

E. Notes - J. J. College, Ara. Date - 22-02-2025

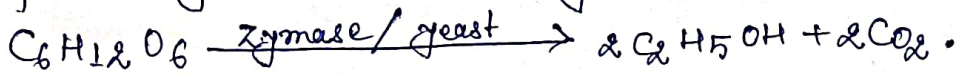
Department of Botany, Dr. Sunil Pandey, U.G - Semester-1

- Microbiology -

Question :- Role of microbes in the alcoholic fermentation. ?

Ans → The alcoholic fermentation has been occupied an important place in the field of industries. Large and small industries are based on the principle of the fermentation process. In this process, the Carbon Compounds are decomposed anaerobically by the help of bacteria and yeast. Following are some the important fermentation based industries.

Alcohol production :- Alcohol is produced by the anaerobic fermentation of carbohydrates such as sugar, starch etc.



Acetic acid (vinegar) production :- The vinegar is produced by the bacterium. *Acetobacter aceti* from alcohol.



Lactic Acid production → Lactic acid is produced by the fermentation of Milk Sugar. Milk *Lactic Bacilli* → Lactic Acid.

Amino Acid production → The amino acid are the building blocks of the proteins.

Milk product :- Some bacteria such as *Streptococcus lacticus*, *Lactobacillus* etc.

Milk *Streptococcus lactis* → Curd.

Milk *Lactobacillus* → Cheese.

Milk. _____ → Butter.

Tobacco Industry :- Species of *Bacillus* group ferments the tobacco leaves, and increase the market value of the leaves.

Organic Acid :- Large number of organic acids are produced by help of Bacteria. Fermentation process is utilised for this work.

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