



Biology	(B)	L.K.No. 1533	Paper Code No. 6463
Paper I	(Objective Type)	Inter ( Ist – A – Exam – 2024 )	
Time :	20 Minutes	Inter ( Part - I )	
Marks :	17	Session (2022 - 24) & (2023 – 25)	

11th Class Biology Objective Paper Group 1 Bahawalpur Board 2024

Note : Four choices A , B , C , D to each question are given. Which choice is correct fill that circle in front of that Question No. on the Objective Bubble Sheet. Use Marker or Pen to fill the circles. Cutting or filling two or more circles will result in Zero Mark in that Question.

Q.No.1	Which of the following is true about Birds :
(1)	<input checked="" type="radio"/> (A) They have right aortic arch      (B) They have left aortic arch (C) They have right and left aortic arch      (D) They do not have aortic arch
(2)	Hydathodes in plants are associated with : (A) Transpiration <input checked="" type="radio"/> (B) Guttation      (C) Conduction      (D) Imbibition
(3)	Respiratory Pigment present in Muscles is called : <input checked="" type="radio"/> (A) Myoglobin      (B) Globin      (C) Haemoglobin      (D) Haemocyanin
(4)	In root nodules of Leguminous plants , bacteria convert Nitrogen into : (A) Ammonia <input checked="" type="radio"/> (B) Nitrate      (C) Urea      (D) Nitrite
(5)	The removal of terminal Phosphate of ATP during hydrolysis releases about ____ of energy : <input checked="" type="radio"/> (A) 7 . 3 K cal      (B) 6 . 3 K cal      (C) 5 . 3 K cal      (D) 4 . 3 K cal
(6)	Synthesis of ATP in the presence of Oxygen is called : (A) Cyclic Phosphorylation      (B) Non-cyclic Phosphorylation (C) Reductive Phosphorylation <input checked="" type="radio"/> (D) Oxidative Phosphorylation
(7)	The Phylum in which animals are exclusively marine : (A) Cnidaria      (B) Poriphera <input checked="" type="radio"/> (C) Echinodermata      (D) Annelida
(8)	The worm that damages wood of ships is called : (A) Hookworm      (B) Sepia      (C) Mytilus <input checked="" type="radio"/> (D) Teredo
(9)	Technically a seed may be defined as a fertilized : (A) Egg <input checked="" type="radio"/> (B) Ovule      (C) Ovary      (D) Flower
(10)	Carcinogenic mycotoxins called aflatoxins are produced by <input checked="" type="radio"/> (A) Aspergillus      (B) Penicillium      (C) Neurospora      (D) Ustilago
(11)	In 1861, John Hogg proposed the Kingdom : (A) Protista <input checked="" type="radio"/> (B) Protoctista      (C) Monera      (D) Fungi
(12)	Some Bacteria transfer genetic material from donor to recipient Bacteria during a process : (A) Binary Fission      (B) Budding      (C) Regeneration <input checked="" type="radio"/> (D) Conjugation
(13)	The Enzyme involved in viral replication is synthesized : (A) On Viral Capsid <input checked="" type="radio"/> (B) By the Host Cell (C) On the interior side of Viral coat      (D) On the interior of viral membrane
(14)	The Undifferentiated cells (such as eggs) have numerous pores about ____ per Nucleus : (A) 300 <input checked="" type="radio"/> (B) 30,000      (C) 6 or 8      (D) 3 or 4
(15)	The type of energy lowered by enzymes for Biological reactions to occur is called : (A) Kinetic      (B) Potential      (C) Ionic <input checked="" type="radio"/> (D) Activation
(16)	Which of following Fatty Acid is Unsaturated : (A) Acetic Acid      (B) Oleic Acid      (C) Butyric Acid <input checked="" type="radio"/> (D) Palmitic Acid
(17)	Populations of different Species ( Plants & animals ) Living in the same Habitat form a : <input checked="" type="radio"/> (A) Community      (B) Tribe      (C) Committee      (D) Population





Note: It is compulsory to attempt any (8 – 8) Parts each from Q.No. 2, Q.No.3 and attempt any (6) Parts from Q.No.4. Attempt any (3) Questions from Part – II. Write same Question No. and its Part No. as given in the Question Paper.

11th Class Biology Subjective Paper Group 1 Bahawalpur Board 2024

Make Diagram where necessary.

