

BOTANY
(Paper II)

Time Allowed : Three Hours

Maximum Marks : 300

QUESTION PAPER SPECIFIC INSTRUCTIONS

(Please read each of the following instructions carefully before attempting questions)

There are EIGHT questions divided in two Sections.

Candidate has to attempt FIVE questions in all.

Question Nos. 1 and 5 are compulsory and out of the remaining, any THREE are to be attempted choosing at least ONE question from each Section.

The number of marks carried by a question/part is indicated against it.

Wherever any assumptions are made for answering a question, they must be clearly indicated.

Word limit in questions, wherever specified, should be adhered to.

SECTION 'A'

1. Write notes on any THREE of the following in about 200 words each: **20×3=60**
- (a) Polytene Chromosome
 - (b) Signal Transduction
 - (c) Transgenic plants
 - (d) Standard deviation.
2. Describe in detail the ultrastructure of Golgi Complex and its function in membrane trafficking. **60**
3. (a) Describe properties of Genetic Code. **30**
(b) Describe the role of RNA in origin and evolution. **30**
4. Define hybrid vigour. Describe anyone method of hybridization for crop improvement. **60**

SECTION 'B'

5. Write notes on any THREE of the following in about 200 words each: **20×3=60**
- (a) Non-cyclic photophosphorylation
 - (b) Nitrogenases
 - (c) Fruit-ripening
 - (d) Afforestation
6. Define auxins. Describe their physiological response in plants. **60**
7. Define biogeochemical cycles. Describe N-cycle. **60**
8. (a) What do you know about Social Forestry? **30**
(b) How would you measure the level of Air-Pollution? **30**