

Topic :- Microbes In Human Welfare

- 1 **(a)**
Jojoba or hohoba (*Simmondsia chinensis*) contains C-20 to C-6 bromohydric alcohol wax and triglyceride.
- 2 **(c)**
Castor oil is obtained from *Ricinus communis* (Euphorbiaceae).
- 3 **(b)**
When the nuclear genetic material of one of the parents is eliminated though the cytoplasm from both the parents are retained, such a fusion product is called **cybrid** (cytoplasmic hybrid) or heteroplast.
- 4 **(a)**
Some plants accumulate hydrocarbons in form of latex, e.g., *Euphorbia*, *Asclepias*, *capaifera*.
- 5 **(b)**
Powdery mildew of wheat-*Erysiphe graminis*.
Loose smut of wheat-*Ustilago tritici*.
- 6 **(b)**
A-fermentation; B-bacteria
- 7 **(c)**
Azospirillum and *Azotobacter* are free living nitrogen fixing bacteria. Free living N₂-fixing bacteria fix atmospheric nitrogen in the soil and make it available for the higher plant
- 8 **(a)**
Wood, agro-industrial residues and petroleum and oil producing plants are the sources of biofuel. Biofuels are the combustible bodies of plants or combustible product derived from biomass. Biofuels are renewable.
- 9 **(b)**
Quinine is obtained from the bark of *Cinchona*

- officinalis* (family-Rubiaceae). The bark of this plant contains about 30 alkaloids including quinine, cinchonine, quinidine and cinchonidine.
- 10 **(c)**
Clove (*Syzygium aromaticum*) belongs to family-Myrtaceae. Unopened flower buds of this plant yield an oil which is used for perfumes and medicines.
- 11 **(c)**
Lactobacillus bacteria inhibit the growth of hostile or illness causing bacteria inside the intestinal tract and promote beneficial bacteria needed for digestion
- 12 **(a)**
A systemic insecticide, when applied to seeds, roots, stems or leaves of plants is absorbed and translocated to various parts of the plant in amounts lethal to insects, which feed on them, e.g., dimethoate, phosphamidon, phorate, aldicarb, parathion etc.
- 13 **(c)**
Labeo bata is minor carp, its size is smaller and growth rate is slower.
- 14 **(c)**
'Himgiri' is a wheat variety resistant to leaf and stripe rust, hill bunt etc.
- 15 **(c)**
Dieldrin is an example of organochlorines and most persistent in soil. Most importantly dieldrin is five times more toxic than DDT.
- 16 **(c)**
An aquatic weed like water hyacinth (*Eichhornia crassipes*) is used as a source of biogas through harvesting, chopping and crushing.
- 17 **(a)**
Those plants whose latex contains long chain of hydrocarbons are called petroplants, e.g., *Euphorbia lathyris*, *Euphorbia caudicifolia*, *Calotropis procera*, *Pittosporum resiniferum*, etc.
- 18 **(d)**
Rhizobium is used as biofertiliser for raising any legume crop. *Rhizobium* is a symbiotic bacterium that lives in the root nodules of legumes and fixes

atmospheric nitrogen into organic compound

20 (a)

Alcoholic beverages are defined as beverages that contain ethanol (C_2H_5OH). This ethanol is almost always produced by fermentation, the metabolism of carbohydrates by certain species of yeast under anaerobic or low-oxygen conditions. Beverages such as, wine, beer, or distilled spirits all use yeast at some stage of their production.

Yeast the most common one being *Sacharomyces cerevisiae*, is used in baking as leavening agent, where it converts the food/fermentable sugars present in dough into the gas carbon dioxide. This causes the dough to expand or rise as gas forming pockets or bubbles. When the dough is baked, the yeast dies and the air pockets 'set', giving the baked product a soft and spongy textures.

Cheese is formed by partial degradation of milk by different other microorganisms

ANSWER-KEY										
Q.	1	2	3	4	5	6	7	8	9	10
A.	A	C	B	A	B	B	C	A	B	C
Q.	11	12	13	14	15	16	17	18	19	20
A.	C	A	C	C	C	C	A	D	B	A