

**FACULTY OF SCIENCE**

BSc. CBCS III-Year (V-Semester) Regular Examinations, Dec-2022/Jan-2023

Biotechnology-V/A

**(Plant Biotechnology)**

Time: 3 Hours

Max Marks: 80

**SECTION-A**

(4x5=20 Marks)

Answer any Four questions from the following

1. Cell suspension cultures.
2. Conservation of plant germplasm.
3. Viral vectors.
4. Salinity stress tolerant plants.
5. Totipotency.
6. Micropropagation.

**SECTION-B**

(4x15=60 Marks)

Answer all the following questions

7. (a) Explain in detail about plant growth regulators.  
(OR)  
(b) What is sterilization what are different types of sterilization.
8. (a) Explain in detail about development of somatic hybrids and cybrids.  
(OR)  
(b) Explain in detail about cell suspension cultures and write its applications.
9. (a) Explain in detail about Genome editing.  
(OR)  
(b) Explain in detail about gene transfer techniques.
10. (a) What are transgenic plants explain briefly with examples.  
(OR).  
(b) Explain in detail about insect resistant transgenic plants.