

SAR.

1118 Warning:- Please write your Roll No. in the space provided and sign.
(Inter Part – I) (Session 2015-17 to 2017-19)

Roll No.-----

Sig. of Student -----

Biology (Objective)**Paper (I)**

Time Allowed:- 20 minutes

PAPER CODE 2461

Maximum Marks:- 17

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. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question. Write **PAPER CODE**, which is printed on this question paper, on the both sides of the Answer Sheet and fill bubbles accordingly, otherwise the student will be responsible for the situation. Use of Ink Remover or white correcting fluid is not allowed.

Q. 1

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|--|----------------------|--------------------|---------------------|-----------------|
| 1) The number of species of insects are | (A) 22.5 % | (B) 17.6 % | (C) 15.5 % | (D) 53.1 % |
| 2) Glycogen gives colour with iodine | (A) Black | (B) Red | (C) Blue | (D) Green |
| 3) The optimum pH for sucrase enzyme is | (A) 4.50 | (B) 5.10 | (C) 4.90 | (D) 4.83 |
| 4) A group of ribosomes attached to mRNA is called | (A) Nucleosome | (B) Polysome | (C) Peroxisome | (D) Cytosome |
| 5) Solanum melangena is scientific name for | (A) Onion | (B) Potato | (C) Brinjal | (D) Tomato |
| 6) A cube of 8 cocci is termed as | (A) Tetrad | (B) Sarcina | (C) Streptococcus | (D) Diplococcus |
| 7) The protozoans having two kinds of nuclei are | (A) Amoeba | (B) Zooflagellates | (C) Ciliates | (D) Actinopods |
| 8) Parmelia is an example of | (A) Fruticose lichen | (B) Foliose lichen | (C) Crustose lichen | (D) Moss lichen |
| 9) Whisk ferns belong to sub-division. | (A) Lycopsidea | (B) Pteropsida | (C) Sphenopsida | (D) Psilopsida |
| 10) Mammals became dominant in a period. | (A) Devonian | (B) Silurian | (C) Coenozoic | (D) Jurassic |
| 11) Only left aortic arch is present in | (A) Birds | (B) Cockroach | (C) Crow | (D) Mammals |
| 12) The dark reaction for photosynthesis occurs in | (A) Chloroplast | (B) Stroma | (C) Grana | (D) Cytoplasm |
| 13) In respiratory chain NADH is oxidized by | (A) Coenzyme Q | (B) Cytochrome b | (C) Cytochrome a | (D) Cyto a_3 |
| 14) pH of fresh saliva of human is about | (A) 6 | (B) 7 | (C) 8 | (D) 9 |
| 15) Number of spiracles in cockroach is | (A) 8 | (B) 7 | (C) 9 | (D) 10 |
| 16) Cuticular transpiration takes place at | (A) Night | (B) Morning | (C) Evening | (D) Noon |
| 17) Antibodies are produced from | (A) Eosinophils | (B) Basophils | (C) Monocytes | (D) Lymphocytes |

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Warning:- Please, do not write anything on this question paper except your Roll No.

Biology (Subjective)

(Session 2015-17 to 2017-19)

Paper (I)

Time Allowed: 2.40 hours

(Inter Part - I)

Maximum Marks: 68

Section ----- I

2. Answer briefly any Eight parts from the followings:- $8 \times 2 = 16$

- (i) What is Hydroponic culture technique? Give its use.
- (ii) What is Bioremediation? Give example. (iii) Define Species.
- (iv) Differentiate between Apoenzymes and Holoenzymes.
- (v) What are enzymes? Give their importance. (vi) What are enzyme inhibitors? Give their example.
- (vii) Differentiate between endomycorrhizae and ectomycorrhizae.
- (viii) What are Lichens? Give their importance. (ix) Differentiate between spiral and Radial cleavage.
- (x) Give importance of Sponges. (xi) What is Placenta? Write down its function.
- (xii) What is swim bladder? Give its function.

3. Answer briefly any Eight parts from the followings:- $8 \times 2 = 16$

- (i) Differentiate between Eubacteria and Archaeobacteria.
- (ii) Define Foraminiferans. Give their importance.
- (iii) What are water molds or oomycetes? (iv) What are Chlorophytes? Give example.
- (v) What is Trypanosoma? Name the disease caused by it.
- (vi) Define Alternation of generation. (vii) What are paraphyses?
- (viii) Define Bioenergetics. (ix) What are Bacteriochlorophylls?
- (x) Define Symbiotic Nutrition with example. (xi) What are Macrophagous Feeders?
- (xii) Differentiate between obligate and Facultative Parasites.

4. Answer briefly any Six parts from the followings:- $6 \times 2 = 12$

- (i) What is division of labour? (ii) What is role of centriole?
- (iii) What are nucleohistones? (iv) Give role of respiratory pigments.
- (v) What are spiracles? Give total number of spiracles in cockroach.
- (vi) Give composition of inhaled and exhaled air. (vii) What are alveoli? Give their function.
- (viii) How stomata open? Give one method? (ix) Define ECG.

Section ----- II

Note: Attempt any three questions.

 $(8 \times 3 = 24)$

- 5. (a) Describe biological organization at organ-system level.
(b) Discuss lymphatic system of man.
- 6. (a) Write a note on primary and secondary structure of proteins.
(b) Draw and label the life cycle of Rhizopus.
- 7. (a) Describe structure and function of chloroplast.
(b) Write down process of digestion in cockroach.
- 8. (a) Describe life cycles at Bacteriophages (labelled diagrams).
(b) Draw the sketch of glycolysis (No description)
- 9. (a) Explain physical methods of Control of bacteria.
(b) Write down the adaptations of bryophytes toward the land habitat.

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