



TRY YOURSELF

ANSWERS

1. Curd has improved nutritional quality than milk as it contains a number of organic acids and vitamins including B₁₂. Lactic acid bacteria present in curd also checks growth of disease causing microbes in stomach and other parts of digestive tract.
2. Curdling of milk during preparation of yoghurt is performed by the help of *Streptococcus thermophilus* and *Lactobacillus bulgaricus*.
3. Toddy is a traditional drink made by fermentation of sap of palms. Toddy left for a few hours undergoes fermentation with help of naturally occurring yeast to form beverage containing about 6% alcohol.
4. Fermented products obtained from soybean are; Tofu, Soya, Tempeh and Soy sauce.
5. Amylase enzyme is used for (i) Softening and sweetening of bread, (ii) Production of alcoholic beverages (e.g., beer, whisky) from starchy materials, (iii) Clearing of turbidity in juices caused by starch, (iv) Separation and desizing of textile fibres.
6. Sources of the following are as follows:
 - (a) Protease → *Mortierella renispora*, *Aspergillus* and *Bacillus* species.
 - (b) Citric acid → *Aspergillus niger* and *Mucor* species.
 - (c) Lipase → *Candida lipolytica* and *Geotrichum candidum*.
 - (d) Statins → *Monascus purpureus*
7. Streptokinase has fibrinolytic effect and is clot buster that is why it helps in clearing blood clots inside the blood vessels through dissolution of intravascular fibrin.
8. There are three type of sewage treatment; Primary, secondary and tertiary. Primary treatment is physical, secondary is biological and tertiary is chemical.
9. Secondary waste water treatment is biological. The main goal of this treatment is to treat the effluent from primary treatment to remove the soluble organic matter and suspended solids.
10. The technology of biogas production was developed in India by the efforts of Indian Agricultural Research Institute (IARI) and Khadi and Village Industries Commission (KVIC).
11. Methane is the primary gas in biogas, which is also the main component in natural gas, a fossil fuel. Biogas can be used as fossil fuel (natural gas) in many applications, such as cooking, lighting, heating, electrical generation, steam production and as a vehicular fuel.
12. Two examples of bioherbicides are
 - (i) Cochineal insect (*Cactoblastis cactorum*)
 - (ii) *Phytophthora palmivora*
13. Biopesticides are those biological agents that are used to control harmful insects. They are cheaper than the chemical pesticides. They have long term effectivity and they are also biodegradable. They are not harmful and farmers get healthy and productive crops upon using them besides getting rid of pests.
14. Microphos biofertilisers are the microorganisms that release phosphate from bound and insoluble states to increase the availability of soluble phosphate to the plants. e.g., *Bacillus polymyxa*, *Pseudomonas striata*, *Aspergillus* species.
15. Free-living nitrogen fixing cyanobacteria are:
 - (i) *Anabaena*
 - (ii) *Nostoc*
16. Nitrogen fixing mycelial bacterium (actinomycetes) is *Frankia*. It is associated symbiotically with the root nodules of several non-legume plants like *Casuarina*, *Alnus*, etc.

