

1	1
2	2
3	3

Time: 3 hours

Marks: 75

Note: There are THREE Sections in this paper i.e. A, B & C. Attempt Section-A and return it to the Superintendent within the given time. No marks will be awarded for cutting, erasing and overwriting. Mobile Phones are strictly prohibited in Examination Hall.

Time: 20 minutes

Section-A

Marks: 18

QNo.1 Select the correct option and shade (A,B,C,D) in the given Bubble Answer Sheet.

- i. The cell wall of prokaryotic cell is composed of _____
 A- Pectin B- Muriel C- Lignine D- Cellulose
- ii. Resolution power of compound microscope is how many time more than naked eye?
 A- 500x B- 150x C- 250x D- 400x
- iii. The mammalian spermatozoan have _____
 A- Single flagellum B- Two flagella C- Three flagella D- Four flagella
- iv. Myosin is fibrous protein found in _____
 A- Muscle cell B- Hairs C- Bones D- Cornea
- v. Optimum pH of invertase enzyme is _____
 A- 7.0 B- 7.5 C- 4.5 D- None of these
- vi. Enzymes which catalyze reaction by addition of water during cleavage of bond are _____
 A- Ligase B- Lyases C- Isomerise D- Hydrolases
- vii. Humoral immunity is due to _____
 A- T-cell B- B-cell C- NK cell D- Plasma cell
- viii. Compound formed in an organism to inhibiting growth of another organism is _____
 A- Antibiotic B- Antigen C- Antibody D- Anti allergic
- ix. The largest body of lymphoid tissue in human body is _____
 A- Liver B- Spleen C- Kidney D- Heart
- x. The bacteria which is leading cause of peptide ulcer in early 1980s was _____
 A- H-pylori B- E.Coli C- Compylobactor D- Salmonella
- xi. Micronutrients are more available in soil of _____
 A- Low pH B- High pH C- Neutral pH D- At 14 pH
- xii. The symbol Ψ_w represents _____
 A- Solute potential B- Air potential C- Pressure potential D- Water potential
- xiii. Zoological name of star fish is _____
 A- Asterias rubens B- Ophiothrix C- Arabica Punctularia D- Thyone briareus
- xiv. The flower symmetry of dicotyledonamy plant is _____
 A- Dimerous B- Tetramerous C- Trimerous D- Pentamerous
- xv. Selaginella belongs to sub-phyllum _____
 A- Psilopsida B- Pteropsida C- Lycopsida D- Sphenopsida
- xvi. Cannabis sativus is used to treat _____
 A- Breast cancer B- Glaucoma C- Alzheimer disease D- Malaria
- xvii. Paramecium reproduce asexually by _____
 A- binary fission B- transverse fission C- Alveolate D- Kinetoplastid
- xviii. Xanthomonas phaseoli causes _____

Note: Time allowed 2:40 hours

SECTION – B

Marks: 40

Q2: Answer any TEN parts. Each part carries equal marks.

- i. What is difference between Prokaryotic and Eukaryotic Cell?
- ii. Explain Genetic Code.
- iii. How pH of cell effect the enzyme activity?
- iv. Differentiate between two types of acquired immunity.
- v. Write a note on Cyanosis.
- vi. What do you know about physical digestion?
- vii. Draw graphical representation of electron transport chain.
- viii. How HIV and AIDS can be prevented?
- ix. Describe importance of bacteria.
- x. Discuss pathogenic fungi.
- xi. Write down uses of Bryophytes.
- xii. What is Tuberculosis and how it is caused?
- xiii. Define mechanical tissue of plant and its types.

SECTION – C

Marks: 27

Note: Attempt any THREE of the following. All questions carry equal marks.

Q3: Explain the following:

- a) Role of plasma membrane (3)
- b) Micro-dissection (2)
- c) Endoplasmic reticulum (4)

Q4: a) Describe role of sunlight in process of photosynthesis. (5)

b) Give short note on chlorophylls. (4)

Q5: a) Give general character of Tracheophytes. (5)

b) Give note on Ulcer. (4)

Q6: Explain process of Kreb's Cycle with diagram. (7+2)