## Glossary:

**Fermentation**: A process in which an agent causes an organic substance to break down into simpler substances; especially, the anaerobic breakdown of sugar into alcohol.

**Anaerobic** fermentation: Yeast fermentation process to produce alcohol requires a small amount of aeration for cells to multiply after wards no air is required. On the contrary air is detrimental for the process which will otherwise oxidise the substrate. Most of the anaerobic fermentation produces carbon dioxide gas.

**Aerobic** fermentation: Sparging air/oxygen is a very common phenomenon in fermentation processes to supply oxygen for the cells to meet their specific oxygen demands. Such fermentation processes which are associated with the bubbling of oxygen are termed as aerobic fermentation

**Bioreactor**: may refer to any manufactured or engineered device or system that supports a biologically active environment In one case, a bioreactor is a vessel in which a chemical process is carried out which involves organisms or biochemically active substances derived from such organisms**.**

**Beef** is the culinary name for meat from cattle. Humans have been eating beef since prehistoric times. Beef is a complete source of protein (meaning that it provides all 20 of the amino acids), and provides many of the essential fatty acids, vitamins, and minerals that humans need.

**Wine** (from Latin *vinum*) is an alcoholic beverage made from fermented grapes.

**Biopolymers** are polymers produced by living organisms; in other words, they are polymeric biomolecules. Since they are polymers, biopolymers contain monomeric units that are covalently bonded to form larger structures

**Amino acids** are biologically important organic compounds containing amine ($-NH_2$) and carboxyl (-COOH) functional groups, along with a side-chain (R group) specific to each amino acid

**Antibiotics,** also called antibacterials, are a type of antimicrobial[1] drug used in the treatment and prevention of bacterial infections.They may either kill or inhibit the growth of bacteria.

**Enzymes** are macromolecular biological catalysts. Enzymes accelerate, or catalyze, chemical reactions. The molecules at the beginning of the process upon which enzymes may act are called substrates and the enzyme converts these into different molecules, called products