

▪ SEMESTER:- IV

▪ COURSE NO.:- FST-2412

▪ COURSE TITLE:- SPICE AND FLAVOR TECHNOLOGY

▪ CREDITS:- 3(2+1)

➤ THEORY

NO. OF UNITS	TOPICS	NO. OF LECTURES
1	<i>Production and processing scenario of spice, flavour &amp; plantation crops and its scope</i>	2
2	<p><i>Major Spices:</i></p> <p><i>(1) Post Harvest Technology composition, processed products of following spices</i></p> <p><i>(2) Ginger</i></p> <p><i>(3) Chill</i></p> <p><i>(4) Turmeric</i></p> <p><i>(5) Onion and garlic</i></p> <p><i>(6) Pepper</i></p> <p><i>(7) Cardamom</i></p> <p><i>(8) Cashew nut, coco nut.</i></p>	2
3	<p><i>Minor spices, herbs and leafy vegetables: processing and utilization, All spice, Annie seed, sweet Basil, Caraway seed, Cassia, Cinnamon, Clove, Coriander, cumin, Dill seed</i></p> <p><i>Fern seed nutmeg mint marjoram, Rose merry, saffron, sage</i></p>	5
4	<i>Savory, Thyme, Ajowan, Curry leaves, Asafoetida</i>	3
5	<i>Tea, Coffee, Cocoa: Processing quality control</i>	2
6	<i>Vanilla and annatto-processing</i>	2
7	<i>Spice oil and oleoresins</i>	2
8	<i>Chemistry and physiology of taste, flavouring compounds in foods</i>	3
9	<i>Separation, purification and identification of natural flavouring materials</i>	3
10	<i>Synthetic flavouring agents and their stability</i>	2
11	<i>Flavours of soft drinks, Baking and confectionery industry</i>	2
12	<i>Standards specification of spices and flavours</i>	2
13	<i>Packaging of spices and spice products</i>	2
	<b>TOTAL</b>	<b>32</b>

➤ PRACTICALS

NO. OF UNITS	TOPICS	NO. OF EXPT.
1	Identification and characterization of flavouring compounds of spices	1
2	Oil determination of spices	1
3	Extraction of oil from clove, pepper, cardamom-chili	1
4	Extraction of oleoresins-Turmeric, ginger, pepper, clove	2
5	Piperine estimation in pepper oleoresin	1
6	Steam distillation of spices	2
7	Determination of curcumin content in turmeric	1
8	Chemical analysis of spices moisture, Volatile oil, specific gravity, refractive index, acid value	1
9	Study of standard specification of spices	1
10	Packaging study of spices	1
11	Preparation of curry powder	1
12	Preparation of Indian Masala for different foods	2
13	Visit to spice industry	1
	<b>TOTAL</b>	<b>16</b>

➤ Reference Books:

- *Spices – vol. II* Parry J. W.
- *Spice and condiments* Pruthi J. S.
- *Herbs and spices* Rosemary Hemphill
- *The book of spices* Rosen garten, F. and Livingston Jr.
- *Spices and herbs for the Food Inudstry* Lewies, Y.S.
- *Spices Vol. I and II; Tropical Agril. Series.* Purseglove, J. W. Brown E. G., Green C. L. And Robbins SRJ.
  
- *Food Flavourings* P. R. Ashust.
- *Food Flavouring composition, manufacture and uses.* J. Merrory