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Total No. of Printed Pages: 1

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**B.Sc. (Food Tech.)/ B.F.S.T (Hons.) (Semester – 5<sup>th</sup>)**  
**SPICES AND FLAVOUR TECHNOLOGY**  
**Subject Code: BFOTD1511**  
**Paper ID: 19131726**

**Time: 03 Hours**

**Maximum Marks: 60**

**Instruction for candidates:**

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

**Section – A**

**(2 marks each)**

Q1. Attempt the following:

- a. What are the labelling laws for synthetic and Natural flavours?
- b. What is the basis of classification of spices?
- c. What do you understand from the term “UMAMI”
- d. What are the advantages of headspace sampling in flavour analysis?
- e. What are advantages of Clevenger system of spice extraction?
- f. What is the difference in synthetic and natural flavors?
- g. What are the various methods used for prevention of contamination in spices?
- h. What is the difference between spices and herbs?
- i. What is the principle of ultrasound extraction of essential oils from spices?
- j. What is the mode of functioning of flavour intensifiers.

**Section – B**

**(5 marks each)**

- Q2. (a) What are the various groups in which spices are classified?  
(b) What is the future of production of organic spices in India?
- Q3. Write about the production, processing and utilization of spices in India.
- Q4. What are oleoresins? Write down the method of extraction of oleoresins.
- Q5. Write about the head space method of flavor isolation.
- Q6. What is the effect of processing techniques on flavour quality?

**Section – C**

**(10 marks each)**

- Q7. What is flavor encapsulation? Enlist the various processes of encapsulation of flavor compounds. Write in detail about the coacervation.
- Q8. Explain the various techniques of isolation of oleoresins from spices.
- Q9. Explain the various sensory and instrumentation method of flavour evaluation.