Part - I

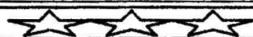
22 x 2 = 44

- Q.No.2 (i) What is Heat of Vaporization? Give its role in plants .  
(ii) What is the difference between Enzyme and Substrate?  
(iii) Differentiate between the Reversible and Irreversible Inhibitors.  
(iv) What do you know about Lock and Key Model of Enzyme Action?  
(v) " Fungi are active predator " . Justify this statement.  
(vi) Give economic importance of yeast.  
(vii) Write down two differences between Diploblastic and Triploblastic animals .  
(viii) Give any four Characteristics / features of Class Amphibia.  
(ix) What is Haemocyanin?  
(x) How insects are important to mankind ?  
(xi) How would you differentiate between the Aerobic and An-Aerobic Respiration?  
(xii) What are Cytochromes?
- Q.No.3 (i) Differentiate between the Deductive Reasoning and Inductive Reasoning.  
(ii) Define Biological Control. Give example.  
(iii) What are Microtubules? Give their chemical composition.  
(iv) Define Chromoplasts. Write their function.  
(v) What is Pellicle ? Give its functions.  
(vi) How Algae are classified ? Write names of their Phyla.  
(vii) Why Phytophthora infestans is famous for ?  
(viii) Write Pigments of Red Algae.  
(ix) Define Pleura . Give its function.  
(x) What are Parabronchi ? Write their functions.  
(xi) Differentiate between the terms Source and Sink in Plants  
(xii) What are Granulocytes ? Give their types.
- Q.No.4 (i) Differentiate between Virion and Prion.  
(ii) What are Mesosomes? Give its two functions.  
(iii) What is Alternation of Generation ? Also mention its importance for Plants.  
(iv) Define Double Fertilization. Give its Evolutionary Importance.  
(v) Write the Scientific name of Lemon Grass.  
(vi) Evolution of Pollen tube is great success of Plants on land. Justify.  
(vii) What is Peristalsis ? How it is different from Antiperistalsis?  
(viii) Differentiate between Digestion and Assimilation .  
(ix) Teeth are related to feeding habit in animals . Justify.

Part - II


( 3 x 8 = 24 )

- Q.No.5 (a) How Biological Science is applied in the field of Food Production? (4)  
(b) What is Photorespiration? Give its consequences. (4)
- Q.No.6 (a) Define Proteins. Describe Primary and Secondary Structures of Protein. (4)  
(b) What are Imperfect Fungi? Discuss reproduction in Penicillium. (4)
- Q.No.7 (a) Describe Structure and Functions of Mitochondria. (4)  
(b) Explain role of Pancreas and Gastric Gland in Digestion of Food. (4)
- Q.No.8 (a) What is Binomial Nomenclature ? Who devised this system ? Give its rules. (4)  
(b) How soil water reaches Xylem tissues by various pathways? Explain. (4)
- Q.No.9 (a) Explain major Characteristics of Cyanobacteria. (4)  
(b) How ATP is generated by Cyclic Phosphorylation? Sketch its Diagram. (4)

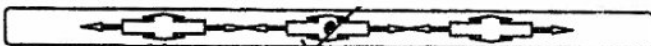




## Bahawalpur Board-2023

<b>Biology</b>	<b>(A)</b>	<b>L.K.No. 1013</b>	<b>Paper Code No. 6461</b>
Paper I	(Objective Type)	<b>Inter ( Ist – A – Exam – 2023 )</b>	
Time :	20 Minutes	<b>Inter ( Part - I )</b>	
Marks :	17	Session (2020 - 22) to (2022 - 24)	

Note : Four possible choices A, B, C, D to each question are given. Which choice is correct fill that circle in front of that Question No. Use Marker or Pen to fill the circles. Cutting or filling two or more circles will result in Zero Mark in that Question.

Q.No.1	Cretaceous, Jurassic and Triassic periods belonged to era :
(1)	(A) Palaeozoic (B) Mesozoic (C) Cenozoic (D) Proterozoic
(2)	The specific gravity of Fat is : (A) 0.8 (B) 0.6 (C) 0.4 (D) 0.1
(3)	Reversible Inhibitors forms Weak Linkage with the : (A) Reactant (B) Product (C) Enzyme (D) Substrate
(4)	Living Contents of the cell is collectively called : (A) Cytoplasm (B) Nucleoplasm (C) Cellsap (D) Protoplasm
(5)	Family include related : (A) Genera (B) Individuals (C) Order (D) Species
(6)	The First Scientist to observe Microbes is : (A) Koch (B) Leeuwenhoek (C) Brown (D) Pasteur
(7)	The feeding stage of a Slime Mold is called : (A) Mycelium (B) Rhizopus (C) Plasmodium (D) Penicillium
(8)	Yeast are Unicellular : (A) Bacteria (B) Algae (C) Protozoan (D) Fungi
(9)	The earliest group of Vascular Plants is : (A) Psilopsida (B) Pteropsida (C) Lycopsida (D) Sphenopsida
(10)	Malpighian Tubules are present in : (A) Annelids (B) Molluscs (C) Protozoa (D) Arthropods
(11)	Mammals become dominant in the : (A) Mesozoic (B) Cenozoic (C) Devonian (D) Silurian
(12)	O <sub>2</sub> released during Photosynthesis comes from : (A) CO <sub>2</sub> (B) NO <sub>2</sub> (C) Water (D) SO <sub>2</sub>
(13)	The dark reaction occurs in : (A) Stroma (B) Cytoplasm (C) Nucleus (D) Cell Membrane
(14)	pH of fresh Saliva is : (A) 7 (B) 8 (C) 9 (D) 10
(15)	Number of Air Sacs in bird is : (A) 6 (B) 7 (C) 9 (D) 8
(16)	Tonoplast is the Membrane of : (A) Nucleus (B) Mitochondria (C) Chloroplast (D) Vacuole
(17)	% of Plasma in the blood is : (A) 45 % (B) 50 % (C) 55 % (D) 60 %
	



