

Sig. of Supdt:.....

KT-XI-1701  
Biology (Part – I)  
Fresh/Reappear

Roll No.....

Fic. No.....

*Code = H*

Fic. No.....

Time allowed: 3 Hrs

Biology (Part – I)  
Fresh / Reappear

Marks: 85

Note: There are three sections of the paper, A, B & C. Attempt Section – A on the same paper and return it to the Superintendent within the given time. No marks will be awarded for cutting, erasing or over writing. Mobile phone etc. are not allowed in the examination hall.

Time: 20 Mins

Section "A"

Marks: 18

Q.1 Write the correct option i.e. A, B, C or D in the empty box provided opposite each part.

- |  |                  |                  |                  |                     |                            |
|--|------------------|------------------|------------------|---------------------|----------------------------|
| i. Appendix is a part of .....   | A. Duodenum      | B. ileum         | C. Caecum        | D. Colon            | <input type="checkbox"/> C |
| ii. Starfish belongs to which phylum?  | A. Echinodermata | B. Annelida      | C. Arthropoda    | D. Mollusca         | <input type="checkbox"/> A |
| iii. Which protein helps other cell of body to resist against viral infection? | A. Histamine     | B. Interferon    | C. Penicillin    | D. Antigens         | <input type="checkbox"/> B |
| iv. Cell organelle which is present in plant cell but not in animal cell.      | A. Lysosomes     | B. Mitochondria  | C. Centriole     | D. Plastid          | <input type="checkbox"/> D |
| v. Which on is self replicating organelles?                                    | A. Mitochondria  | B. Centriole     | C. Cell wall     | D. Ribosomes        | <input type="checkbox"/> A |
| vi. Hemoglobin consist of ..... polypeptide chains.                            | A. 3             | B. 4             | C. 5             | D. 6                | <input type="checkbox"/> B |
| vii. The optimum pH value for pepsin to work is .....                          | A. 5.5           | B. 6.8           | C. 2.6           | D. 1.6              | <input type="checkbox"/> D |
| viii. Thermophilic bacteria work at a temperature.....                         | A. 90°C          | B. -10°C         | C. 37°C          | D. 20°C             | <input type="checkbox"/> A |
| ix. Malate is formed from fumarate when it reacts with .....                   | A. ATP           | B. NADH          | C. FAD           | D. H <sub>2</sub> O | <input type="checkbox"/> D |
| x. Which one of the following is disaccharide?                                 | A. Glucose       | B. Fructose      | C. Lactose       | D. Galactose        | <input type="checkbox"/> C |
| xi. A group of flagella inserted at one pole of the bacteria is .....          | A. Monotrichous  | B. Lophotrichous | C. Amphitrichous | D. Atrichous        | <input type="checkbox"/> B |
| xii. Rhizopus an important member of .....                                     | A. Zygomycota    | B. Ascomycota    | C. Basidiomycota | D. Omycota          | <input type="checkbox"/> A |
| xiii. Most of the volume of blood is contained in .....                        | A. Arteries      | B. Veins         | C. Lacteal       | D. None of these    | <input type="checkbox"/> B |
| xiv. Salsola is a .....  | A. Hydrophyta    | B. Mesophyta     | C. Xerophyta     | D. Halophyta        | <input type="checkbox"/> D |
| xv. Glycine is converted into serine in .....                                  | A. Chloroplast   | B. Mitochondria  | C. Cell wall     | D. Ribosome         | <input type="checkbox"/> B |
| xvi. Mycorrhiza is a common feature of the sporophytes of .....                | A. Psilotum      | B. Pinus         | C. Rhynia        | D. Selaginella      | <input type="checkbox"/> B |
| xvii. Seedless grapes are produced by application of .....                     | A. Gibberellins  | B. Cytokinin     | C. Auxin         | D. Abscissic acid   | <input type="checkbox"/> A |
| xviii. Book lungs are special respiratory structure found in .....             | A. Butterfly     | B. Grass hopper  | C. Ant           | D Scorpion          | <input type="checkbox"/> D |

Time: 2:40 Hours

T-246

KT-XI-1701

P2394

Biology (Part - I)

Fresh/Reappear

**Section "B"**

**Marks: 40**

Q.2 Attempt any TEN parts. Each part carries equal marks.

- i. Write note on mitochondria.
- ii. Define transcription and translation.
- iii. Give chemical nature of glycosidic food.
- iv. How lactic acid is formed?
- v. Write note on flu virus.
- vi. Write general characteristics of fungi.
- vii. Write short note on Leukemia.
- viii. What is endosymbiosis?
- ix. What role plays capsule in the structure of bacteria?
- x. What are memory cells?
- xi. What is the importance of polymorphism?
- xii. What are the symptoms and preventions of Dyspepsia?
- xiii. What are interferons?

**Section "C"**

**Marks: 27**

Note: Answer any THREE questions. Each question carries equal marks.

Q.3 Write briefly the mode of action an enzyme.

Q.4 Describe the life cycle of Rhizopus in detail

Q.5 Describe the structure and functions of pancreas.

Q.6 Write short note on any two of the following.

- i. Hemichordata
- ii. C<sub>4</sub> photosynthesis
- iii. Growth correlation