

**Sr. Inter Botany Model Paper**

**Time : 3 Hours]**

**[Max. Marks : 60**

**Note :** Read the following instructions carefully :

- (i) Answer **all** the questions of Section –A. Answer any six questions out of **eight** in Section –B and answer any **two** questions out of **three** in Section-C.
- (ii) In Section-A, questions from Sl. Nos. **1** to **10** are “ Very Short Answer Type”. Each question carries **two** marks. Every answer may be limited to **5** lines. Answer all these questions at one place in the same order.
- (iii) In Section-B, questions from Sl. Nos. **11** to **18** are of “Short Answer Type”. Each question carries **four** marks. Every answer may be limited to **20** lines.
- (iv) In Section –C, questions from Sl. Nos. **19** to **21** are of “Long Answer Type”. Each question carries **eight** marks. Every answer may be limited to **60** lines.
- (v) Draw labeled diagrams, wherever necessary for questions in Section-B and Section-C.

**SECTION –A**

**10 x 2 = 20**

**Note :** Answer **all** questions. Answer may be limited to **5** lines.

1. Define hydroponics
2. What is meant by bolting? Which hormone causes bolting?
3. What are pleomorphic bacteria? Give an example.
4. What is point mutation? Give an example.
5. What are the components of a transcriptional unit?
6. What is meant by capping and tailing?
7. For which variety of Indian rice, has a patent been filed by a USA company.
8. What is green revolution? Who is regarded as Father of green revolution?
9. Name two semi-dwarf varieties of rice developed in India.
10. Name an immunosuppressive agent. From where it is obtained?

**SECTION – B**

**6 x 4 = 24**

**Note :** Answer any **six** questions. Answer may be limited to **20** lines

11. Explain the mechanism of opening and closing of stomata.
12. Explain different types of co-factors.
13. Define RQ. Write a short note on RQ.
14. Write short notes on seed dormancy.
15. Explain the structure of TMV.
16. Mention the advantages of selecting pea plant for experiment by Mendel.
17. Draw the schematic/ diagrammatic presentation the operon.
18. Give a brief account of Bt cotton.

**SECTION – C**

**2 x 8 = 16**

**Note :** Answer any **two** questions. Answer may be limited to **60** lines

19. Explain Calvin cycle.
20. Explain briefly the various processes of recombinant DNA technology.
21. Write a brief essay on microbes in sewage treatment.