

Note: There are three sections in this paper i.e. Section A, B & C.

VERSION : C

Time Allowed: 20 Minutes

"Section-A"

Marks: 18

INSTRUCTIONS:

- Attempt this section on the MCQs Answer Sheet only.
- Use black ball point or marker for shading only one circle for correct option of a question.
- No mark will be awarded for cutting, erasing, over writing and multiple circles shading.

- Q. 1. Choose the correct option i.e. A,B,C, or D.
1. The two sub units of ribosome are held together by
 - (A) Ca ion
 - (B) H-bonds
 - (C) Mg ions
 - (D) Sulfur bridges
 2. "Hemoglobin" contains total numbers of "Amino acids".
 - (A) 574
 - (B) 573
 - (C) 576
 - (D) 474
 3. The bond formed between H_3PO_4 and hydroxyl (OH) group of pentose sugar is called
 - (A) Phosphodiester bond
 - (B) Peptide bond
 - (C) Ester linkage
 - (D) Glycosidic bond
 4. Chlorophylls are present in which component of the chloroplast?
 - (A) Lamella
 - (B) Thylakoid
 - (C) Stroma
 - (D) None of these
 5. Plasmodium belongs to which of the following protozoan group?
 - (A) Apicomplexa
 - (B) Kinetoplastida
 - (C) Foraminifera
 - (D) Ciliophora
 6. The "Lentivirus (Visna) causes disease in
 - (A) Goat
 - (B) Monkey
 - (C) Sheep
 - (D) Cat
 7. The Archaea Bacteria live in moderate conditions are called as
 - (A) Halophiles
 - (B) Thermophiles
 - (C) Acidophiles
 - (D) Methanogens
 8. The plant "Cassia fistula" has the inflorescence.....
 - (A) Typical raceme
 - (B) Soike
 - (C) Corymb
 - (D) Catkin
 9. All are "Stop codons" except.....
 - (A) UAA
 - (B) UUA
 - (C) UAG
 - (D) UGA
 10. Bacteriophage contains which of the following enzyme to digest bacterial cell wall to get entered in
 - (A) Amylase
 - (B) Gyrase
 - (C) Lysozyme
 - (D) Topoisomerase
 11. Carotenoids absorb the light in visible spectrum in the wavelength ranging from
 - (A) 600-700 nm
 - (B) 500-600 nm
 - (C) 400-500 nm
 - (D) 300-400 nm
 12. The disease "Beriberi" is produced due to deficiency of
 - (A) Vitamin B
 - (B) Vitamin C
 - (C) Electrolytes
 - (D) Iron
 13. All are fibrous proteins except.....
 - (A) Keratin
 - (B) Myosin
 - (C) Collagen
 - (D) Antibodies
 14. Mature "RBC" contains all cellular organelles except
 - (A) Golgi bodies
 - (B) Mitochondria
 - (C) Endoplasmic reticulum
 - (D) Both A & C
 15. During strong muscular exercise the heart rate of a person
 - (A) Increases
 - (B) Remain unchanged
 - (C) Decreases
 - (D) Fluctuates
 16. Which of the following cells turn into "Macrophages".....
 - (A) Neutrophils
 - (B) B-cells
 - (C) Monocytes
 - (D) Erythrocytes
 17. The T-lymphocytes are produced and become mature in
 - (A) Spleen
 - (B) Bone marrow
 - (C) Pancreas
 - (D) None of these
 18. "Atherosclerosis" is caused by
 - (A) LDL
 - (B) HDL
 - (C) VLDL
 - (D) VHDL

BIOLOGY (Part-I)

(Fresh/New Course)

"Section-B"

Marks: 40

Q. 2. Write short answers of any TEN (10) of the following parts. Each part carries equal marks.

- (i) Differentiate between "Higher" and "Lower" vascular plants. Why the term "Lower" is applied for lower vascular plants ?
- (ii) Describe the anatomical composition of "Arteries".
- (iii) Differentiate between "Ribose" and "Deoxyribose" sugars.
- (iv) What is meant by "Plant Movements"? Differentiate between: Epinasty, Hyponasty and Nutation.
- (v) What are Cytoskeletons? Describe their different types.
- (vi) Describe the reptiles-like characters of "Archaeopteryx".
- (vii) Define "Monochasial" and "Dichasial" inflorescence. Give suitable examples for each.
- (viii) Define "Hypotension" and "Hypertension". Describe primary and secondary hypertensions.
- (ix) Write short note on "Conjugation".
- (x) Define Photorespiration. Describe its main disadvantage.
- (xi) Elaborate various functions of plasma membrane.
- (xii) What is meant by "Food Poisoning"?
- (xiii) Express various components of "Nucleus".

"Section-C"

Marks: 27

Note: Answer any THREE (3) questions. Each question carries equal marks.

- Q. 3. Explain the process of "Glycolysis".
- Q. 4. Write notes on the following:
 - (a) Classify bacteria on the basis of "Shapes" with examples.
 - (b) Describe salient features of "Gymnosperms".
- Q. 5. Write notes on the following:
 - (a) Bacterial cell structure.
 - (b) Different growth phases of Bacteria.
- Q. 6. What is meant by different "Lines of defense" ? Differentiate the First, Second and Third line of defense. Describe the various components of "First line of defense".