

# BOTANY

Time: 1 Hours 45 Minutes

Marks: 32

## SECTION 'B' (SHORT-ANSWER QUESTIONS)(20)

**NOTE: Answer 10 questions from this section.**

- 2.(i) Name any two aspects of Homeostasis.
- (ii) Write any two advantages of Secondary tissues.
- (iii) Define Pollination. Name its types.
- (iv) Name the kinds of Cymose inflorescence.
- (v) What is meant by Double fertilization?
- (vi) Draw Karyotype of Drosophila.
- (vii) Name different types of Cell division.
- (viii) Name various types of plants on the basis of relative requirement of light.
- (ix) Name the horizontal zones of sea.
- (x) How can we estimate the age of a tree?
- (xi) Mention any two functions of Auxin.
- (xii) Differentiate between isogamy and Oogamy.
- (xiii) Name various nitrogenous bases found in DNA nucleotides.
- (xiv) Which cross helps to determine the homozygosity or heterozygosity of a dominant parent?
- (xv) Name the two main types of movements in plants.

**3. Attempt any five part question.**

- (i) Explain the responses of plants against herbivory.
- (ii) Define Succession. Name its various types.
- (iii) Classify Chromosomes on the basis of position of centromere.
- (iv) Discuss advantages & disadvantages of Transpiration.
- (v) Write note on any one of the following:
  - (i) Seed dormancy
  - (ii) Vernalization
- (vi) How is Apoptosis different from Necrosis?
- (vii) Compare Mitosis with Meiosis.
- (viii) Write note on any one:
  - (i) Desert ecosystem
  - (ii) 4 forests of Pakistan.

## SECTION 'C' (DETAILED- ANSWER QUESTIONS)

**NOTE: Answer 2 question from this section(12)**

4. Describe Watson & Crick model of DNA. How does this model explain semi-conservative replication of DNA?
5. Define sex-linked inheritance. Explain with reference to haemophilia in man.
6. What do you mean by Biogeochemical cycle? Describe Nitrogen cycle.

OR Define Meiotic errors. Describe the defects caused due to abnormal number of chromosomes in human beings.