

Roll No. of Candidate : _____

64J-62-21

BIOLOGY

(INTERMEDIATE PART - I) 321 - (IV)

Paper – I

Group-II

Time: 20 Minutes

OBJECTIVE - - - - Code : 6468

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. Attempt as many questions as given in objective type question paper and leave others blank.

1. It is estimated that in normal persons blood cells or cell like bodies constitute by volume of blood.
(A) 55% (B) 50% (C) 45% (D) 40%
2. The average life span of red blood cells in human is about _____ month/months.
(A) one (B) two (C) three (D) four
3. Venous blood contains carbon dioxide about _____.
(A) 50 ml / 100 ml (B) 60 ml / 100 ml (C) 54 ml / 100 ml (D) 64 ml / 100 ml
4. In stomach hydrochloric acid is secreted in concentrate form. For the pepsin to act on protein pH is adjusted ranging from _____.
(A) 1 – 2 (B) 2 – 3 (C) 3 – 4 (D) 4 – 5
5. During glycolysis 1 – 3 Bisphosphoglycerate gives one phosphate to ADP to convert into ATP and becomes _____.
(A) 3-phosphoglycerate (B) 2-phosphoglycerate (C) phosphoenol pyruvate (D) phosphoglycerate
6. Alcoholic and lactic acid fermentations yield small amount of energy present within the chemical bonds of glucose which is converted into ATP. It is only about _____ %.
(A) 2 (B) 5 (C) 10 (D) 20
7. Which of the following annelids is marine?
(A) stylaria (B) nereis (C) hirudo (D) pheretima
8. Among vertebrates sting rays are _____.
(A) reptiles (B) amphibians (C) fishes (D) mammals
9. Imperfect fungi belong to phylum _____.
(A) zygomycota (B) ascomycota (C) deuteromycota (D) basidiomycota
10. Among gymnosperms cedrus plant is commonly called _____.
(A) deodar (B) hemlock (C) sago-palm (D) pine
11. Which one of the following belongs to green algae?
(A) euglena (B) acetabularia (C) polysiphonia (D) fucus
12. Which one of the following is an example of spiral shaped bacteria?
(A) escherichia coli (B) bacillus subtilis (C) pseudomonas (D) hyphomicrobium
13. Which one of the following viral disease is not caused by RNA virus?
(A) small pox (B) influenza (C) poliomyelitis (D) mumps
14. Which one of the following cellular organelles is called power house of the cell?
(A) chloroplast (B) mitochondria (C) golgibodies (D) lysosomes
15. The enzymes involved in cellular respiration are found in _____.
(A) chloroplast (B) ribosomes (C) mitochondria (D) golgibodies
16. Types of amino acids found to occur in cells and tissues is about _____.
(A) 150 (B) 140 (C) 155 (D) 170
17. The branch of biology which deals with the use of living organisms, systems or processes in manufacturing and service industry is called _____.
(A) biotechnology (B) human biology (C) molecular biology (D) social biology

221-(IV)-321-23000

Note: Section I is compulsory. Attempt any THREE (3) questions from Section II.

(SECTION – I)**2. Write short answers to any EIGHT questions.****(2 x 8 = 16)**

- i - Define a peptide bond and how it is formed?
- ii - Differentiate between apoenzyme and holoenzyme.
- iii - What is a co-factor? Give its significance.
- iv - Give four characteristics of enzymes.
- v - How fungi differ from animals?
- vi - Write down a short note on omnivorous fungi.
- vii - Write down two differences between protostomes and deuterostomes along with examples.
- viii - Give asexual reproduction in sponges.
- ix - What are polyps and medusae?
- x - Give four characteristics of bony fishes.
- xi - How dark reaction can be summarized in an equation?
- xii - Differentiate between chlorophyll-a and chlorophyll-b.

3. Write short answers to any EIGHT questions.**(2 x 8 = 16)**

- i - Differentiate between fresh water and marine water biology.
- ii - What is theory? Write down properties of a good theory.
- iii - What is primary wall? Give its chemical composition.
- iv - Differentiate between chromoplast and leucoplast.
- v - Define thallus.
- vi - Give two characteristics of Euglenoids.
- vii - Mention structural features of red algae.
- viii - Write down four importance of algae.
- ix - Name floral leaves of a flower along with their functions.
- x - What is double fertilization?
- xi - Define hypertension and its cause.
- xii - Write down two functions of lymphatic system.

4. Write short answers to any SIX questions.**(2 x 6 = 12)**

- i - Write down any four characteristic features of viruses.
- ii - Write down about spiral shaped bacteria. Give all its three forms.
- iii - How trapping and digestion of insects occur in sundew?
- iv - What is dyspepsia?
- v - Define saprophytic nutrition.
- vi - How expiration occurs in human?
- vii - What is lung cancer?
- viii - How pH affects the capacity of haemoglobin to combine with oxygen?
- ix - Give composition of breathed air in man.

(SECTION – II)

5. (a) Write down a note on "protection and conservation of environment". (4)
(b) Enlist different functions that blood performs in human body. (4)
6. (a) Write down a note on nucleic acids. (4)
(b) Describe in detail basidiomycota. (4)
7. (a) Discuss control of bacteria by physical and chemical methods. (4)
(b) Write down a note on evolution of leaf. (4)
8. (a) Describe life cycle of bacteriophage. (4)
(b) Write down a note on photosystems. (4)
9. (a) Describe the structure and function of mitochondria. (4)
(b) Write down food absorption in small intestine of man. (4)