

53514

Seat No. _____

First Year B. Sc. Examination

April/May – 2003

Biotechnology (Vocational) : Paper – II

Time : 3 Hours]

[Total Marks : 70

- Instructions :** (1) Question numbers as it is in question paper should be correctly written in margin.
(2) Marks are designated on the **right** hand side.

- 1** (a) Draw and discuss the structure and functions of : **7**
(a) Golgibody
(b) Chloroplast.
(b) Discuss the events occurring during mitosis. **7**

OR

- 1** (a) Discuss the functions of proteins. **7**
(b) Write a note on Desmosomes. **7**
2 (a) What is apoptosis. Discuss it in detail. **7**
(b) Explain in brief about cell differentiation. **7**

OR

- 2** (a) Write a note on gap–junctions. **7**
(b) Discuss the structure and functions of peptidoglycan. **7**
3 (a) Write about different methods used for sludge disposal. **7**
(b) Discuss the effect of pesticides on soil micro–organisms. **7**

OR

- 3** (a) What is pasturisation ? Discuss in detail. **7**
(b) Discuss the significance and the mode of action of nitrogen fixing bacteria. **7**

- 4** Write notes on any **two** : **14**
- (1) Recycling of urban-waste for agriculture purpose
 - (2) Reclamation of wasteland that is moderately difficult to reclaim
 - (3) Cellulose as a fuel
 - (4) Petrocrops as an industry of future.
-
- 5** Write short notes : (any **three**) **14**
- (1) MPN and MBRT
 - (2) B. Thurangensis
 - (3) Biofertilizers
 - (4) Calmodulin
 - (5) "9+2" Arrangement.
-