

KNT/KW/16/5228

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

APPLICATIONS OF BIOTECHNOLOGY

Paper—1
(Biotechnology)

Time : Three Hours]

[Maximum Marks : 50

Note :— ALL questions are compulsory and carry equal marks.

1. What is biological waste water treatment process ? Explain activated sludge treatment process in detail. 10

OR

Explain the chlorination methods use to disinfect water. 10

2. (a) Describe BOD Test. 5
(b) Discuss COD test for the assessment of water quality. 5

OR

(c) Describe the Anoxic degradation of xenobiotics. 5

(d) Explain the principle and procedure of indole test. 5

3. Explain the design of typical submerged fermentor in detail. 10

OR

Explain in detail commercial production of any antibiotic produced by microorganisms. 10

4. (a) Explain the stages involved in cheese making. 5
(b) What is SCP ? Explain the production of Spirulina. 5

OR

(c) Write note on soft and hard cheese. 5

(d) Explain the concept of good manufacturing practices in pharmaceutical industry. 5

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

- (a) What is ozonation ? 1
(b) Define biotransformation. 1
(c) Define facultative pond. 1

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| (d) Give names of indicators of fecal pollution. | 1 |
| (e) What is biomagnification ? | 1 |
| (f) What is MPN ? | 1 |
| (g) Give any two names of industrially important microorganisms. | 1 |
| (h) What is the meaning of GMOs ? | 1 |
| (i) What is Primary Screening ? | 1 |
| (j) What are Edible Mushrooms ? | 1 |
| (k) Give any two medicinal uses of mushroom. | 1 |
| (l) What is the importance of quality control ? | 1 |