

EXERCISE

1. Which one of the following is not true about antibiotics –
 - (1) First antibiotic was discovered by Alexander Fleming
 - (2) The term 'antibiotic' was coined by S. Waksman in 1942.
 - (3) Some persons can be allergic to a particular antibiotic
 - (4) Each antibiotic is effective only against one particular kind of germ.
2. Which one of the microorganism is used for production of citric acid in industries?
 - (1) *Lactobacillus bulgaricus*
 - (2) *Penicillium citrinum*
 - (3) *Aspergillus niger*
 - (4) *Rhizopus nigricans*
3. Formation of vinegar from alcohol is caused by
 - (1) *Bacillus subtilis*
 - (2) *Clostridium*
 - (3) *Acetobacter aceti*
 - (4) *Azotobacter*
4. Biogas consists of
 - (1) Carbon monoxide, methane and hydrogen
 - (2) Carbon dioxide, methane and hydrogen
 - (3) Carbon monoxide, ethane and hydrogen
 - (4) Carbon dioxide, ethane and hydrogen
5. Biogas is produced by anaerobic breakdown of biomass of agricultural waste by methanogenic bacteria. It is a
 - (1) One step process
 - (2) Two step process
 - (3) Three step process
 - (4) Multistep process
6. Which of the following Microorganisms use for swiss cheese :
 - (1) *Propionibacterium*
 - (2) *Geotrichum*
 - (3) *Penicillium*
 - (4) *Streptococcus*
7. *Saccharomyces cerevisiae* is used in the formation of :-
 - (1) Ethanol
 - (2) Methanol
 - (3) Acetic acid
 - (4) Antibiotics
8. Which one produce gas by decomposing the gobar (Dung) in gobar gas:-
 - (1) Fungus
 - (2) Virus
 - (3) Methanogenic bacteria
 - (4) Algae
9. Which of the following is the pair of biofertilizers :-
 - (1) Azolla and BGA
 - (2) Nostoc and legume
 - (3) Rhizobium and grasses
 - (4) Salmonella & E. Coli
10. During the formation of bread it becomes porous due to release of CO₂ by the action of :-
 - (1) Yeast
 - (2) Bacteria
 - (3) Virus
 - (4) Protozoans
11. A free living nitrogen-fixing cyanobacterium which can also form symbiotic association with the water fern Azolla is :
 - (1) Anabaena
 - (2) Tolypothrix
 - (3) Chlorella
 - (4) Rhizobium
12. The technology of biogas production was developed in India mainly due to the efforts of
 - (1) IARI
 - (2) KVIC
 - (3) both (1) and (2)
 - (4) WHO
13. Which one of the following is used in the making of bread :
 - (1) *Rhizopus stolonifer*
 - (2) *Saccharomyces cerevisiae*
 - (3) *Zygasaccharomyces*
 - (4) *Saccharomyces ludwigi*
14. The drug Cyclosporin used for organ transplant patients is obtained from a
 - (1) Bacterium
 - (2) Fungus
 - (3) Virus
 - (4) Plant
15. A common biocontrol agent for the control of plant diseases caused by fungi is
 - (1) *Agrobacterium*
 - (2) *Glomus*
 - (3) *Trichoderma*
 - (4) Baculovirus
16. Which one of the following microbes forms symbiotic association with plants and helps them in their nutrition ?
 - (1) *Glomus*
 - (2) *Trichoderma*
 - (3) *Azotobacter*
 - (4) *Aspergillus*
17. Lactic acid bacteria (LAB) grow in milk and convert it to curd and also improve its nutritional quality by increasing :-
 - (1) Vitamin A
 - (2) Vitamin B₁₂
 - (3) Vitamin B₆
 - (4) Vitamin C and A

- 18.** Which of the following fermented beverage will not be produced by distillation of fermented broth.
 (1) Whisky (2) Brandy
 (3) Rum (4) Wine
- 19.** Select the correct match -
 (1) Aspergillus niger - Acetic acid
 (2) Streptokinase - Immunosuppressive
 (3) Cyclosporin - A - Clot buster
 (4) Statins - Cholesterol lowering agent
- 20.** Which biocontrol agent is very common in root ecosystem & is effective against several plant pathogens.
 (1) Baculoviruses
 (2) Trichoderma
 (3) Nucleopolyhedro virus
 (4) Ladybird beetle & Dragonflies
- 21.** Which of the following bacterium is associated with production of bioinsecticide is ?
 (1) **Bacillus subtilis**
 (2) **Bacillus thuringiensis**
 (3) **Agrobacterium**
 (4) **Azotobacter**
- 22.** Bio pesticide include :-
 (1) Only bioinsecticide
 (2) Only bioherbicide
 (3) Bioinsecticide & bioherbicide
 (4) Bioherbicide, bioinsecticide & biofertilisers
- 23.** **Bacillus thuringiensis** is used to control :-
 (1) Moth (2) Flies
 (3) Mosquito (4) All the above
- 24.** Trichoderma has proved a useful microorganism for :-
 (1) Gene transfer in higher plants
 (2) Biological control of soil-borne plant pathogens
 (3) Bioremediation of contaminated soils
 (4) reclamation of wastelands
- 25.** Microbial insecticide is :
 (1) *Bacillus polymixa*
 (2) *Bacillus brevis*
 (3) *Bacillus subtilis*
 (4) *Bacillus thuringiensis*
- 26.** Ladybird is useful to get rid of
 (1) Aphids (2) Mosquitoes
 (3) Boll worm (4) Jassids

ANSWER KEY

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	4	3	3	2	3	1	1	3	1	1	1	3	2	2	3
Que.	16	17	18	19	20	21	22	23	24	25	26				
Ans.	1	2	4	4	2	2	3	4	2	4	1				