Roll No. Total No. of Pages : 02

Total No. of Questions: 09

M.Sc (Food Technology) EL-II (2017 Batch) (Sem.-3) FOOD ADDITIVES

Subject Code: MSFT-615 M.Code: 75582

Time: 3 Hrs. Max. Marks: 60

#### **INSTRUCTIONS TO CANDIDATES:**

- 1. SECTION-A contains SIX questions carrying TWO marks each and students has to attempt any ALL questions.
- SECTION-B consists of FOUR Subsections: Units-I, II, III & IV. Each Subsection contains TWO questions each carrying TWELVE marks each and student has to attempt any ONE question from each Subsection.

### **SECTION-A**

# 1. Answer briefly:

- a) What is mechanism of action of antioxidants?
- b) Why natural color is preferred over synthetic color?
- c) How emulsifiers help in stabilization of emulsion?
- d) What is role of chelating agents? How it can reduce fat oxidation?
- e) What is vitamin and mineral premix?
- f) What is seasoning blends?

# **SECTION-B**

#### **UNIT-I**

2. What are the chemical preservatives? What is the mechanism of its action on microbial destruction? How potassium metabisulphite prevent the growth of bacteria?

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3. What is the need of anti-browning agents? What are the type and mode of action?

# **UNIT-II**

- 4. What is color chemistry? Discuss plant pigments particularly carotene. What are the different colors imparted by carotene?
- 5. Differentiate between natural and synthetic flavour. How you may stabilize flavour in food?

### **UNIT-III**

- 6. What are the criteria for selection of emulsifier? How emulsion stability is affected? How to improve emulsion stability?
- 7. What are the acidulants? What is the importance of acidulants in food? How its may improve food properties and its quality?

# **UNIT-IV**

- 8. Discuss the uses and special attributes of important Indian spices.
- 9. Discuss various techniques of oleoresin extraction.

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

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