



**INTEGRAL INSTITUTE OF AGRICULTURAL  
SCIENCE & TECHNOLOGY (IAST)  
INTEGRAL UNIVERSITY**

**Offers Value-Added Course On  
Processed Products of Tomato**

**20-April-2023 to 19-May-2023  
Every Thursday and Friday**

**Registration: 13-April-2023 onwards**  
**Upon successful completion of the course**  
**Each candidate shall receive a certificate.**

## **VAC513 - Processed Products of Tomato**

### **Objective:**

- 1.To train the participants in the preparation of tomato products.
2. Encourage small scale production and marketing of these products.

### **Course Contents:**

Due to convenience and rising disposable incomes and westernization of food consumption patterns in the country, the fast-food industry has been witnessing a very strong growth in the country. The Indian tomato processing market is currently experiencing strong growth. India is the world's second largest tomato producer after China and currently accounts for 11% of the total global tomato production. Most of the tomatoes produced in the country are consumed fresh with the remaining being processed into products such as tomato paste, tomato juice, tomato sauce, tomato ketchup, etc. Processed tomato products such as tomato ketchup and sauce are commonly served with food products such as burgers, sandwiches, pizza, fries, etc. Some of the other factors driving the tomato processing market in India include convenience, longer shelf life, urbanization, changing food habits, growth in the organized retail sector, etc. Moreover, tomato paste and sauce also have wide application in various Indian cuisines. In reference to the importance and usability of the processed products of Tomato in India, this course is designed to give the learners a clear picture about importance of tomato, tomato products and knowhow for the preparation of products- tomato ketchup, sauce, and puree etc. The persons who will complete this course can take up small scale production of tomato products like ketchup and sauces. The course is designed by expert instructors of Integral Institute of Agricultural Science & Technology, Integral University which will help in understanding the concept and technical knowhow of making the processed products of Tomato

### **Key USPs:**

- 1.To impart knowledge about value addition and marketing in the agriculture.
- 2.To provide adequate knowledge and basic concepts related to marketing of essential tomato product.
- 3.To impart knowledge about value addition and marketing in the agriculture.
- 4.To make the students aware about different ways to manage finance for end uses of essential tomato product in agriculture.

## Learning Outcomes:

- 1.To develop KSA (Knowledge, Skills and Abilities) in students which would be helpful in efficiently running a business.
- 2.To deepen the understanding of management concepts and its application in small agriculture businesses.

Course Instruction Platform: ILI-LMS/Google Classroom

Conduct of Teaching Sessions: Google Meet

Link For Registration:

[https://docs.google.com/forms/d/e/1FAIpQLSdUd6d83dw0VxkGPb7R-wBLyg-PuPV8\\_wEuj6DjJe4B1tQ06A/viewform?usp=pp\\_url](https://docs.google.com/forms/d/e/1FAIpQLSdUd6d83dw0VxkGPb7R-wBLyg-PuPV8_wEuj6DjJe4B1tQ06A/viewform?usp=pp_url)

### Module 1:

Background of tomato Nutritional benefits of tomato, Health benefits of tomato, post-harvest loses of tomato, Tomato varieties, Tomato ripening stages, Tomato grades and storage	3Hours
Importance of tomato processing, Points to be considered while processing of tomato, Characteristics of tomato colour during processing, Effect of processing on nutrients in tomato products	4Hours
Quiz Test	1.5Hours

### Module 2:

<b>Tomato ketchup:</b> Processing of tomato ketchup, General considerations, Pilot scale production of tomato ketchup, Quality changes during storage, Marketing issues	3 Hours
<b>Tomato pastes and puree</b> Processing of tomato paste and puree, Pilot scale production of tomato paste, Shelf-life stability of tomato puree/ paste, Quality problems, Market issues, Salient features of tomato paste / puree	4 Hours
Quiz Test	1.5Hours

### Module 3:

Tomato sauces and chutneys Processing of tomato sauces, Processing of tomato chutney, Pilot scale production of tomato sauce and chutneys, Additional processing notes	3 Hours
Food Safety and Standards Regulations, 2010 Regulation 5.3.14 thermally processed tomato puree and paste, Regulation 5.3.27 tomato ketchup and tomato sauce, Regulation 5.3.8 thermally processed tomato juice, Microbiological requirements of tomato products, Quantity of sample to be sent to the public analyst	4 Hours
Quiz Test	1.5 Hours

### Module 4:

Tomato products - Basic recipes Tomato puree and simple concentrate, Tomato paste, Tomato sauce or ketchup, Basic sauce, and chutney - Italian style, Tomato juice	3 Hours
Quiz Test	1.5 Hours

## **Team VAC, Department of Agriculture:**

Dr. Muzeeb Ahmad	Module 1
Dr. Sanket Kumar	Module 2
Dr. Md. Abu Nayyer	Module 3
Dr. Satish Yadav	Module 4

**Note-** This is an Online Course. Lectures shall be conducted during Thursday(s) between 10:00 AM - 1:00 PM/ 2:00 PM -6:00 PM and Friday(s) between 10:00 AM - 1:00 PM/ 2:00 PM - 6:00 PM respectively.

## **Coordinator(s) of the Course:**

Dr. Satish Yadav  
Dr. Md. Abu Nayyer

## **CONVENER**

Dr. Saba Siddiqui  
Professor and Head  
Department of Agriculture (IIAST)  
Integral University Lucknow