# Bahawalpur Board-2023



Roll No.	1013 - 30000	Inter ( Part - I )	Session (2020 - 22 ) to (2022 - 24)
Biology (Subjective)	Inter ( Ist - A - Exam - 2023 )	Time 2 : 40 Hours	Marks : 68

Note: It is compulsory to attempt any (8 – 8) Parts each from Q.No. 2, Q.No.3 and attempt any (6) Parts from Q.No.4. Attempt any (3) Questions from Part – II. Write same Question No. and its Part No. as given in the Question Paper.

Make Diagram where necessary.

Part - I

22 x 2 = 44

- Q.No.2 (i) What are Ester Compounds? Give example.  
(ii) How Irreversible Inhibitors Inhibit Enzyme Activities?  
(iii) Define Optimum pH. Give two examples.  
(iv) Differentiate between Prosthetic Group and Coenzyme.  
(v) What is Ergotism? How it is caused?  
(vi) How Fungi Resemble with animals?  
(vii) What are Hermaphrodites? Give two examples.  
(viii) What is Spiral and Determinate Cleavage?  
(ix) What is Polymorphism? Give example.  
(x) Why Echinoderms are placed close to Chordates?  
(xi) What are Photosystems? Differentiate between Photosystem I and Photosystem II.  
(xii) What is Alcoholic Fermentation?
- Q.No.3 (i) How does Population differ from Community?  
(ii) What is Integrated Disease Management?  
(iii) Write any two salient features of Cell Theory.  
(iv) Explain Fluid Mosaic Model of Plasma Membrane.  
(v) Differentiate between Foraminiferans and Actinopods.  
(vi) What is the Ecological importance of Dinoflagellates?  
(vii) Why Kelps are so important?  
(viii) Justify that Green Algae are ancestors of plants.  
(ix) Explain kPa.  
(x) Define Stroke or Cerebral Infarction.  
(xi) What is Protonema?  
(xii) Write Botanical Names of any two plants belong to Pea Family.
- Q.No.4 (i) What do you know about Capsule of Bacteria?  
(ii) Write a short note on Herpes Simplex.  
(iii) How the plants are Surviving in the Nitrogen Deficient Soil?  
(iv) Why Anorexia Nervosa is so dangerous?  
(v) What is the cause and consequences of Obesity?  
(vi) How smoking effects humans?  
(vii) How the composition of Arterial and Venous blood differ?  
(viii) What is the role of Parabronchi in Birds?  
(ix) What happens when Glycine enter into Mitochondria?

Part - II

( 3 x 8 = 24 )


- Q.No.5 (a) Discuss the role of Biology in protection and conservation of Environment. (4)  
(b) Describe the Categories of Solutes present in blood plasma in detail. (4)
- Q.No.6 (a) Explain the importance of Carbon. (4)  
(b) Explain the Life Cycle of Ustilago Tritici with the help of Diagram. (4)
- Q.No.7 (a) Discuss Nutrition in Bacteria. (4)  
(b) Define Alternation of Generation. Give its importance. (4)
- Q.No.8 (a) Give Lytic Cycle of Bacteriophage. (4)  
(b) Describe role of light in Photosynthesis. (4)
- Q.No.9 (a) How does Digestion occur in Hydra? (4)  
(b) Describe structure and function of Mitochondria. (4)

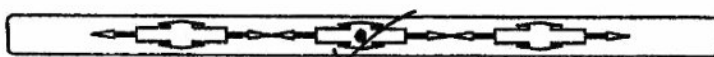




<b>Biology</b>	<b>(A)</b>	<b>L.K.No. 1111</b>	<b>Paper Code No. 6461</b>
<b>Paper I</b>	<b>( Objective Type )</b>	<b>Inter – A – 2022</b>	
<b>Time :</b>	<b>20 Minutes</b>	<b>Inter ( Part - I )</b>	
<b>Marks :</b>	<b>17</b>	<b>Session (2020 - 22) to (2021 – 23)</b>	

\*Note : Four possible choices A , B , C , D to each question are given. Which choice is correct fill that circle in front of that Question No. Use Marker or Pen to fill the circles. Cutting or filling two or more circles will result in Zero Mark in that Question.

<b>Q.No.1</b>	<b>Percentage of Calcium in Human Body is :</b>
(1)	(A) 1 % (B) 2 % (C) 3 % (D) 10 %
(2)	Keratin is Fibrous Protein and is present in :  (A) Blood (B) Muscles (C) Nails (D) Bones
(3)	The Optimum pH for Arginase is : (A) 9.70 (B) 8.70 (C) 9.00 (D) 2.00
(4)	Cell Wall is secreted by : (A) Protoplasm (B) Nucleoplasm (C) Golgi Complex (D) Ribosomes
(5)	Number of Capsomeres in Capsid of Herpes Virus is : (A) 252 (B) 200 (C) 152 (D) 162
(6)	Aerobic Bacterium is : (A) Campylobacter (B) E. Coli (C) Pseudomonas (D) Spirochete
(7)	Pinnularia belongs to Phylum : (A) Pyrrophyta (B) Chrysophyta (C) Phaeophyta (D) Chlorophyta
(8)	Example of Fruticose Lichen is : (A) Bacidia (B) Lecanor (C) Parmelia (D) Ramalina
(9)	Living Genus of Psilopsida is : (A) Cooksonia (B) Horneophyton (C) Psilophyton (D) Psilotum
(10)	Which one of the following is included in Tunicates : (A) Amphioxus (B) Molgula (C) Balanoglossus (D) Saccoglossus
(11)	The phylum which is exclusively marine is : (A) Echinodermata (B) Hemichordata (C) Chordata (D) Nematoda
(12)	Which light Wavelength is least absorbed by Chlorophyll : (A) Violet (B) Blue (C) Yellow (D) Orange
(13)	Dark reaction occurs in : (A) Cytoplasm (B) Chloroplast (C) Stroma (D) Grana
(14)	In Plants, stunted growth of root is due to deficiency of : (A) Potassium (B) Magnesium (C) Nitrogen (D) Phosphorus
(15)	Break down of Alveoli of lungs is called : (A) Asthma (B) Emphysema (C) Tuberculosis (D) Lung Cancer
(16)	Guttation occurs in plants through : (A) Cuticle (B) Hydathodes (C) Lenticels (D) Stomata
(17)	From where Renal Vein brings impure blood : (A) Brain (B) Kidney (C) Lungs (D) Liver







Roll No.	1111-28 000	Session (2020-22 to 2021-23)	Inter (Part-I)
<b>Biology (Subjective)</b>	<b>Inter - A - 2022</b>	<b>Time 2 : 40 Hours</b>	<b>Marks : 68</b>

Note: It is compulsory to attempt any (8-8) Parts each from Q.No. 2, Q.No.3 and attempt any (6) Parts from Q.No.4. Attempt any (3) Questions from Part - II. Write same Question No. and its Part No. as given in the Question Paper.

**Bahawalpur Board-2022**

Make Diagram where necessary.

Part - I

22 x 2 = 44

- Q.No.2 (i) Why Sickle Cell Hemoglobin of human fails to carry sufficient amount of Oxygen ?  
(ii) - How is an Enzyme recognized and select a proper substrate ?  
(iii) Why some Enzymes are tightly bound to sub-cellular Organelles ?  
(iv) Which are two conditions that destroy Enzymetic Activity by disrupting bonds between Atoms in an Enzyme ? Give reason.  
(v) What is a Dikaryotic Hypha ?  
(vi) Differentiate between Plasmogamy and Karyogamy.  
(vii) Differentiate between Protostomes and Deuterostomes for the formation of Mouth and Anus.  
(viii) How Respiration occurs in Arthropods ?  
(ix) Give names and harms of any two harmful Molluscs.  
(x) Differentiate between complete and incomplete Metamorphosis.  
(xi) Give any two differences between Photosynthesis and Respiration.  
(xii) Point out the role of Mitochondria in Respiration.
- Q.No.3 (i) Define Biological Control and give its example.  
(ii) Differentiate between Inductive and Deductive Reasoning.  
(iii) Why Mitochondria are called Self Replicating Organelle ?  
(iv) Why Granum appears to be Green ?  
(v) How Red Tides are formed ?  
(vi) Why Euglenoids are classified in plant as well as animal kingdoms ?  
(vii) How Algae differ from plants ?  
(viii) Define Thallus.  
(ix) What are Paraphyses and in which plant these are present ?  
(x) Define Circinate Vernation.  
(xi) What is Apoplast Pathway and why it becomes discontinuous in Endodermis ?  
(xii) Differentiate between Thrombus and Embolus.
- Q.No.4 (i) Define Binomial Nomenclature with two examples.  
(ii) Describe function of Mesosomes and Plasmid in Bacteria.  
(iii) Name Salivary Glands and give Ingredients of Saliva.  
(iv) Describe Mechanism of Nutrition in *Dionaea Muscipula*.  
(v) Give reasons for Heart Burn or Pyrosis.  
(vi) Differentiate between Spiracles and Tracheoles.  
(vii) Why Pulmonary and Cutaneous Respiration are necessary for Frog ?  
(viii) Why Air Sacs and Alveoli are considered necessary for Respiration in Man ?  
(ix) How Carbonic Anhydrase helps to transport  $O_2$  in the blood at tissue level ?

