

4 <sup>th</sup> Semester	19MBA402G	Agrifood Processing Management	L-T-P 3-0-0	3 Credits	35 hrs
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**Objective:** The objective of this course is to acquaint the students with different food processing techniques and their management

### Module –I

Present status of food industry in India; Organization in food industry; Introduction to operations of food industry; Deteriorative factors and hazards during processing, storage, handling and distribution.

Basic principles of food processing and food preservation by manipulation of parameters and factors and application of energy, radiations, chemicals and biotechnological agents; Non-thermal food processing techniques (aseptic processing, individual quick freezing and cryogenic freezing, high pressure technology, heat and ultrasound, high voltage pulse technology, irradiation, membrane technology). Packaging of foods, Labelling techniques, Advanced packing techniques- Active & intelligent packaging, Retort pouch packaging etc.)

### Module-II

Analysis of costs in food organization; Risk management; Laws and regulations related to food industry and food production and marketing; Food Safety & Quality, Food Standards (AGMARK, Codex alimentations, BIS/ISO, PFA, FPO, FSSAI, Total Quality Management (TQM), Hazard Analysis and Critical Control Points (HACCP), etc.

### Module – III

Case studies on project formulation in various types of food industries – milk and dairy products, cereal milling, oil-seed and pulse milling, sugarcane milling, honey production, baking, confectionery, oil and fat processing, fruits and vegetable storage and handling, processing of fruits and vegetables, egg, poultry, fish and meat handling and processing, etc. Case studies relating to HACCP (identification of CCP in various processing lines/methods) etc.

### Books:

- Acharya SS & Aggarwal NL. 2004. *Agricultural Marketing in India*. Oxford & IBH.
- Early R. 1995. *Guide to Quality Management Systems for Food Industries*. Springer
- Jelen P. 1985. *Introduction to Food Processing*. Reston Publishing.

## MBA 2Yrs Syllabus from Admission Batch 2018-19 onwards

- Potly VH & Mulky MJ. 1993. *Food Processing*. Oxford & IBH.
- P. J. Fellows (2016). *Food Processing Technology Principles and Practice*, Woodhead Publishing, 4th Edition
- Potter, N. N. (2018). *Food science*. McGraw-Hill Education, 6th Edition
- Singh R.P, Heldman D.R (2013). *Introduction to Food Engineering*. Elsevier Inc., 5th Edition
- J. Scott Smith, Y.H. Hui (2013) *Food Processing: Principles and Applications*, Wiley