

**SECOND SEMESTER M.Sc. DEGREE EXAMINATION
JULY 2011**

Microbiology

MB2 3T – INDUSTRIAL MICROBIOLOGY

(2005 Admissions)

Time : Three Hours

Maximum : 80 Marks

Section A

*Write about I answer **all** the questions, each in two **or** three sentences.*

Each question carries 2 marks.

1. Auxanography.
2. Mutagenic effect of UV rays.
3. Turbidostat.
4. Fluidised bed fermentor.
5. Control of temperature in bioreactors.
6. Corn-steep liquor.
7. Baffles.
8. Ultra filtration.
9. Disk stack centrifuge.
10. 'Fining' of broth.
11. Lyophilization.
12. Biphasic separation.
13. Genetic improvement of penicillin producing *Penicillium chrysogenum*.
14. Vitamin **B₁₂** production.
15. Surface mat culture.
16. Continuous extractive fermentation.
17. Sweet wine.
18. Hops.
19. Baker's yeast.
20. Malting.

(20 x 2 = 40 marks)

Turn over

Section B

*Write note on / discuss any **five** of the following.*

Each question carries 8 marks.

1. Production of single cell protein.
2. Importance of fermentation in **ayurvedic** medicines.
3. **Acetone-butanol** fermentation.
4. Mashing.
5. Filtration techniques.
6. Sterilization media and **fermentors**.
7. Continuous fermentation.

(5 x 8 = 40 marks)