

9. Decarboxylation is
- | | |
|------------------------------|------------------------------|
| a. Removal of amine | b. Removal of carboxyl group |
| c. Removal of hydroxyl group | d. Removal of halogen group |
10. The fungicide, Thiram is degraded by
- | | |
|------------------------------------|---------------------------|
| a. <i>Bacillus subtilis</i> | b. <i>Pseudomonas</i> sp. |
| c. <i>Clostridium sporogenesis</i> | d. None of the above |
11. The permissible limit of turbidity in water isppm
- | | |
|---------|----------|
| a. 2-5 | b. 10-15 |
| c. 5-10 | d. 5-20 |
12.turbidity meter can measure the turbidity of the order of 0-1 ppm
- | | |
|------------------------|-------------------------|
| a. <i>Nephelometer</i> | b. <i>Turbidity rod</i> |
| c. <i>Baylis</i> | d. <i>Jackson's</i> |
13. Skimming tanks are used in waste water treatment plants to remove
- | | |
|-------------------|----------|
| a. Oil and grease | b. Salts |
| c. Minerals | d. Dirts |
14. Permissible limit of pH in water is
- | | |
|------------|----------|
| a. 4.5-5.5 | b. 6-8.5 |
| c. 6.6-8.5 | d. 7 |
15. is the coagulants used in the sedimentation of waste water treatment.
- | | |
|-------------|---------------------|
| a. Lime | b. Alum |
| c. Soda Ash | d. All of the above |
16. Nitrite is converted into nitrate by.....
- | | |
|-----------------------|------------------------|
| a. <i>Nitrobacter</i> | b. <i>Nitrosomonas</i> |
| c. Both A and B | d. None of the above |
17. Phosphorus in the sewage is mostly present in the form of
- | | |
|-----------------------------|---------------------|
| a. Orthophosphate | b. Polyphosphate |
| c. Organic bound phosphorus | d. All of the above |
18. is the zone which forms the basin or floor of the ocean, regardless of depth
- | | |
|-------------|----------------------|
| a. Littoral | b. Sub littoral |
| c. Benthic | d. Continental slope |
19. is a transitional zone between rivers and sea representing an ecotone possessing unique ecological features and biotic communities
- | | |
|-----------------|----------------------|
| a. Estuary | b. Continental slope |
| c. Benthic zone | d. Intertidal zone |
20. VAM is a Biofertilizer.
- | | |
|--------------|---------------------|
| a. Bacterial | b. Fungal |
| c. Algal | d. All of the above |

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(PART-B : Descriptive)

Time : 2 hrs. 40 min.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

1. Discuss any two airborne diseases along with its preventive measures and treatments. 10
2. What do you mean by lentic and lotic ecosystem. Explain in brief each with examples. Describe the phenomenon of thermal stratification occur in lakes. 4+6=10
3. Explain the physical and chemical properties of potable water. 10
4. Write a note on waste water treatment. 10
5. a. Discuss about the root nodulation system. 4+6=10
b. Classify soil types based on its physical and microbial habitation.
6. What are biofertilizers? Explain the classification of biofertilizers. 2+8=10
7. a. What do you mean by biogeochemical cycle? Explain briefly its types. 3+7=10
b. Critically elaborate the degradation of pesticides by microbes
8. Explain the mechanism of root nodulation by bacteria and its interaction with soil. 10

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