

# BOTANY

2018

Time: 1 Hours 45 Minutes

Marks: 32

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

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

- 2.(i) Define Paratonic movement.
- (ii) What do you mean by Double fertilization?
- (iii) Name various Meristematic tissues found in plants.
- (iv) Define Karyotype.
- (v) Name only the biotic factors of an ecosystem.
- (vi) How Halophytes cope with in salt marshes?
- (vii) Define any one:
  - Incomplete dominance
  - Co-dominance
- (viii) Give names of Racemose inflorescences having elongated Axis.
- (ix) Name Polygenic traits in human, plants and animals.
- (x) Define test cross. (xi) State the role of Pollen tube.
- (xii) Define Deletion, Duplication, Translocation & inversion.
- (xiii) When do you find Mitotic and Meiotic cell divisions in plant? (xiv) Define Photoperiodism.
- (xv) Explain Apical meristem.
3. Attempt any five part question.
- (i) Mention how plants respond to Drought stress?
- (ii) Find the possible blood group of children if the blood group of father is O and that the mother is AB.
- (iii) What is an autosome? How many Autosomes are there in a human cell? (iv) What is Down's Syndrome?
- (v) Define succession and name its various types.
- (vi) Write a note on Phenylketonuria.
- (vii) Define Biological Clock and Circadian Rhythm.
- (viii) Write a note on Sclerenchyma.

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

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

4. Define the term Ecosystem. Name the various abiotic components of an ecosystem. Describe climatic factors only.
  5. What are Phytohormones? Name various Phytohormones and discuss the role of Auxins.
  6. Describe Prophase I of Meiosis with diagrams.
- OR
- Describe the Law of Independent Assortment with the help of checker board.