

YENEPOYA

(DEEMED TO BE UNIVERSITY)

Recognized under Sec 3(A) of the UGC Act 1956

Accredited by NAAC with 'A' Grade

Deralakatte, Mangaluru -575018

Value Added Course

Certificate course on Food Preservatives

VAC 104

ATTESTED

Dr.Gangadhara Somayaji K.S.
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Yenepoya(Deemed to be University)
University Road, Deralakatte
Mangalore- 575 018, Karnataka

PRINCIPAL
The Yenepoya Institute of Arts, Science,
Commerca & Management
Balmatta, Mangaluru-575002

YENEPOYA

(Deemed to be University)



YENEPOYA


**YENEPOYA INSTITUTE OF ARTS SCIENCE
COMMERCE AND MANAGEMENT**

Value Added Course

FOOD PRESERVATIVES

2020-21

ATTESTED


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The Yenepoya Institute of Arts Science Commerce and Management, Yenepoya (Deemed to be University) offers 30 hours Value added Course once in a year for I Year BSC HS Students.

FOOD PRESERVATIVES

Total Hours: (30 Hours)

Learning Objectives: After studying this paper the students will know –

- a. *The significance of food preservation to human society.*
- b. *To guide the students in their quest for the scientific principles involved in the attainment of food quality.*
- c. *To help students to learn the various ways of evaluating and controlling food quality.*

Goal - To help understand methods and processes of food technology in every area of activity.

Unit 1: Food Deterioration

Microbial spoilage, Food enzymes, Insects, Parasites and Rodents. Temperature. Moisture. Oxygen, Light and Time. Food safety in Home

Unit 2: Methods of preservation and Processing

Preservation by Heat- Effect/TDT/Environmental factors/ canning/Pasteurization Preservation by cold – effect of cold on Microorganisms/Types of cold preservation

Unit 3: Preservation by low temperature, Drying, Bacteria and Radiation

Chill storage – Production of low temperature/air circulation and Humidity/Modified Atmosphere
Deep freezing – Changes during Freezing & thawing/methods of freezing Drying –
Advantages/drying rate/ Changes during drying/ Methods of drying Concentration-
Methods of Concentration
Fermentation - benefits/Microbial activities/ Control of fermentation in foods/Radiation – kinds
of radiation/measurement of radiation/mode of action/ uses


Unit 4: Preserved Products:

Jam, Jelly, Marmalade, Sauces, Pickles, Squashes, Syrups-types, composition and manufacture, selection, cost, storage, uses and nutritional aspects.
Food quality

Unit 5: food quality:

Meanings and definition of food quality, Quality factors in foods, indicators of food quality.
Meaning, importance and ways of food quality assessment
Sensory and objective evaluation of foods – Sensory evaluation, physiological bases, sensory characteristics of foods, types, selection and training of sensory panel, requirements of sensory evaluation tests, types of tests, analysis and interpretation of sensory evaluation tests.

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Video Links

1. <https://youtu.be/b62mvn1xJTE>
2. <https://youtu.be/4C03LVifsN0>
3. https://youtu.be/FKSgyjk_e3c
4. <https://youtu.be/o91slorm204>
5. <https://youtu.be/fLxBtFmVRIQ>

Suggested Readings

1. Subalakshmi, G and Udipi, SA (2006): Food processing and preservation, 1st Ed. New Age International (P) Ltd.
2. Srilakshmi B (2018): Food Science, 7th Colour Ed. New Age International (P) Lt
3. Potter NN and Hotchkiss JH (1999): Food science, 5th Ed, Spinger.
4. Srivastava RPO and Kumar S (2014): Fruit and Vegetable Preservation Principles and Practices, 3rd Ed. International Book distribution Company.
5. Mc Williams M and Paine H (1984): Modern Food preservation. Surjeet Publications,.
6. Cruess WV (2004): Commercial Fruits and Vegetable Products, Agrobios India.
7. Desrosier NW and Desrosier JN (2006): The Technology Of Food Preservation, 4th Ed. CBS Publishers and Distributors, New Delhi.
8. Adams M and NoutMJR (2001): Fermentation and Food Safety, Spinger.

Course Certificates

- The course is free to enroll and learn from.
- However, if you wish to get a certificate, you need to register and appear for a proctored exam.
- Date and time of Exam: Will be updated shortly
- If you succeed in the examination, a certificate will be issued by the YIASCM. All related information will be notified on YIASCM website.

- **Teaching methods** :lectures, videos, worksheets
- **Evaluation**: Continuous Internal Assessment.

Attendance requirement:


A candidate must have minimum 75% attendance throughout 30hours.

Medium of instruction: English

Award of certificate:

The candidate those who has attended the course with successful completion of CIA will be awarded a certificate jointly issued by Centre of Personality and Professional Development, Yenepoya (Deemed to be University) and The Yenepoya Institute of Arts, Science, Commerce and Management.

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