

| Roll No. |  |  |  |  |  |  |
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|          |  |  |  |  |  |  |

Sig. of Candidate.

| Answer Sheet No     |  |
|---------------------|--|
| Sig. of Invigilator |  |

| NOTE: | - Secti   | on-A is     | Minutes  compulsory. All pa completed in the rwriting is not allow                  | first 20 minu  | tes and n        | anded ove                 | r to the Ce          | question paper itself<br>entre Superintendent |
|-------|---|-------------|---|--|------------------|---------------------------|----------------------|---|
| Q. 1  | Circle the correct option i.e. A / B / C / D. Each part carries one mark.  (i) Who introduced the Binomial Nomenclature system? |             |   |  |                  |                           |                      |   |
|       |   | A.          | Vi Salius   |  | B.               | Carolus Li                | nnaeus               |   |
|       |   | C.          | Edward Jenner   |  | D.               | Charles D                 | arwin                |   |
|       | (ii)  | Which       | of the following stater   | nents is TRUE f  | or all gymn      |                           |                      |   |
|       | (iii)   | Λ           | They are vascular pl<br>They are usually fou<br>of the following chara<br>Growth B. | ind in hot plains<br>acteristic of Virus<br>Reproduction   | es is NOT        | They are like that of li  | D.                   | Respiration                                   |
|       | (iv)  | The fig     | ure given below show  | vs a nostoc filam  | ent. Where       | does it fix               | the nitrogen of      | of the atmosphere?                            |
|       |   |             | В   |  | 2                | C                         |                      |   |
|       | (v)   | A.          | hytes include<br>Liverworts, mosses<br>Gymnosperms, and                             | giosperms  | B.<br>D.         | Mosses,                   | rmnosperms<br>fungi  |   |
|       | (vi)  | Which       | of the following grou   | ps represents th   | e seedless       | plants?                   |                      |   |
|       |   | Α.          | Gymnosperms B.  |  |                  |                           | hytes D.             | Spermatophytes                                |
|       | (vii)   | Which<br>A. | of the following phylometry of the following phylometry B.                          | a has metamerio<br>Nematoda  | c segmenta<br>C. | tion in the b<br>Annelida | ody of its ani<br>D. | Mals?<br>Arthropoda                           |
|       | (viii)  | The te      | erm 'Cell' was first use<br>Schleiden B.  | and the second s | C.               | J. Purkir                 | ndi D.               | Robert Hook                                   |
|       | (ix)  | A.          | of the following plan<br>Cotton B.  | Mulberry   | C.               | Peepal                    | D.                   | Amaltas                                       |
|       | (x)   |             | h of the following mole   | ecules are abso  | rbed by the      | digestion o               | f carbohydrat        | e and protein in                              |
|       |   | the si      | mall intestine? Glucose, Amino a  | acids  | B.               | Sugar,                    | Fatty acids          |   |
|       |   | C.          | Glucose, Fatty ad   |  | D.               | Sugar,                    | Amino acids          |   |
|       | (xi)  | What        | t is the function of ma   | nganese in plan  | ts?              |                           |                      |   |
|       | 250,000   | Α.          | Synthesis of nucle  |  | B.               | Synthes                   | is of chloroph       | hyll  |
|       |   | B.          | Building of amino   | acids  | D.               | Synthes                   | sis of carbohy       | rdrates                                       |
|       | (xii) Which of the following paths does air take to enter the human lung?   |             |   |  |                  |                           |                      |   |
|       | A. Bronchiole → Bronchus → Larynx → Trachea   |             |   |  |                  |                           |                      |   |
|       |   | B.          | Bronchiole → Bro  | nchus → Trache   | ea → Laryn       | X                         |                      |   |
|       |   | C.          | Trachea → Bronc   | hiole Bronch   | us → Alveo       | lus                       |                      |   |
|       |   | 0.          | Tradited Brone  |  |                  |                           |                      |   |

