# Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore



# Shri Vaishnav Institute of Home Science Choice Based Credit System (CBCS) in Light of NEP General Electives Offered UG

**Teaching and Evaluation Scheme** Theory **Practical** CREDITS **Subject** Category **Subject Name** L T P End Sem University vssessmen Iwo Tern vssessmen Iniversity Code **Feachers** eachers End Sem Exam Exam GE **GE** Introduction 60 20 0 0 3 0 3 20 0 **FSN** to Food 301 **Preservation** 

**Legends:** L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; C - Credit; \*Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

#### Course Educational Objectives (CEOs): The Students will -

**CEO1**: acquainted with principles of different techniques used in processing and preservation of foods

**CEO2**: develop ability in preparing and preserving various foods by household methods.

#### Course Outcomes (COs): Student should be able to-

CO1: understand source and types of food based on shelf life

CO2: familiarize with different types of heat and cold preservation methods

CO3: gain knowledge about drying and food irradiation as a preservation technique.

CO4: understand and utilized the knowledge natural and chemical preservative

C05: learn the recent methods of food preservation.

#### **Syllabus**

## **GE FSN 301: Introduction to Food Preservation**

## **UNIT I**

Sources of food, types of food based on shelf life, food spoilage.

Preservation: scope, principle, advantage, and types of food preservation.

## **UNIT II**

Thermal processing methods of preservation: Principle and method of: Canning, blanching, pasteurization, sterilization, Aseptic processing and evaporation. Cold preservation: principle and effect on quality. chilling, cold storage and freezing.

# Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore



# Shri Vaishnav Institute of Home Science Choice Based Credit System (CBCS) in Light of NEP General Electives Offered UG

Subjec t Code	Category	Subject Name	Teaching and Evaluation Scheme								
			Theory			Practical					
			End Sem University Exam	Two Term Exam	Teachers Assessment	End Se mUniversity	Teachers Assessment	L	Т	P	CREDITS
GE FSN 301	GE	Introduction to Food Preservation	60	20	20	0	0	3	0	0	3

**Legends:** L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; C - Credit; \*Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10.

#### **UNIT III**

Preservation by drying, dehydration and concentration: principle, methods and effect on quality. Preservation by radiation: definition, methods of Irradiation, direct & indirect effect, measurement of radiation dose and dose distribution.

#### **UNIT IV**

Preservation of foods by Preservatives: chemicals, mold inhibitors and bio preservatives Preservation by salt & sugar: principle, method and effect on food quality.

Preservation by fermentation: definition, types, importance and production of fermented foods.

#### **UNIT V**

Recent methods in preservation: Pulsed electric field processing, High pressure processing, processing using ultrasound, dielectric, ohmic and infrared heating.

#### **Reference Books:**

- Fellows PJ, (2005) Food Processing Technology: Principle & Practice 2nd Ed. CRC.
- N.N. Potter, (2009), Food Science, CBS publishing.
- Ramaswamy H & Marcotte M. (2006), Food Processing: Principles & Applications., Taylor & Francis
- Subbulakshmi, G and Udipi, S. A. (2001). Foods Processing and Preservation, New Delhi: New Age International (P) Ltd.

Chairperson Board of Studies Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore Chairperson Faculty of Studies Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore Controller of Examination Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore Joint Registrar Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore