



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

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	Percentage of Calcium in Human Body is :
(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 - 26 000	Session (2020 - 22 )to(2021 - 23)	Inter ( Part - I )
<b>Biology (Subjective)</b>	<b>Inter - A - 2022</b>	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

BWP-22

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)

