Chapter 6

1. Yeast is a simple (1)_____. When magnified under a (2)_____, it is seen to be made up of single cells. Yeast can be grown on jelly-like food called (3)_____ or in liquid culture rich in (4)_____.

2. During laboratory work with micro-organisms (such as yeast), precautions are taken to try to create sterile ((5)_____) conditions. For example a special container called an (6)_____ is used to sterilize apparatus and nutrient agar by heating them to 1210C for 20 minutes. A Bunsen burner is used to heat a wire inoculating loop until it is (7)_____ and to (8)_____ the neck of any culture bottle in use.

3. When added to bread (9)_____, yeast produces bubbles of (10)_____ gas. These get caught in the dough and make it (11)_____.

4. During beer-making, yeast is used to change sugar into (12)_____ and carbon dioxide. This chemical reaction is called (13)_____.

5. The alcohol content of beer varies. It is affected by factors such as the type of (14)_____ used, the (15)_____ at which the process is carried out and the length of fermentation (16)_____.

6. (17)_____-conditioned beer has its yeast removed and extra carbon dioxide added. (18)_____-conditioned beer (real (19)_____) does not have its yeast removed and the yeast continues to produce carbon dioxide in the cask.

7. An (20)_____ is a substance that controls a biochemical reaction. Enzymes from bacteria can change milk sugar to simpler sugars and (21)_____. Enzymes in yeast cells can change simple sugars to alcohol. These enzymes from microbes can change milk into a (22)_____ milk drink.

8. Enzyme molecules and yeast cells can be (23)_____ (trapped) in (24)_____ pellets. After they have brought about the required chemical reaction, they can be (25)_____.

9. Yeast is used to (26)_____ certain foods. Pink yeast can be used to (27)_____ the flesh of farmed salmon.

10. If wastes from yeast-based industry were released into a river, they would (28)_____ the water. Bacterial numbers in the river water would rise and (29)_____ content would drop. To prevent this happening and to increase profit, the waste is (30)_____ into animal feed.

alcohol ale aseptic autoclave Brewery
carbon dioxide Cask colour dough enzyme
fermentation fermented flame flavour
fungus gel immobilized lactic acid
microscope nutrient agar oxygen pollute
red hot reused rise sugar temperature
time upgraded yeast

----------Word Bank----------

Chapter 6

1. Yeast is a simple fungus. When magnified under a microscope, it is seen to be made up of single cells. Yeast can be grown on jelly-like food called nutrient agar or in liquid culture rich in sugar.

2. During laboratory work with micro-organisms (such as yeast), precautions are taken to try to create sterile (aseptic) conditions. For example a special container called an autoclave is used to sterilize apparatus and nutrient agar by heating them to 1210C for 20 minutes. A Bunsen burner is used to heat a wire inoculating loop until it is red hot and to flame the neck of any culture bottle in use.

3. When added to bread dough, yeast produces bubbles of carbon dioxide gas. These get caught in the dough and make it rise.

4. During beer-making, yeast is used to change sugar into alcohol and carbon dioxide. This chemical reaction is called fermentation.

5. The alcohol content of beer varies. It is affected by factors such as the type of yeast used, the temperature at which the process is carried out and the length of fermentation time.

6. Brewery-conditioned beer has its yeast removed and extra carbon dioxide added. Cask-conditioned beer (real ale) does not have its yeast removed and the yeast continues to produce carbon dioxide in the cask.

7. An enzyme is a substance that controls a biochemical reaction. Enzymes from bacteria can change milk sugar to simpler sugars and lactic acid. Enzymes in yeast cells can change simple sugars to alcohol. These enzymes from microbes can change milk into a fermented milk drink.

8. Enzyme molecules and yeast œlls can be immobilized (trapped) in gel pellets. After they have brought about the required chemical reaction, they can be reused.
9. Yeast is used to flavour certain foods. Pink yeast can be used to colour the flesh of farmed salmon.

10. If wastes from yeast-based industry were released into a river, they would pollute the water. Bacterial numbers in the river water would rise and oxygen content would drop. To prevent this happening and to increase profit, the waste is upgraded into animal feed.