

# BOTANY 2021

(AS PER CONDENSED SYLLABUS)

TIME: 1 Hour 30 Minutes (40 Marks)

NOTE:

- i) This section consists of 20 part questions and all are to be answered. Each question carries ONE mark.
- ii) Do not copy the part questions in your answer book. Write only the answer in full against the proper number of the question and its part.

## SECTION 'A' (Multiple Choice Questions) (20)

1. Choose the correct answer for each from the given options:

1. Solution having low concentration as compared to the cell sap
  - \* Hypertonic
  - \* Hypotonic ✓
  - \* Isotonic
  - \* Solute potential
2. In terms of number of chromosomes, the endosperm of seed is:
  - \* haploid
  - \* Diploid
  - \* Triploid ✓
  - \* Quadreploid
3. Two polynucleotide chains of DNA are apart from each other by:
  - \*  $3\text{Å}$
  - \*  $4\text{Å}$
  - \*  $20\text{Å}$  ✓
  - \*  $34\text{Å}$
4. A cell division without spindle is:
  - \* Amitosis ✓
  - \* Mitosis
  - \* Meiosis
  - \* Apomines
5. This biome is called the "bread basket" of the world:
  - \* Savanah
  - \* Grass land ✓
  - \* Tundra
  - \* Tropical Rain forest
6. This group of plants is found in soil of high salt concentration:
  - \* Hydrophytes
  - \* Mesophytes
  - \* Halophytes ✓
  - \* Xerophytes
7. The breakdown of rocks due to environmental action is called:
  - \* Topography
  - \* Pedology
  - \* Weathering ✓
  - \* Edaphic
8. The producer of a pond ecosystem is:
  - \* Bacteria
  - \* Phytoplankton
  - \* Zooplankton
  - \* Fungi
9. This codon is start codon: ✓
  - \* AUG ✓
  - \* UAG
  - \* UAA
  - \* UGA
10. Meristem responsible for secondary growth:
  - \* Apical
  - \* Intercalary
  - \* Lateral ✓
  - \* Cork
11. During the process the translation, cells use this to make protein:
  - \* RNA ✓
  - \* DNA
  - \* Chromosomes
  - \* Nucleus
12. The best soil for plant growth is:
  - \* Sand
  - \* Silt
  - \* Loam ✓
  - \* Clay
13. Total aggregation of gene in a population is called:
  - \* Chromosomes
  - \* Multiple gene
  - \* Gene pool ✓
  - \* Population
14. At High temperature plants produce these to preserve enzymes:
  - \* Fructans
  - \* Unsaturated fatty acids
  - \* Heat shock proteins ✓
  - \* Phytoalexins
15. The genetic makeup of any individual is called:
  - \* Allelomorph
  - \* Phenotype
  - \* Synapsis
  - \* Genotype ✓
16. During this stage of mitosis chromosomes arrange on equatorial plate:
  - \* Prophase
  - \* Metaphase ✓
  - \* Anaphase
  - \* Teleophase
17. The two chromatids of the same chromosome are called:
  - \* Chromonema
  - \* Centromere
  - \* Sister chromatid ✓
  - \* Kinetochore
18. Germination of seed inside the fruit is called:
  - \* Epigeal
  - \* hypogeal
  - \* viviparous ✓
  - \* hypocotyl
19. Movement of plant unrelated to the direction of stimuli is known as:
  - \* Nautation
  - \* Tropic
  - \* Nastic ✓
  - \* Turgor
20. These tissues are commonly known as conducting tissue:
  - \* Vascular tissues ✓
  - \* Cork Cambium
  - \* Meristem
  - \* Ground tissues