Part - II

(3 x 8 = 24)

- Q.No.5 (a) How Biologists help us to improve yield of our Crops ? (4)  
(b) Define Root Pressure and explain its role in ascent of Sap. (4)
- Q.No.6 (a) Write down any six functions of Proteins. How Fibrous Proteins are different from Globular Proteins ? (5)  
(b) Describe and sketch life cycle of *Rhizopus*. (3)
- Q.No.7 (a) How Bacteria increase their numbers ? Write in detail. (4)  
(b) How Family Poaceae is economically important for humans ? (4)
- Q.No.8 (a) Define Hepatitis. What are its Various Types ? (4)  
(b) Discuss Glycolysis. Give scheme of Reactions as well. (4)
- Q.No.9 (a) Write a note on Cytoskeleton. (4)  
(b) Explain the Digestion and Absorption of Food in Human Small Intestine. (4)



# Bahawalpur Board-2021



Biology	(D)	L.K.No. 1111	Paper Code No. 6467
Paper I	( Objective Type )	Inter – A – 2021	
Time :	20 Minutes	Inter ( Part - I )	
Marks :	17	Session (2017 -19) to (2020 – 22)	

**Note :** Four possible choices A, B, C, D to each question are given. Which choice is correct fill that circle in front of that Question No. Use Marker or Pen to fill the circles. Cutting or filling two or more circles will result in Zero Mark in that Question.

Q.No.1	Inductive reasoning moves from :
(1)	(A) General to Specific (B) Specific to Specific (C) Specific to General (D) General to General
(2)	The Ribosomal RNA ( rRNA ) is synthesized and stored in the : (A) Golgi Complex (B) Centriole (C) Nucleolus (D) Vacuole
(3)	The Enzymes which are involved in the synthesis of proteins are integral part of : (A) Chloroplast (B) Ribosome (C) Mitochondria (D) Golgi Apparatus
(4)	The first scientist who determined the sequence of Amino Acid in a protein molecule was : (A) F. Sanger (B) F. Miescher (C) Franklin (D) Wilkins
(5)	Pig could be the source of infection of Hepatitis : (A) E (B) A (C) B (D) C
(6)	Typical example of Phylum Basidiomycota is : (A) Penicillium (B) Rhizopus (C) Pilobolus (D) Mushrooms
(7)	Dinoflagellates belongs to phylum : (A) Chrysophyta (B) Pyrrophyta (C) Rhodophyta (D) Phaeophyta
(8)	The Bacterial Growth is rapid in : (A) Log Phase (B) Lag Phase (C) Stationary Phase (D) Death Phase
(9)	Anthoceropsida are commonly known as : (A) Liverworts (B) Mosses (C) Hornworts (D) Club Mosses
(10)	Glycolysis occurs in : (A) Mitochondria (B) Vacuole (C) Chloroplast (D) Cytosol
(11)	In Mollusca and Annelida the larva is : (A) Trochophore (B) Bipinnaria (C) Brachiolaria (D) Amphiblastula
(12)	The reptiles of today has been derived from Dinosaurs of Jurassic period and : (A) Silurian (B) Cretaceous (C) Ordovician (D) Cambrian
(13)	The Hypothesis that source of Oxygen released during photosynthesis is water and not Carbondioxide was given by : (A) Calvin (B) Kreb (C) Niel (D) T.W. Engelmann
(14)	The discharge of blood from the blood vessels is called : (A) Stroke (B) Heart Attack (C) Hypertension (D) Haemorrhage
(15)	Each Air Sac consists of several microscopic single layered structures called : (A) Trachea (B) Alveoli (C) Bronchi (D) Bronchioles
(16)	Pepsinogen is secreted by : (A) Zymogen Cells (B) Mucous Cells (C) Parietal Cells (D) Oxyntic Cells
(17)	The structure involved in Guttation is : (A) Lenticels (B) Stomata (C) Hydathodes (D) Cuticle





# Bahawalpur Board-2021



Roll No.	1111 - 22000	Session (2017 – 19 ) to (2020 – 22)	Inter ( Part – I )
Biology (Subjective )	Inter – A – 2021	Time 2 : 40 Hours	Marks : 68

Note: It is compulsory to attempt any (8 – 8) Parts each from Q.No. 2, Q.No.3 and attempt any (6) Parts from Q.No.4. Attempt any (3) Questions from Part – II. Write same Question No. and Its Part No. as given in the Question Paper.

