Sessional Examination B.Sc. 6th Semester (M) Subject: Botany Paper: M 602 (Bioinformatics, Computer Application and Biotechnology) Full marks: 30

Q. 1 Answer the following (any 4)

- a) What is totipotency?
- b) What are explants?
- c) Define bioinformatics.
- d) What is an accession number in biological database?
- e) Give one example of a bacteria widely used in recombinant DNA technology.
- f) What is the role of NCBI in bioinformatics?
- Q. 2 Answer the following (any 3)
 - a) Write about the significance of biotechnology.
 - b) What is micropropagation?
 - c) Write two applications of bioinformatics.
 - d) Write four properties of enzyme.
 - e) Name six different class of enzyme.

Q. 3 Write a note on (any 4)

- a) Various techniques involved in plant tissue culture.
- b) Development of haploid plants.
- c) Development of transgenic plants.
- d) Biological databases
- e) Recombinant DNA technology
- f) Somatic embryogenesis

 $5 \times 4 = 20$

 $1 \times 4 = 4$

 $2 \times 3 = 6$