

Board – CBSE

Class – 12

Topic – Biotechnology: Principles and Processes

1. How does a small amount of curd added to fresh milk convert it into curd? Mention a nutritional quality that gets added to the curd.
2. Why is secondary treatment of water in sewage treatment plants called biological treatment?
3. An antibiotic called Wonder Drug was used to treat the wounded soldiers of America during World War-II. Name the drug and the scientist who discovered it.
4. You have observed that fruit juice in bottles bought from the market are clearer as compared to those made at home. Give a reason.
5. Alexander Fleming discovered Penicillin, but its full potential as an effective antibiotic was established by other scientists. Name the two scientists.
6. Name the plant whose sap is used in making Toddy. Mention the process involved in it.
7. What is the medical use of cyclosporin A.
8. Name the pests that lady bird & dragonflies help to get rid off respectively?
9. Give an example to prove that microbes release gases during metabolism?
10. What are interferons?
11. Name the enzyme which is used as a “clot buster” to remove blood clot from blood vessels of patients.
12. Name the first antibiotic manufactured & also name its source microorganism.
13. Name any two fungus which are used in production of antibiotics?
14. Expand LAB?
15. Name any two free – living nitrogen fixing bacteria.
16. Name the organism used in the dough for making bread.
17. Name the fungus used as a biocontrol of plant diseases.
18. Name any two gases produced during secondary treatment of Sewage?
19. Name two alcoholic drinks produced in each of the following ways.
20. Lactic Acid Bacteria (LAB) is commonly used in the conversion of milk into curd. Mention any two other functions of LAB that are useful to humans.
21. How do mycorrhizal function as biofertilizers? Explain with examples.
22. Fill in the blanks spaces a, b, c, d, e, and f, given in the following table:

S.No	Name of Organism	Commercial Product	Application
1.	Penicillium Notatum	Penicillium	(a)
2.	(b)	Lactic acid	Making Curd.
3.	Streptococcus	Clot buster enzyme	(c)
4.	Trichoderma Polysporum	(d)	Immunosuppressive agent
5.	Saccharomyces cerevisiae	Ethanol	(e)
6.	(f)	Swiss cheese	Food Product

23. What is biochemical oxygen demand (BOD) test? At what stage of Sewage treatment this test is performed? The BOD level of three samples of water labelled as A, B and C are 30 mg/L, 10mg/L and 500 mg/L respectively. Which sample of water is most polluted?
24. Given below is the Flow chart of Sewage treatment. Fill in the blank spaces marked 'a' to 'f'.
25. What are biofertilizers? A farmer is advised to add a culture of bacterium in the soil before sowing the crop. Name the bacterium in the culture. How is this bacterium useful to the crop?
26. What are statins? Name the microorganism that produces this substance. How is it medically important?
27. Describe the procedure involved in Sewage treatment?
28. What is Biogas? How is it produced & Name the microbes involved in Biogas production.
29. Microbes can be used to decrease the use of chemical fertilizers & pesticides. Explain how this can be accomplished?
30. How do Biofertilisers enrich the fertility of soil? How does cyanobacteria act as a biofertilizer?