Make Diagram where necessary.

Part - I

22 x 2 = 44

- Q.No.2 (i) Differentiate between Nucleoside and Nucleotide.  
(ii) Define Apoenzyme and Holoenzyme.  
(iii) Give difference between Prosthetic Group and Activator.  
(iv) What are Enzyme Inhibitors? Give example.  
(v) What is Ergotism? How it is caused?  
(vi) Differentiate between Plasmogamy and Karyogamy.  
(vii) What is Notochord? Write down its function.  
(viii) Define Placenta. Write its function.  
(ix) What is Mantle? In which phylum it is present?  
(x) Differentiate between Sac-like and Tube-like Digestive System.  
(xi) Define Photosynthesis with the help of an equation.  
(xii) Define Alcoholic Fermentation. Write its equation.
- Q.No.3 (i) Define Life.  
(ii) What is Integrated Disease Management?  
(iii) Define Secondary Wall. Also give its chemical composition.  
(iv) Give two functions of Golgi Apparatus.  
(v) What is Trichonympha?  
(vi) Define Pellicle.  
(vii) Which type of Photosynthetic Pigments are present in plant like protists?  
(viii) Give resemblances of Green Algae with plants.  
(ix) Why Bryophytes are called Amphibians of plant world?  
(x) Differentiate between Ovule and Integuments.  
(xi) Define Symplast Pathway.  
(xii) Define Thalassaemia.
- Q.No.4 (i) Define Binomial Nomenclature and give one example following its rules.  
(ii) Differentiate between Facultative Bacteria and Microaerophilic Bacteria.  
(iii) Give names of Salivary Glands with their location.  
(iv) Differentiate between Appendix and Appendicitis.  
(v) What is Botulism?  
(vi) What are Alveoli?  
(vii) Differentiate between Bronchi and Bronchioles.  
(viii) Differentiate between Haemoglobin and Myoglobin.  
(ix) What are Lung Capacities?

Part - II



( 3 x 8 = 24 )


- Q.No.5 (a) Write a note on Deductive and Inductive Reasoning with example of each. (4)  
(b) Discuss role of Influx of Potassium Ions in opening and closing of Stomata. (4)
- Q.No.6 (a) Write a note on Nucleic Acid. (4)  
(b) Discuss Economic Losses due to Fungi. (4)
- Q.No.7 (a) Describe Nutrition in Bacteria. (4)  
(b) Describe the Evolution of Leaf. (4)
- Q.No.8 (a) Describe the structure of a Virus giving example of Bacteriophage. (4)  
(b) Draw outline of the Krebs Cycle. (4)
- Q.No.9 (a) Differentiate between Prokaryotes and Eukaryotes. (4)  
(b) Give the role of large intestine in digestion of Man. (4)





Biology	(C)	L.K.No. 1116	Paper Code No. 6465
Paper I	(Objective Type)	Inter -A- 2019	(New Pattern)
Time :	20 Minutes	Inter (Part - I)	
Marks :	17	Session (2015 -17) to (2018 - 20)	

Note : Four possible choices A, B, C, D to each question are given. Which choice is correct fill that circle in front of that Question No. Use Marker or Pen to fill the circles. Cutting or filling two or more circles will result in Zero Mark in that Question.

o.1	pH value of 7.60 is optimum for enzyme :	
)	(A) Arginase (B) Enterokinase (C) Catalase (D) Sucrase	
)	Amount of Solar Energy required to synthesize 10 g of Glucose is :	
	(A) 617.6 K cal (B) 717.6 K cal (C) 817.6 K cal (D) 917.6 K cal	
)	Population of different species living in the same Habitat form :	
	(A) Community (B) Population (C) Biome (D) Biosphere	
)	Sedimentation rate of Eukaryotic Ribosome is : (A) 30 S (B) 50 S (C) 70 S (D) 80 S	
)	Apicomplexans move by : (A) Cilia (B) Flagella (C) Flexing (D) Tube Feet	
)	Which is anaerobic bacterium :	
	(A) E. Coli (B) Spirochete (C) Pseudomonas (D) Campylobacter	
)	Which is organelle of symbiotic origin :	
	(A) Mitochondria (B) Vacuole (C) Cell Membrane (D) Cell Wall	
i)	Poisonous Mushrooms are called : (A) Mushrooms (B) Morels (C) Truffles (D) Toad Stool	
i)	In birds, the organ of voice is called : (A) Pharynx (B) Larynx (C) Syrinx (D) Vocal Cords	
0)	Mollusca has a respiratory pigment of blue colour, called :	
	(A) Haemoerythrin (B) Haemocyanin (C) Haemoglobin (D) Myoglobin	
1)	Sweet Pea belongs to which family :	
	(A) Fabaceae (B) Rosaceae (C) Solanaceae (D) Poaceae	
2)	Plastocyanin protein contains : (A) Magnesium (B) Iron (C) Potassium (D) Copper	
3)	Blood is not involved in transport of gases in : (A) Frog (B) Fish (C) Insects (D) Man	
4)	Volume of Dry seed may increase upto 200 times after absorbing water by :	
	(A) Diffusion (B) Osmosis (C) Active Transport (D) Imbibition	
5)	Breaking of Terminal Phosphate of ATP releases energy of about :	
	(A) 7.3 K cal (B) 6.5 K cal (C) 4.5 K cal (D) 3.7 K cal	
.6)	Tentacles are characteristic of : (A) Amoeba (B) Hydra (C) Euglena (D) Snail	
.7)	Single Circuit Heart is present in : (A) Fishes (B) Amphibians (C) Reptiles (D) Mammals	





