

THIRD SEMESTER B.A./B.Sc. DEGREE EXAMINATION, NOVEMBER 2014

(CUCBCSS—UG)

Microbiology

MBG 3B 03—ENVIRONMENTAL AND SANITATION MICROBIOLOGY

(2018 Admissions)

Time : Three Hours

Maximum : 80 Marks

Part A

Answer all questions.

1. Name any method of secondary treatment of sewage.
2. The amount of oxygen used for organic compound degradation by microbes is called _____.
3. The COD is measured in which unit ?
4. The type of filter used in laminar air flow chamber is called _____.
5. The nitrates in the sewage are removed in which stage of treatment ?
6. Rotorod sampler is used for _____.
7. The primary treatment of sewage is purely a _____ process.
8. Name any method for water quality analysis.
9. Gravity slide method is used for _____.
10. Name any one pathogen causing water borne infection.
11. Name any one harmful bacteria in air.
12. Expand PCB.

(12 × ½ = 6 marks)

Part B

Answer all questions in one or two sentences.

13. BOD.
14. Chlorination.
15. Methanogens.

Turn over

16. Sand Filtration of water.
17. Activated sludge.
18. Biomagnification.
19. Land fills.
20. What is infectious dust ?
21. What is HEPA filter ?
22. Define biomagnification.

(10 × 2 = 20 marks)

Part C

Write short notes on any six of the following.

23. Tertiary treatment methods of sewage.
24. Anaerobic sludge digestion.
25. Microbial leaching.
26. Indicator microbes.
27. Vermi composting.
28. Factors influencing growth of microbes in aquatic environment.
29. Impinger method of air sampling.
30. Water quality analysis methods.

(6 × 5 = 30 marks)

Part D

Answer any two questions.

31. Explain briefly on Bioremediation of xenobiotics.
32. Write an essay on Solid waste management.
33. Municipal sewage treatment system.

(2 × 12 = 24 marks)