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Name			
Reg. No			

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2020

(CUCBCSS—UG)

Microbiology

MBG 5D 02—ENVIRONMENTAL MICROBIOLOGY

(2018 Admissions)

Time: Two Hours

Maximum: 40 Marks

Draw diagrams wherever necessary.

Part A

All questions to be attended. Each question carries ½ mark.

A free living nitrogen fixing bacteria is :
 (Nitrosomonas, Nitrobacter, Rhizbium, Azotobacter)

- 2. The immediate surface of the plant root interacting with soil is called ————.
- 3. The mycorrhiza is the association of ———— with plant roots.
- 4. Define Sewage.
- 5. Name one waterborne viral disease.
- 6. Indicator organism used for faecal pollution of water is ————.
- 7. Name one airborne bacterial disease.
- 8. Expand CFC.
- 9. The earthworm used for vermicomposting is ———.
- 10. What is the composition of biogas?

 $(10 \times \frac{1}{2} = 5 \text{ marks})$

Part B

All questions can be attended and overall ceiling.

Each question carries 2 marks.

- 11. What is humus?
- 12. What is denitrification? Give one example for denitrifying bacteria.

Turn over

- 13. What is superchlorination?
- 14. MPN determination.
- 15. What are aerosols?
- 16. Define acid rain.
- 17. Define Biomagnification.

 $(5 \times 2 = 10 \text{ marks})$

Part C

All questions can be attended and overall ceiling.

Each question carries 5 marks.

Write notes on:

- 18. Rhizosphere effect.
- 19. Disinfection of potable water.
- 20. Hepatitis B infection.
- 21. Greenhouse effect.
- 22. Cholera.

 $(3 \times 5 = 15 \text{ marks})$

Part D

All questions can be attended and overall ceiling.

The question carries 10 marks.

Write essays on:

- 23. Discuss the steps involved in municipal sewage treatment.
- 24. Write a note on different methods used for composting.

 $(1 \times 10 = 10 \text{ marks})$