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NFT-403

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 182408

Roll No.

B.Tech. (Semester-IV)

SPL. THEORY EXAMINATION, 2014-15

FOOD ADDITIVES

Time : 2 Hours]

[Total Marks : 50

Note: Attempt all questions. All questions carry equal marks.

1. Attempt any four parts: 4×2.5=10
 - a) Enlist the use of sulphur dioxide as a preservative
 - b) How are haze formed in fruit juices and how can it be rectified?
 - c) Explain the uses of EDTA as a chelating agent?
 - d) What is chemical leavening system?
 - e) What are the major functions of bases in food industry?
2. Attempt any two parts: 2×5=10
 - a) Differentiate between primary and secondary antioxidant?

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(1)

[Contd...

- b) Explain antimicrobial agents and its classification according to PFA?
- c) What do you understand by Propellants? Discuss their role as food additive with proper examples.
3. Attempt any two parts: $2 \times 5 = 10$
- a) What do you understand by Emulsifying Agents? Discuss the HLB system for selecting emulsifiers.
- b) Differentiate between Class I and Class II Preservatives. Also discuss the mechanism of action of Sugar, Salt and Vinegar as preservatives.
- c) Give function, mechanisms of action and application of Stabilizing Agents?
4. Attempt any two questions from this section: $10 \times 2 = 20$
- a) What do you understand by Low Calorie and Non Nutritive Sweeteners? Name various low calorie and non nutritive sweeteners used in food industry and discuss the properties of any two of them.
- b) What do you understand by Firming Agents? Discuss the role of pectic substances and pectin methyl esterase enzyme as firming agents in fruits and vegetables.
- c) Differentiate between Color Enhancers and Color Bleaching Agents. Give the essential requirements of coloring matter for use in food products as per PFA act.

5. Attempt any two questions from this section: $2 \times 5 = 10$
- a) Explain oleoresin and its processing?
- b) Classify the Food Poisoning & discuss in detail their correlation with microorganism
- c) Comment on "Beneficial Microorganism" & their utilization in food industries.

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