

17FT022 BEVERAGES TECHNOLOGY

Hours Per Week :

L	T	P	C
3	1	-	4

Total Hours :

L	T	P	WA/RA	SSH/HSB	CS	SA	S	BS
45	15	-	15	30	-	5	5	-

Course Description and Objectives:

The aim of the Master's course Beverage Technology is to enable students to solve technological problems in the field of beverage technology in industrial practice. This course emphasizes on the utilization of seasonal fruits for beverage production so as to reduce its wastage. By the end of the semester students will be able to understand the various equipment's, process and regulatory requirements for beverage industry.

Course Outcomes:

The student will be able to:

- understand the role of various ingredients used in beverage processing.
- formulate ingredients and propose suitable methods for manufacturing of alcoholic and non-alcoholic beverage
- assess and control the processing and quality parameters of beverages

SKILLS:

- ✓ Efficient in preparation of commonly consumed beverages from seasonal fruits.
- ✓ Judge the quality of raw-materials.
- ✓ Predict the physiochemical changes during processing.

ACTIVITY:

- o Development of blended beverage and shelf life study of the product

UNIT-I

Types of beverages and their importance; status of beverage industry in India; Manufacturing technology for juice-based beverages; synthetic beverages

UNIT-II

Technology of still, carbonated, low-calorie and dry beverages; isotonic and sports drinks; role of various ingredients of soft drinks, carbonation of soft drinks.

UNIT-III

Specialty beverages based on tea, coffee, cocoa, spices, plant extracts, herbs, nuts, dairy and imitation dairy-based beverages.

UNIT-IV

Alcoholic beverages- types, manufacture and quality evaluation; the role of yeast in beer and other alcoholic beverages, ale type beer, lager type beer, technology of brewing process, equipments used for brewing and distillation, wine and related beverages, distilled spirits.

UNIT – V

Packaged drinking water- definition, types, manufacturing processes, quality evaluation and raw and processed water, methods of water treatment, BIS quality standards of bottled water; mineral water, natural spring water, flavoured water, carbonated water.

TEXT BOOKS:

1. HardwickWA. 1995. Handbook of Brewing. Marcel Dekker.
2. Hui YH. et al 2004. Handbook of Food andBeverage Fermentation Technology. Marcel Dekker.
3. Priest FG & Stewart GG. 2006. Handbook of Brewing. 2nd Ed. CRC.
4. Richard P Vine. 1981. Commercial Wine Making – Processing and Controls. AVI Publ.

REFERENCE BOOKS:

1. Varnam AH & Sutherland JP. 1994. Beverages: Technology, Chemistry and Microbiology. Chapman & Hall.. Varnam AH & Sutherland JP. 1994. Beverages: Technology, Chemistry andMicrobiology. Chapman & Hall.
2. Woodroof JG & Phillips GF.1974. Beverages: Carbonated and Non Carbonated. AVI Publ.