



K22U 3688

Reg. No. : .....

Name : .....

**Fourth Semester B.Sc. Degree (CBCSS – OBE – Regular)**  
**Examination, April 2022**  
**(2020 Admission)**  
**Complementary Elective Course (For B.Sc. Life Sciences (Zoology) and**  
**Computational Biology)**  
**4C05 MCB : APPLIED MICROBIOLOGY – II**

Time : 3 Hours

Max. Marks : 32

PART – A

Short answer. **Each** carries 1 mark. (Answer **all** questions)

1. Heterocyst.
2. COD.
3. Mantle.
4. Sludge.
5. YEMA.

(5×1=5)

PART – B

Short essay. **Each** carries 2 marks. (Answer **any four** questions)

6. Tertiary water treatment.
7. Mycorrhiza as biofertilizer.
8. Methanogen.
9. Biomagnification.
10. Nitrogenase.

(4×2=8)

P.T.O.



PART – C

Essay. **Each** carries **3** marks. (Answer **any three** questions)

11. Biogas production.
12. Activated sludge.
13. Vermicomposting.
14. VAM-production and application.
15. Septic tank.

(3×3=9)

PART – D

Long essay. **Each** carries **5** marks. (Answer **any two** questions)

16. What is microbial infallibility ? How do pesticides affect soil microorganisms ?
17. Discuss the need for solid waste management and different large scale waste disposal methods.
18. What are the components of mycorrhiza ? Explain the different types of mycorrhizae and their importance.
19. Explain the secondary waste water treatment emphasizing the microorganisms involved.

(2×5=10)

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