Marks Obtained: ---- 1SA-1010 (L) ---



## **BIOLOGY SSC-I**

Total Marks Sections B and C: 53

Time allowed: 2:40 Hours

Student Bounty.com NOTE:- Answer any eleven parts from section 'B' and any two from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

|       | and legibly.  |                             |  |  |  |  |  |
|-------|---|-----------------------------|--|--|--|--|--|
|       | SECTION – B (Marks 33)  |                             |  |  |  |  |  |
| Q. 2  | Attempt any ELEVEN parts. The answer to each part should not exceed                           | 3 to 4 lines. (11 x 3 = 33) |  |  |  |  |  |
|       | (i) Define the following: a. Morphology b. Embryology c. Genetics                             | (1+1+1)                     |  |  |  |  |  |
|       | (ii) a. Why do some animals hibernate themselves in cold season?                              | (2)                         |  |  |  |  |  |
|       | b. Name two vertebrates that hibernate themselves in the winte                                | r season. (1)               |  |  |  |  |  |
|       | (iii) Two types of blood are received by the heart of frog during circulation                 | n. (3)                      |  |  |  |  |  |
|       | Name the veins which supply blood to the heart.   | II f th - h a du of from?   |  |  |  |  |  |
|       | b. Which chamber of the heart receives deoxygenated blood from all parts of the body of frog? |                             |  |  |  |  |  |
|       | (iv) Write down the salient features of the cell theory presented by Schlei                   | roused as medicines         |  |  |  |  |  |
|       | (v) Name any three Angiospermic plants from which the products that ar                        | (3)                         |  |  |  |  |  |
|       | are obtained.   | (0)                         |  |  |  |  |  |
|       | (vi) Define the following: a. Nucleoid b. Rachis c. Prothallus                                | (1+1+1)                     |  |  |  |  |  |
|       | a. Nucleoid b. Rachis c. Protrialius (vii) Differentiate between Arteries and Veins.          | (3)                         |  |  |  |  |  |
|       | (viii) Write down the cause of the following diseases:  |                             |  |  |  |  |  |
|       | a Beri-beri b. Rickets c. Anaemia   | (1+1+1)                     |  |  |  |  |  |
|       | (ix) Write down the structure of Amoeba.  | (3)                         |  |  |  |  |  |
|       | Write down one function of each of the following:   |                             |  |  |  |  |  |
|       | a. Pyrenoid b. Plasmid c. Radula of S   |                             |  |  |  |  |  |
|       | <ul><li>(xi) Differentiate between Aerobic and Anaerobic respiration.</li></ul>               | (3)                         |  |  |  |  |  |
|       | (xii) Write a short note on Carbohydrates.  | (3)                         |  |  |  |  |  |
|       | (xiii) Write a short note on different types of Plastids found in plants.                     | (3)                         |  |  |  |  |  |
|       | (xiv) a. How do the Parasitic plants obtain their food?                                       | (2)<br>(1)                  |  |  |  |  |  |
|       | <ul> <li>Give two examples of Saprophytic plants.</li> </ul>                                  | (3)                         |  |  |  |  |  |
|       | (xv) Write down the structure of Xylem tissue.  | (5)                         |  |  |  |  |  |
|       | SECTION - C (Marks 20)  |                             |  |  |  |  |  |
| Note: | Attempt any TWO questions. All questions carry equal marks.                                   | $(2 \times 10 = 20)$        |  |  |  |  |  |
| Q. 3  |   |                             |  |  |  |  |  |
| 4, 5  | b. How does digestion of food take place in the stomach of man?                               | (04)                        |  |  |  |  |  |
| Q. 4  | a. Name the chemicals present in the cigarette smoke. Also describe t                         | the harmful effects of      |  |  |  |  |  |
| G. 7  | each chemical.  | (00)                        |  |  |  |  |  |
|       | <ul> <li>What is Mutualism? Give two examples of mutualists.</li> </ul>                       | (03)                        |  |  |  |  |  |
|       | <ul> <li>Describe Cutaneous and Buccal Respiration in frog.</li> </ul>                        | (02)                        |  |  |  |  |  |
| Q. 5  | a. Describe the internal structure of Brassica root.  | (05)                        |  |  |  |  |  |
| W. O  | Write down the significance of meiosis cell division.   | (02)                        |  |  |  |  |  |
|       | c. Write down the energy rich compounds which are formed in light re                          | action of                   |  |  |  |  |  |
|       | photosynthesis.   | (03)                        |  |  |  |  |  |
|       |   |                             |  |  |  |  |  |