

Printed Pages : 3



NFT403

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

PAPER ID : 182408

Roll No.

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B. Tech.

(SEM. IV) THEORY EXAMINATION, 2014-15

FOOD ADDITIVES

Time : 2 Hours]

[Total Marks : 50

- Note :**
- (1) Attempt all questions.
 - (2) Each question carries equal marks.

1. Attempt any four parts of the **4×2.5=10** following :
 - (a) What do you understand by Food Additives?
 - (b) Discuss the desirable and undesirable uses of food additives.
 - (c) Differentiate between food additives and adulterants.
 - (d) Differentiate between Intentional & Non-Intentional additives.
 - (e) What do you understand by toxicological evaluation of food additives?

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2. Attempt any two parts of the following : **2×5=10**
- (a) Discuss the functions of Acids used in foods. Also give the name of acids used in food processing industry with the maximum level of use.
 - (b) What do you understand by Low Calorie and Non-Nutritive Sweeteners? Discuss the properties of any two of non-nutritive sweeteners used in food industry.
 - (c) Write a precise technical note on the Use of Polyols in the Food Applications.
3. Attempt any two parts of the following : **2×5=10**
- (a) What are Antioxidants? Discuss their role as food additives with proper examples.
 - (b) What do you understand by Firming Agents? Discuss the role of pectic substances and pectin methylesterase enzyme as firming agents in fruits and vegetables.
 - (c) Write a precise technical note on Flour Bleaching Agents and Bread Improver along with their examples and mode of action.
4. Attempt any two parts of the following : **2×5=10**
- (a) Differentiate between Class I and Class II Preservatives. Also discuss the mechanism of action of Sugar, Salt and Vinegar as preservatives.

- (b) What do you understand by Antimicrobial Agents? Also discuss the action mechanism of Benzoic acid & sulfur dioxides and Epoxides.
- (c) Comment on “Utility of Inert gases in Food Industry”. Also discuss the utility of Ethylene in Food Industry.

5. Attempt any two parts of the following : **2×5=10**

- (a) Give the essential requirements of coloring matter for use in food products as per PFA act.
 - (b) What do you understand by Flavoring Agents? Differentiate between Natural & Nature identical flavoring agents.
 - (c) Write a technical note on Essential oils and Oleoresins.
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