

**University of Pune**  
**Department of Management Sciences**  
**MBA-BT Semester I**  
**Mid Semester Exam October 2011**  
**102- Basics of Biotechnology and Bioinformatics**

**Question Paper: 40 marks**

**Time: 2Hrs**

**Instructions: i) Answer Section I and II on separate answer sheet**  
**ii) Each Section carries 20 marks.**  
**iii) Marks are as indicated.**

**Section I**

**Write short notes on any four of the following:**

1. Sterilization procedure for explants, media and glassware
2. Salient features of Somatic Embryogenesis Vs Organogenesis
3. Somaclones and their importance as an agri-product in Industry
4. Secondary metabolites production by cell cultures and their importance in Industry
5. Applications of somatic embryogenesis in Industry

**Section II**

**Q1. Define**

**(Marks: 4)**

a) Biotechnology      b) Nucleotide      c) Enzyme      d) Hybridization

**Q2. Write short notes on (any four)**

**(Marks: 16)**

- a) Single Cell Protein
- b) Size Exclusion Chromatography
- c) Continuous and Batch Fermentation Process
- d) Western Blot
- e) Differences between gel electrophoresis methods for DNA and RNA
- f) Compare and contrast the structures of DNA and Protein