SWL-11-23

Roll No.

(To be filled in by the candidate)

**Biology** 

H.S.S.C (11th)1st Annual 2023

: 20 Minutes

Paper: I

Objective - (iv)

Marks: 17

Paper Code 6 4 7 6 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                               | В                                | C                                | D                                |
|-----|---|---------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 1.  | A contagious disease is:  | Cancer                          | Asthma                           | Tuberculosis                     | Emphysema                        |
| 2.  | The example of an insectivorous plant is:   | Dodder                          | Dionaea                          | Puccinea                         | Neotia                           |
| 3.  | In yeast Pyruvic acid is converted into:  | Ethyl alcohol                   | Methyl alcohol                   | Acetic acid                      | Lactic acid                      |
| 4.  | The absorption spectrum of light for chlorophyll ranges:  | 430-660 nm                      | 430-670 nm                       | 430-680 nm                       | 430-690 nm                       |
| 5.  | The worm that damages the wood of ships is called:  | Hook worm                       | Sepia                            | Teredo                           | Mytilus                          |
| 6.  | The respiratory pigment of molluscus is called:   | Haemocyanin                     | Haemoglobin                      | Haemolymph                       | Colourless<br>pigment            |
| 7.  | The symptom of candidosis is:   | Convulsion                      | Psychotic<br>thrush              | Oral thrush                      | Renal thrush                     |
| 8.  | The male gametophyte has two wings in:  | Cycas                           | Taxus                            | Picea                            | Pinus                            |
| 9.  | Which of the given pigment is absent in algae?  | Phycocyanin                     | Carotenoids                      | Xanthophylls                     | Phycoerythrin                    |
| 10. | The hollow, non-helical, filamentous appendages in bacteria:  | Cilia                           | Pilli                            | Flagella                         | Cyst                             |
| 11. | Mumps and measles are caused by:  | RNA naked virus                 | DNA naked<br>virus               | RNA enveloped virus              | DNA enveloped virus              |
| 12. | The liver and muscle cells appear filled with glycogen within membrane bounded organelles in disease: | Glycogenosis<br>type -l         | Glycogenosis<br>type -II         | Glycogenosis<br>type -III        | Glycogenosis<br>type -IV         |
| 13. | The charge bearing site of an enzyme is called:   | Catalytic site                  | Binding site                     | Blocking site                    | Active site                      |
| 14. | The number of carbon atom in waxes are:   | C <sub>5</sub> -C <sub>15</sub> | C <sub>15</sub> -C <sub>25</sub> | C <sub>25</sub> -C <sub>35</sub> | C <sub>35</sub> -C <sub>45</sub> |
| 15. | The oldest period of Mesozoic era is:   | Jurassic                        | Cretaceous                       | Triassic                         | Silurian                         |
| 16. | The hydrostatic pressure in xylem and root, pressure of roots is responsible for:                     | Bleeding                        | Guttation                        | Imbibition                       | Transpiration                    |
| 17. | The renal vein brings deoxygenated blood from:  | Brain                           | Liver                            | Lungs                            | Kidneys                          |

Roll No. (To be filled in by the candidate) iology 801-1/-23 H.S.S.C (11th)1st Annual 2023 Time : 2:40 Hours Paper: I 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.  $(8 \times 2 = 16)$ i. Differentiate between anabolic and catabolic reaction. ii. Only small quantities of vitamins are needed. Why? iii. Enlist different regions of active site and write down their functions. iv. Define inhibitors and give their examples. Differentiate between karyogamy and plasmogamy. vi. What is ergotism? vii. Write down two affinities of echinoderms with hemichordates. viii. What is marsupium? ix. Give two parasitic adaptations of Platyhelminthes. x. What is agricultural importance of earth worm? xi. Why non cyclic phosphorylation changes into cyclic phosphorylation under certain conditions. xii. Define oxidative phosphorylation.  $(8 \times 2 = 16)$ Write short answers to any Eight parts. 3. i. How can we determine the age of rocks? ii. Differentiate between organ and organelle. iii. What do you know about middle lamella? iv. Differentiate between cristae and cisternae? v. Why is it difficult to classify the protists? vi. Discuss the importance of chlorella. vii. What do you know about ramenta? Also write down their function. viii. Differentiate between homospory and heterospory. ix. What do you know about blue babies? x. Differentiate between cavum venosum and cavum pulmonale. xi. What are red tides? xii. How the comycotes are different from fungi?  $(6 \times 2 = 12)$ Write short answers to any Six parts. 4. i. What is Herpes simplex? ii. Differentiate between heterotrophic and saprophyte bacteria. iii. What is symbiotic nutrition? CANCELLED iv. Define microphagous feeders. Give example. v. What is the role of Gastrin? vi. Differentiate between pulmonary and cutaneous respiration. vii. What are parabronchi? What is rubisco? Write its function. Differentiate between bronchi and bronchioles.

## SECTION-C

Note:- Attempt any Three questions. Each question carries eight marks (4+4=8)

 $(8 \times 3 = 24)$ 

5.(a) What is cloning? Give its applications.

(b) Give comparison between closed and open circulatory system.

6. (a) Discuss the taxonomic position of Fungi.

(b) Write the importance of carbon. Why carbon is called skeleton of life?

7. (a) Explain chemical composition of bacterial wall in detail.

(b) Write a comprehensive note on life cycle of Adiantum.

8. (a) What do you know about the structure of viruses?

(b) Sketch the Calvin Cycle.

9. (a) Write down composition and functions of Ribosomes.

(b) Describe digestion of food in human stomach.