

Roll No. 

(To be filled in by the candidate)

**Biology****H.S.S.C (11<sup>th</sup>)-A-2022**

Time : 20 Minutes

Paper : I

Objective – (i)

Marks : 17

**Seat - 22**Paper Code  6  4  6  1

Note: - 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 that question number in your answer book. Use marker or pen to fill the circles. Cutting or filling up two or more circles will result no mark.

**SECTION-A**

Q.1	Questions	A	B	C	D
1.	A method in which pests are destroyed by using some living organism is called:	Biological control	Insecticide control	Cultural control	Pesticide control
2.	Identify the unsaturated fatty acid.	Acetic acid	Butyric acid	Palmitic acid	Oleic acid
3.	The optimum pH for pepsin is:	2.00	4.50	5.50	7.60
4.	Nuclear membrane is continuous with:	Endoplasmic reticulum	Golgi bodies	Lysosomes	Peroxisomes
5.	The mysterious brain infection in man is caused by:	Virion	Fungi	Bacteria	Prions
6.	Antibiotics are produced by fungi and certain bacteria of groups:	Oomycetes	Basidiomycetes	Ascomycetes	Actinomycetes
7.	Which one of the given phylums has no flagella?	Euglenophyta	Pyrophyta	Rhodophyta	Chlorophyta
8.	The number of ascospores in each ascus are:	2	4	6	8
9.	Vascular system is absent in:	Bryophytes	Pteridophytes	Gymnosperms	Angiosperms
10.	During development of an animal mesoderm layer gives rise to:	Nervous system	Digestive system	Integumentary system	Reproductive system
11.	Which one of the given is intermediate host for Taenia?	Snail	Pig	Sparrow	Man
12.	The product of cyclic phosphorylation is/are:	ATP	NADP	NADP and ATP	NADP, ATP and O <sub>2</sub>
13.	In which of the given parts of body lactic acid fermentation takes place?	Brain	Muscle	Heart	Liver
14.	Appendix arise from blind end of:	ileum	Caecum	Colon	Rectum
15.	Surfactant is mainly composed of:	Lipids	Proteins	Lipoproteins	Carbohydrates
16.	Which one of the given parts of fish body has oxygenated blood?	Sinus venosus	Dorsal aorta	Ventral aorta	Atrium
17.	Hydathodes are linked with one of the given processes.	Imbibition	Bleeding	Guttation	Transpiration

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Roll No. 

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(To be filled in by the candidate)

**Biology**

**H.S.S.C (11<sup>th</sup>)-A-2022**

Time : 2:40 Hours

Paper : I **SWL - 22**

Subjective

Marks : 68

Note:- Section B is compulsory. Attempt any 3 questions from Section C.

**SECTION-B**

2. Write short answers to any Eight parts. (8 x 2 = 16)

- i. Why proper arrangement of amino acids is necessary for proteins? Give an example.
- ii. What will happen to enzymatic reactions if the temperature becomes 50°C ?
- iii. Why some enzymes are not produced in active form? Give an example.
- iv. Enzymes become denatured in what ways? Explain briefly.
- v. What are septate and non-septate hyphae?
- vi. Write a brief note on yeast.
- vii. Give four parasitic adaptations in Platyhelminthes.
- viii. Define Moulting.
- ix. What do you know about locusts?
- x. Give two differences between osteichthyes and chondrichthyes.
- xi. What is compensation point?
- xii. How absorption spectrum differs from action spectrum?

3. Write short answers to any Eight parts. (8 x 2 = 16)

- i. Differentiate between biopesticides and biological control.
- ii. How a biologist can help to reduce environmental pollution?
- iii. Why thylakoid has grana and intergrana?
- iv. Describe the fact that centrifugation is necessary for cellular fractionation.
- v. How are limestone deposits formed?
- vi. Write two similar and two different characters between algae and green plants.
- vii. Give two examples each of red algae and green algae.
- viii. What is the name of oomycetes which played infamous role in human history? Comment why it is so notorious?
- ix. Which plant group is called arthropytes and why?
- x. Differentiate between monocots and dicots.
- xi. What will be direction of flow of blood in the heart of fishes?
- xii. Define Immunity. What is difference between active and passive immunity?

4. Write short answers to any Six parts. (6 x 2 = 12)

- i. Define Retroviruses.
- ii. Write down few words on the capsule of bacteria.
- iii. Write down the names of any two salivary glands. Compare them.
- iv. Define Heart Burn.
- v. Define Dyspepsia.
- vi. Write down the lung capacity of humans.
- vii. By listening "Smoker's Cough" which disease come in our mind? Elaborate.
- viii. How muscles get their oxygen?
- ix. Has pH any effect on the blood when oxygen combines with haemoglobin?

**SECTION-C**

**(EACH QUESTION CARRIES EIGHT (8) MARKS)**

- 5. (a) Why is understanding of biodiversity important and how biology is helping to mankind to conserve environment? 4
- (b) What is ascent of sap? Explain the Cohesion-Tension Theory? 4
- 6. (a) Describe the structure of amino acids and importance of proteins. 2+2
- (b) Describe nutrition in Fungi and explain mycorrhizal association. 2+2
- 7. (a) Wise use of antibiotics is necessary. What happens if we misuse them? Introduce antibiotics as well. 4
- (b) Comprehend various processes that occurred in vascular plants to evolve microphylls and megaphylls. 4
- 8. (a) Describe the structure and function of plasma membrane. 4
- (b) Explain the digestion of food in Hydra. 4
- 9. (a) Describe the structure and function of plasma membrane. 4
- (b) Describe any four methods of animal nutrition. 4