Roll No.	1116 - 24000	Session (2015 - 17) to (2018 - 20)	Inter (Part - I)
Biology (Subjective)	Inter - A - 2019	Time 2 : 40 Hours Marks : 68	(New Pattern)

Note: It is compulsory to attempt any (8 - 8) Parts each from Q.No. 2, Q.No.3 and attempt any (6) Parts from Q.No.4. Attempt any (3) Questions from Part - II. Write same Question No. and its Part No. as given in the Question Paper. **Bahawalpur Board-2019**

Make Diagram where necessary.

Part - I



22 x 2 = 44

- (i) Differentiate between Amylose and Amylopectin.
- (ii) What are Competitive and Non-Competitive Inhibitors?
- (iii) How temperature affects rate of Enzyme Action?
- (iv) What Lock and Key Model says about Substrate Enzyme Interaction?
- (v) Differentiate between Plasmogamy and Karyogamy.
- (vi) What is Dikaryotic Hyphae and how it is formed?
- (vii) What are Beneficial Insects?
- (viii) Write three basic characters of all Chordates.
- (ix) What are Marsupials?
- (x) Give functions of Swim Bladder and sources of Gases in it.
- (xi) Define Calvin Cycle.
- (xii) What happens to Pyruvic Acid before entering into Kreb's Cycle?

- (i) Differentiate between Inductive and Deductive Reasoning.
- (ii) Define Social Biology.
- (iii) Differentiate between Microtubules and Microfilaments.
- (iv) What is Cell Fractionation?
- (v) What are Choanoflagellates?
- (vi) How are Limestone deposits formed?
- (vii) Give habitat of Algae.
- (viii) What is Conjugation?
- (ix) Differentiate between Antheridiophores and Archegoniophores.
- (x) Give two important features of Lycopsidea.
- (xi) What is the cause of Cyanosis?
- (xii) What are Lymph Nodes?

4. (i) Describe rules of Binomial Nomenclature.
- (ii) What is Hormogonia?
- (iii) What is Appendicitis?
- (iv) What is the cause of Constipation?
- (v) Enlist most obvious functions of Oral Cavity.
- (vi) How the body of Earthworm is kept moist?
- (vii) What are Spiracles?
- (viii) Enlist properties of Respiratory Surfaces in animals.
- (ix) Describe the role of Mitochondria in Photorespiration.

Part - II

5. (a) Describe the role of Biology In the field of Food Production. (4)
- (b) Enlist any eight functions of Blood. (4)
6. (a) Describe Importance of Water by discussing Its various properties. (4)
- (b) Discuss various methods of Nutrition in Fungi. (4)
7. (a) Discuss the Habitat, Structure and Reproduction of Nostoc in detail. (4)
- (b) Discuss the Life Cycle of Adiantum. (4)
8. (a) Define Binomial Nomenclature. Give its rules and why it is needed? (4)
- (b) Explain Electron Transport Chain In Mitochondria. (4)
9. (a) Explain Structure of Plasma Membrane. (4)
- (b) Describe Digestion in Amoeba. (4)





Note : Four possible choices A, B, C, D to each question are given. Which choice is correct, fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.

