**Enclosure-V**

**Shree Manibhai Virani & Smt. Navalben Virani Science College, Rajkot**

**Autonomous**

**Affiliated to Saurashtra University, Rajkot**

**OFFERING DEPARTMENT- DEPARTMENT OF BIOCHEMISTRY**

**SEC-III: VALUE ADDED COURSE**

**For students admitted from 2019-20 and onwards**

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| **19AEVA13** | **Food Adulteration** | **40 Hrs** | **1 credit** |

Syllabus

**Objective:**

1. Be aware of adulteration of selected food products through various testing procedures.
2. Understand the effects of adulterants in food.
3. Create awareness of food adulteration to consumers.

**Unit I: Types of adulteration and detection methods**

 a. Introduction: Food and food product definition.

b. Prevention of Food Adulteration Act. (PFA)

c. Effect of Adulterants on Community Health

**Unit II: Detection of adulterants in spices:**

a. Introduction and types of Adulterants in spices.

b. Detection of adulterants in spices

c. Side effect of adulterants in spices.

**Unit III: Types of Adulterants in milk and milk products.**

a. Introduction and types of adulterants in milk and milk products.

b. Detection of adulterants in milk and milk products.

c. Side effect of adulterants in milk and milk products.

d. Detection of microorganism in milk (MBRT)

**Unit IV: Types of Adulterants in flour, sugar, salt, tea and food grains**

a. Introduction and types of adulterants food grains

b. Detection of adulterants in food grains.

c. Side effect of adulterants food grains

**Unit V: Identification of adulterants in fruits and vegetables.**

1. Types of adulterants used in fruits and vegetables.
2. Side effect of pesticides in fruits and vegetables.
3. Methods used for removal of adulterants in fruits and vegetables.

**Reference Books:**

1. Wiley, Harvey Washington Foods and Their Adulteration Rarebooksclub.com

2. Schlink, Frederick John Eat, Drink, and Be Wary: The Problems of Diet and Food Adulteration Literary Licensing, LLC

3. Bruce, E. M. (1917). Detection of the common food adulterants. D. Van Nostrand Company.

 4. Hassall, A. H. (1876). Food: its Adulterations, and the Methods for their Detection.

 Longmans Green.