fungi.	4
7.(a)	Describe the classification of bacteria on the basis of flagella.	4
(b)	Define alternation of generation. Also describe its significance.	4
8.(a)	What is binomial nomenclature, give its importance.	4
(b)	Discuss role of carbon dioxide as a photosynthetic reactant.	4
9.(a)	Discuss structure and function of ribosomes.	4
(b)	Give role of oral cavity in digestion.	4