

# BOTANY 2022

TIME: 2 Hours

(40 Marks)

## SECTION 'A' (Multiple Choice Questions)(16)

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

(i) Enzyme are protected at high temperature by:

- \* Ice-Crystal
- \* Super Cooling
- \* Freezing Tolerance
- \* Heat Shock Proteins✓

(ii) Chromosomal Theory of Heredity was proposed by:

- \* Karl Correns
- \* Hershey and Chase
- \* George Beadle
- \* Walter Sutton✓

(iii) In this sub-stage of Meiosis Prophase I Terminalization occurs:

- \* Pachytene
- \* Leptotene
- \* Diplotene
- \* Diakinesis✓

(iv) A cell division without spindle is:

- \* Amitosis✓
- \* Mitosis
- \* Meiosis
- \* Apomixis

(v) This is present in RNA but not in DNA.

- \* Uracil✓
- \* Cytosine
- \* Adenine
- \* Guanine

(vi) The multiple effects of a single gene is termed as:

- \* Polygenic inheritance
- \* Multiple Alleles
- \* Pleiotropy✓
- \* Incomplete Dominance

(vii) If the sequence of base in one chain is ATTGCAT, the base sequence of its Partner in the duplex is:

- \* ATAGCAT
- \* AATGCAT
- \* GCCATTA
- \* TAACGTA✓

(viii) The first line of defence against pathogen in plants is:

- \* Endodermis
- \* Cortex
- \* Epidermis✓
- \* Cuticle

(ix) Germination of seed within the fruit while still attached to the plant is:

- \* Epigeal
- \* Hypogeal
- \* Viviparous✓
- \* Oviparous

(x) Promotion of flowering by cold treatment given to imbibed seeds is called:

- \* Vernalization✓
- \* Apomixis
- \* Parthenocarpy
- \* Phototropism

(xi) Both polynucleotide strands of DNA remain separated by:

- \* 5A
- \* 10 A✓
- \* 15A
- \* 20A

(xii) Dark zone of oceanic region is:

- \* Euphotic
- \* Aphotic✓
- \* Neritic
- \* Profundal

(xiii) The cotyledon in monocot seed is called:

- \* Epicotyl
- \* Coleorhiza
- \* Coleoptile
- \* Scutellum✓

(xiv) Example of ecosystem having lotic water is:

- \* Waterfall✓
- \* Swamp
- \* Pond
- \* Lake

(xv) In guttation plants lose excess water in the form of liquid from special pores on leaves called:

- \* Air pores