

N-55044

Seat No. _____

M. Sc. (Part-I) Examination

April / May – 2003

Biotechnology : Paper – III

(Microbiology & Industrial Microbiology)

Time : 3 Hours]

[Total Marks : 100

- 1 Describe structure and give functions of any **two** :
 - (a) Bacterial spore
 - (b) Locomotary organ
 - (c) Cell wall of prokaryots
 - (d) Rickettsia.

- 2 Discuss any **two** :
 - (a) Synchronized culture
 - (b) Effect of physical perameters on bacterial growth
 - (c) Continuous culture of bacteria
 - (d) Nitrogen fixation by symbiotic organisms.

- 3 Describe any **two** :
 - (a) Importance of microbial diversity study
 - (b) Significant points to be considered during bacterial diversity study.
 - (c) Portal of entry and exist. Give their importance in spreading infection.
 - (d) What are extremophiles ? Explain any one group and give importance.

- 4 Discuss microbial production and recovery of citric acid or Ethanol.

- 5 Write any **two** :
 - (a) Mechanisms of bioleucheruuj
 - (b) Dump leuchery process
 - (b) S.C.P.
 - (c) Microbial production of Beer.