

Sig. of Supdt. ....

KT-XI-1601  
**BIOLOGY**  
(Part - I)  
(Fresh / New Course)

Roll No. ....

Fig. # .....

Total Marks: 85

**BIOLOGY**  
(Part - I)  
(Fresh / New Course)

Time Allowed : 3 Hrs.

Marks: 18

**Section "A"**

Time : 20 Mins.

**NOTE :** Section-A is compulsory. All parts of this section to be answered on the questions paper itself. It should be completed in the given time and handed over to the Centre Superintendent. Deleting / Overwriting is not allowed. Do not use lead pencil.

**NOTE :** Insert the correct option (a, b, c, d) in the empty box opposite to each part.

**Q. 1** Insert the correct option (a, b, c, d) in the empty box opposite to each part. Each part carries one mark.

- i) The domain system was introduced by .....  
(a) Robert Whittaker (b) Margulis (c) Aristotle (d) Carl ~~Linnaeus~~ <sup>Woese</sup>  d
- ii) Methanogenic archaea can survive in condition which are .....  
(a) Extremely hot (b) Highly saline (c) Aerobic (d) Anaerobic  d
- iii) The main component of cellular membrane is .....  
(a) Cellulose (b) Protein (c) Lipids (d) Carbohydrate  b
- iv) All stages of malarial parasite are haploid except .....  
(a) Merozoites (b) Oocyst (c) Okinetes (d) Sprozoite  c
- v) All living cell get direct energy for life from .....  
(a) Glucose (b) Sun (c) Carbohydrate (d) ATP  d
- vi) The most important and basic category of taxonomy is .....  
(a) Phylum (b) Class (c) Species (d) Order  c
- vii) The inflorescence of Mulberry and willow is called ;  
(a) Panicle (b) Umbel (c) Corymb (d) Catkin  d
- viii) Organs of excretion in platyhelmenthus are ;  
(a) Flame cells (b) Nephridia (c) Malpighian tubules (d) Kidneys  a
- ix) The only living member of sub phylum sphenopsida ;  
(a) Rhynea (b) Cooksonia (c) Calamite (d) Equisem  d
- x) Terpenoides are made up of small units called ;  
(a) Carotene (b) Isoprenoid (c) Glycerol (d) Faty acids  b
- xi) The joining of 2 glucose molecule by condensation result in ;  
(a) Sucrose (b) Lactose (c) Maltose (d) All of these  c
- xii) Alper's syndrome is caused by ;  
(a) Viroids (b) Prions (c) HIV (d) HSV<sub>2</sub>  b
- xiii) Enzymes that catalyze bond formation between two substrate molecule are ;  
(a) Lyases (b) Transferases (c) Ligases (d) Hydrolasis  c
- xiv) The oxygenated blood is transported by vein ;  
(a) Pulmonary (b) Renal (c) Carotid (d) Coronary  a
- xv) The biggest W.B.C s in the body are ;  
(a) Macrophages (b) Neutrophills (c) Monocytes (d) N.K. cells  a
- xvi) Calotropis belongs to ;  
(a) Hydrophytes (b) Mesophytes (c) Xerophytes (d) Halophytes  c
- xvii) An enzyme that acts only in an acidic medium is ;  
(a) Rennin (b) Pepsin (c) Trypsin (d) Amylase  a
- xviii) The zig zag movement of young stem is called ;  
(a) Epi - nasty (b) Thigmotropism (c) Nutation (d) Hyponasty  c

KT-XI-1601 202  
**BIOLOGY**  
(Part – I)  
(Fresh / New Course)

Total Marks : 67

Time Allowed : 2:40 Hrs.

**Section – B**

Marks : 40

**Q. 2 Write short answers of any TEN of the following parts. Each part carries equal marks.**

- (i) If the baroreceptors are removed from artery, what would be the effect?
- (ii) How metamorphosis occurs in Arthropoda?
- (iii) What are plastids in plants?
- (iv) Compare photosynthesis in Bacteria and Cyanobacteria.
- (v) Write down the structural model of antibody.
- (vi) What do you know about dinucleotide?
- (vii) Draw labeled diagram of HIV virus.
- (viii) Write a note on mechanism of secretion of gastric juice.
- (ix) Write a note on diatoms.
- (x) What is photorespiration?
- (xi) Draw labeled diagram of a typical flower.
- (xii) What are the functions of Auxins?
- (xiii) What are reversible inhibitors?

**Section – C**

Marks : 27

**NOTE :** Attempt any THREE questions. Each question carries equal marks.

**Q. 3** Write a detail note on Osmoregulation in plants.

**Q. 4** Write briefly characters of Phylum Arthropoda.

**Q. 5** Describe sexual reproduction in Bacteria.

**Q. 6** Write a note on any two of the following.

- (a) Oligosaccharide
- (b) Cell Wall
- (c) Psilopsida