

NRT/KS/19/2195

Bachelor of Science (B.Sc.) Semester—VI Examination

APPLICATIONS OF BIOTECHNOLOGY

Optional Paper—1

(Biotechnology)

Time : Three Hours]

[Maximum Marks : 50

- N.B. :—** (1) **All** questions are compulsory and carry equal marks.
(2) Draw well labelled diagrams wherever necessary.

1. Describe methods of chlorination in detail. 10

OR

Write notes on :

- (a) Concept of Biodegradation 5
(b) Activated sludge treatment. 5

2. Describe the principle and mechanism of IMVic Test. 10

OR

Write notes on :

- (a) MPN 5
(b) BOD. 5

3. Explain various parts of a fermentor. 10

OR

Write notes on :

- (a) Crowded plate technique 5
(b) Important features of secondary screening of industrially important microorganisms. 5

4. Explain in detail production of edible mushroom. 10

OR

Write notes on :

- (a) Types of cheese 5
(b) Quality assurance in pharmaceutical industry. 5

5. Solve any **TEN** of the following :

- (i) Define biotransformation 1
(ii) What is ozonation ? 1
(iii) Name a biogas formed in an anaerobic digester. 1
(iv) What are recalcitrant compounds ? 1
(v) Define Xenobiotics. 1
(vi) Define biomagnification. 1
(vii) What is meant by GMO ? 1
(viii) Name any one pharmaceutical product produced by GMO's. 1
(ix) What is meant by antifoaming agents ? 1
(x) Name any one example of SCP. 1
(xi) Mention any one good manufacturing practice in Pharmaceutical industry. 1
(xii) What is meant by ripening of cheese ? 1