Sig. of Supdt.

KT-XI-14(A)

BIOLOGY - (Part-I)

Roll No.

Fic. No.....

Fic. No.....

Time Allowed : 3 Hrs. **Total Marks : 85**

Note: There are three sections of this paper, A, B, & C. Carefully read the instructions for each section and attempt accordingly.

Time Allowed : 20 Mins. **SECTION – A** **Total Marks : 18**

Note: Use this sheet for this section. No. mark will be awarded for cutting, erasing or over writing.

Q. 1 Insert the correct option (a, b, c, d) in the empty box opposite to each part. Each part carries one mark. Any kind of Mark Left / Written is strictly prohibited. Mobile Phone is strictly prohibited in Examination Hall.

i) Ribosomes were discovered by:
(a) Robert Hooke (b) Palade (c) Ivanowski (d) De Duve

ii) One of the following is also known as the power house of the cell:
(a) Plastids (b) Golgi Body (c) Mitochondria (d) Nucleus

iii) Peptide Bond is found in:
(a) Proteins (b) Lipids (c) Carbohydrates (d) DNA

iv) Optimum pH for Urease enzyme is:
(a) 5 (b) 6 (c) 7 (d) 8

v) Range of wavelength for visible light is:
(a) 390-760nm (b) 400-770nm (c) 410-780nm (d) 440-790nm

vi) Bacilli are:
(a) Spherical (b) Rod shaped (c) Cubic (d) Corkscrew shaped

vii) Volvox belongs to one of the following groups:
(a) Zooflagellata (b) Ciliata (c) Forminifera (d) Chlorophyta

viii) Athelet's foot is a disease caused by:
(a) Algae (b) Fungi (c) Protozoans (d) Bacteria

ix) All of the following are carnivorous plants except:
(a) Pitcher plant (b) Sundew (c) Butterwort (d) Cannabis

x) Companion cells are found in:
(a) Parenchyma (b) Collenchyma (c) Phloem (d) Xylem

xi) Hydrilla is a:
(a) Hydrophyte (b) Mesophyte (c) Xerophyte (d) Halophyte

xii) Which of the following has higher number of glycosidic bonds:
(a) Glucose (b) Fructose (c) Maltose (d) Ribose

xiii) Halophytes are best adapted to:
(a) High Temperatures (b) Low temperatures
(c) Saline conditions (d) Both A & C

xiv) Number of carbonatoms is a deoxyribose sugar molecule is:
(a) 4 (b) 5 (c) 6 (d) 7

xv) Penicillium belongs to one of the following groups of Fungi:
(a) Zygomycota (b) Ascomycota (c) Basidiomycota (d) Deuteromycota

xvi) Type of inflorescence found in Grapes is:
(a) Catkin (b) Umbel (c) Capitulum (d) Panicle

xvii) Absorption is maximum in small intestine because of:
(a) The presence of Villi (b) Its length (c) Its thin walls (d) All of these

xviii) In bryophytes the female reproductive organ is known as:
(a) Stamen (b) Antheridium
(c) Carpel (d) Archegonium

KT-XI-14(A)

BIOLOGY - (Part-I)

Total Marks : 67

Time Allowed : 2:40 Hrs.

Section – B

Marks : 40

Note: - Attempt section B and C accordingly. Draw labeled diagrams wherever necessary.

Q. 2 Attempt any TEN parts of the following. All parts carry equal marks.

(i) What functions a nucleus performs in a cell.
(ii) Describe Oligosaccharides.
(iii) Explain Induced – Fit hypothesis of enzyme action.
(iv) What are Carotenoids?
(v) How viruses can be classified on the basis of Host.
(vi) Write general characters of Brown Algae.
(vii) List three uses of Bryophytes.
(viii) Differentiate between Microphyllous and Megaphyllous leaf.
(ix) Differentiate between Adhesion and Cohesion.
(x) What is Apical dominance?
(xi) Define digestive function of jejunum.
(xii) How Obesity can be prevented.
(xiii) Differentiate between Vasodilation and Vasoconstriction.

Section – C

Marks : 27

NOTE: - Attempt any THREE questions. All question carry equal marks.

Q. 3. Write a comprehensive note on Anaerobic respiration.

Q. 4. What are Nucleic acids? Describe the structure of DNA.

Q. 5. Describe in detail the Evolution of Seed in plants.

Q. 6. Write short notes on any TWO of the following.

a. Cyanobacteria.
b. Endoplasmic Reticulum.
c. Allergies.