## PG diploma in industrial Instrumentation and process Automation

## Paper 3: Alcohol Technology & Bio-Products.(Theory)

- 1. Fermentation, types of fermentations, Outline of alcohol production by different fermentation process
- 2. Role of microorganism and other condition on fermentation.
- 3. Raw Materials for fermentative production of alcohol. Molasses: Composition grades and Classification of molasses,
- 4. Production of grain spirit.
- 5. Theoretical Yield, Fermentation & Distillation Efficiency, etc.
- 6. Different method of spent wash treatment including bio-methanation, incineration and bio-composting.
- 7. Brewing technology: Malting, mashing, fermentation and pasteurization of beer, defects of beer.
- 8. Alcoholometry : Reduction and blending of spirits, denaturation, obscuration & shrinkage, potable liquors, country liquors & Indian Made Foreign Liquors.(IMFL)