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NB—13—2023

FACULTY OF SCIENCE

B.Sc. (Third Year) (Sixth Semester) EXAMINATION

NOVEMBER/DECEMBER, 2023

BIOTECHNOLOGY

(New Course)

Paper-(CCBT-3F)

(Environmental Biotechnology)

(Monday, 04-12-2023)

Time : 10.00 a.m. to 1.00 p.m.

Time—3 Hours

Maximum Marks—75

N.L. :— (i) All questions are compulsory

(ii) Draw a well labelled diagram wherever necessary.

1. Describe secondary waste water treatment with application. 15

Or

(a) Primary treatment 8

(b) Packed bed reactor. 7

2. Explain Biodegradation of Hydrocarbon with suitable example. 15

Or

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(2)

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- (a) Municipal solid waste treatment 8
- (b) Anaerobic degradation. 7
3. What is bioremediation ? Write methods of bioremediation with advantages and disadvantages. 15
- Or*
- (a) Bioremediation of Saline Soil 8
- (b) Phytoremediation. 7
4. What is xenobiotics ? Describe herbicide degradation principle with application. 15
- Or*
- (a) Pesticide degradation 8
- (b) Cytochrome P₄₅₀ System. 7
5. Write notes on (any *three*) : 15
- (i) Air lift membrane bioreactor
- (ii) Concept of Biodegradation
- (iii) Bioremediation of Alkaline Soil
- (iv) Phase-I
- (v) Tertiary treatment.

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