Q.No.1	Which one of these is Macro Molecule :
(1)	(A) $H_2O$ (B) $CO_2$ (C) $O_2$ (D) Starch
(2)	The percentage of water in human bone cells is : (A) 18 % (B) 19 % (C) 20 % (D) 25 %
(3)	The Optimum pH of Pancreatic Lipase is : (A) 7.00 (B) 9.00 (C) 8.00 (D) 6.00
(4)	The protein present in microtubules is : (A) Myosin (B) Actin (C) Tubulin (D) Tropomyosin
(5)	The number of Capsomeres in the Capsid of Adenovirus is : (A) 253 (B) 252 (C) 257 (D) 254
(6)	Pili are primarily involved in : (A) Parthenogenesis (B) Vaccination (C) Conjugation (D) Motility
(7)	Diatoma belongs to Phylum : (A) Rhodophyta (B) Euglenophyta (C) Chlorophyta (D) Chrysophyta
(8)	Reindeer Moss is a : (A) Moss (B) Fungus (C) Lichen (D) Mold
(9)	In Spermatophytes, seed is formed from : (A) Ovule (B) Ovary (C) Anther (D) Embryosac
(10)	Nereis belongs to class : (A) Oligochaeta (B) Hirudinea (C) Polychaeta (D) Insecta
(11)	Polymorphism is a characteristic of Members of Phylum : (A) Echinodermata (B) Cnidaria (C) Annelida (D) Arthropoda
(12)	Oxygen released during Photosynthesis comes from : (A) $CO_2$ (B) $C_6H_{12}O_6$ (C) $H_2O$ (D) $CaCO_3$
(13)	The process of Glycolysis occurs in : (A) Mitochondria (B) Ribosomes (C) E.R. (D) Cytosol
(14)	Cohesion Tension Theory was proposed by : (A) Sacks (B) Dixon (C) Van Mohl (D) Van Neil
(15)	Temperature that causes closure of Stomata is : (A) $30-40^{\circ}C$ (B) $30-35^{\circ}C$ (C) $25-35^{\circ}C$ (D) $40-45^{\circ}C$
(16)	Certain types of Whales are also : (A) Omnivore (B) Filter Feeder (C) Fluid Feeder (D) Herbivore
(17)	Parabronchi are present in the lungs of : (A) Insects (B) Man (C) Lion (D) Birds





Roll No.	816 - 22000	New Pattern	Inter (Part - I)
Biology (Subjective)	Inter-A-2018	Time : 2:40 Hrs Marks = 68	Session (2015 - 17) to (2017 - 19)

Note: It is compulsory to attempt any (8-8) parts each from Q.No.2 and Q.No.3 while attempt any (6) parts from Q.No.4  
Attempt any (03) questions from Part II. Write same Question No. and its Part No. as given in the question paper.

Make Diagram where Necessary.

Part - I

**Bahawalpur Board-2018** 22 x 2 = 44

**Q.No.2** (i) Differentiate between Chemotherapy and Gene Therapy.

- (ii) What is Biological Control? Give its example.
- (iii) Differentiate between Competitive and Non-Competitive Enzyme Inhibitors.
- (iv) How Holoenzyme differs from Apoenzyme?
- (v) Define Optimum pH. Give optimum pH of Pepsin.
- (vi) What are Capsomeres? How many Capsomeres are present in the Capsids of Herpes Virus?
- (vii) What is Swim Bladder? State its function.
- (viii) Differentiate between Spiral and Radial Cleavage.
- (ix) What is Polymorphism? Give two examples.
- (x) Name any two Larvae found in Echinoderms.
- (xi) Differentiate between Rusts and Smuts.
- (xii) What is Parasexuality?

**Q.No.3** (i) Write two chemical methods to control microbes.

- (ii) What are the Kelps?
- (iii) What is Chlorella? Write its use.
- (iv) Write down the role of Phytophthora Infestans in human history.
- (v) Differentiate between Foraminiferans and Actinopods.
- (vi) What is Ovule?
- (vii) What are the Monoecious Plants?
- (viii) Differentiate between Light Reaction and Dark Reaction of Photosynthesis.
- (ix) Compare Chlorophyll a to Chlorophyll b.
- (x) What is Pyrosis? Give its cause.
- (xi) Differentiate between Peristalsis and Antiperistalsis.
- (xii) What do you know about the Detritivores?

**Q.No.4** (i) Differentiate between Granum and Thylakoid Membrane.

- (ii) What is Centromere and its role?
- (iii) Differentiate between Heat Capacity and Heat of Water Vaporization.
- (iv) Differentiate between Apoplast and Symplast Pathways.
- (v) Differentiate between Solute Potential and Pressure Potential.
- (vi) Differentiate between Cutaneous Respiration and Pulmonary Respiration.
- (vii) Define Parabronchi and its role in birds.
- (viii) Differentiate between Bronchi and Bronchioles.
- (ix) What is Respiratory Distress Syndrome and its symptoms?

Part - II

**Q.No.5** (a) State and explain the process of Cloning.

(b) Define Immunity. Discuss its types.

**Q.No.6** (a) Discuss Acylglycerols in detail.

(b) Give economic losses due to Fungi.

**Q.No.7** (a) What are Glyoxysomes? Give their functions.

(b) Write a note on Food Poisoning.

**Q.No.8** (a) Write a note on characteristics of Viruses.

(b) Sketch the process of Glycolysis. (No description required.)

**Q.No.9** (a) Explain Respiration in Bacteria.

(b) Write a note on the Economic Importance of Family Rosaceae.

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