

Subject: Botany

Class: XII

Time: 1½ Hours

Max Marks: 35

GENERAL INSTRUCTIONS:

This question paper contains four sections:

- i. Section –A contains 5 Very Very Short Answer Type Questions of 1 mark each. $1 \times 5 = 5$ marks
- ii. Section- B contains 5 Very Short Answer Type Questions of 2 marks each to be answered in 20 to 30 words. $2 \times 5 = 10$ marks
- iii. Section – C contains 5 Short Answer Type Questions of 3 marks each to be answered in 100 to 150 words. $3 \times 5 = 15$ marks
- iv. Section - D contains 1 Long Answer Type Questions of 5 marks each to be answered in 150 to 200 words. $5 \times 1 = 5$ marks

Section A

1. Fruits have:
 - a) Pericarp and flesh
 - b) Pericarp and seeds
 - c) Pericarp, mesocarp and endocarp
 - d) Pericarp and ovule
2. _____ incompatibility prevents cross pollination.
 - a) Intraspecific
 - b) Self
 - c) Interspecific
 - d) Out breeding
3. Nitrogen base not found in DNA is:
 - a) Uracil
 - b) Adenine
 - c) Guanine
 - d) Thymine
4. The term Ecosystem was coined by:
 - a) Warming
 - b) Odum
 - c) Tansley
 - d) Ernst Haeckel
5. Conversion of nitrates to nitrogen is called:
 - a) Ammonification
 - b) Nitrification
 - c) Nitrogen fixation
 - d) Denitrification

Section B

6. Difference between Autogamy and Geitonogamy.
7. What is pleiotropic gene?
8. What are ecological pyramids? Draw pyramid of energy.
9. Name any two Bio-fertilizers.



10. What is red data book?

Section C

11. Differentiate between Apomixes and Parthenogenesis.

12. Write a brief account on incomplete dominance.

13. Distinguish between DNA and RNA.

14. What are Bt. Crops? List any two.

15. What are somatic hybrids? Give an example.

Section D

16. Define hotspots of biodiversity. Name hotspots found in Indian sub-continent.

OR

Define Ecological pyramid. Explain different types of Pyramids.

