

**KAKARAPARTI BHAVANARAYANA COLLEGE (Autonomous)**  
**Department of Chemistry**

<b>Class:</b>	<b>Semester:</b>	<b>Title of The Paper:</b>	<b>Paper Code:</b>	<b>W.E.F</b>
I BSC	II	<b>FOOD ADULTERATION</b>	R20SDC201C	2020-21

**Syllabus**

Total No of Hours for Teaching - Learning	Instructional Hours for Week		Duration of Semester Examination Hours	Max Marks		Credits
	Theory	Practical		CIA	SEE	
30 Hours	2	-	3 Hours	-	50	

**Learning Outcomes:**

After successful completion of the course, students will be able to:

1. Get basic knowledge on various foods and about adulteration.
2. Understand the adulteration of common foods and their adverse impact on health
3. Comprehend certain skills of detecting adulteration of common foods.
4. Be able to extend their knowledge to other kinds of adulteration, detection and remedies.
5. Know the basic laws and procedures regarding food adulteration and consumer protection.

# **FOOD ADULTERATION**

## **Paper Code: R20SDC201C**

### **UNIT-I – Common Foods and Adulteration: (07hrs)**

Common Foods subjected to Adulteration - Adulteration – Definition – Types; Poisonous substances, Foreign matter, Cheap substitutes, Spoiled parts. Adulteration through Food Additives – Intentional and incidental. General Impact on Human Health.

### **UNIT-II –: Adulteration of Common Foods and Methods of Detection: (10hrs)**

Means of Adulteration, Methods of Detection Adulterants in the following Foods; Milk, Oil, Grain, Sugar, Spices and condiments, Processed food, Fruits and vegetables. Additives and Sweetening agents (at least three methods of detection for each food item).

### **UNIT-III –:Present Laws and Procedures on Adulteration: (08hrs)**

Highlights of Food Safety and Standards Act 2006 (FSSA) –Food Safety and Standards

Authority of India–Rules and Procedures of Local Authorities. Role of voluntary agencies such as, Agmark, I.S.I. Quality control laboratories of companies, Private testing laboratories, Quality control laboratories of consumer co-operatives. Consumer education, Consumer’s problems rights and responsibilities, COPRA 2019 – Offenses and Penalties – Procedures to Complain – Compensation to Victims.

### **Recommended Co-curricular Activities (including Hands on Exercises): (05 hrs)**

1. Collection of information on adulteration of some common foods from local market
2. Demonstration of Adulteration detection methods for a minimum of 5 common foods (one method each)
3. Invited lecture/training by local expert
4. Visit to a related nearby laboratory
5. Assignments, Group discussion, Quiz etc.

Reference e Books and Websites:

1. A first course in Food Analysis–A.Y.Sathe, New Age International (P)Ltd., 1999
2. Food Safety, case studies–Ramesh.V.Bhat,NIN,1992
3. [https://old.fssai.gov.in/Portals/0/Pdf/Draft\\_Manuals/Beverages and confectionary.pdf](https://old.fssai.gov.in/Portals/0/Pdf/Draft_Manuals/Beverages and confectionary.pdf)
4. <https://cbseportal.com/project/Download-CBSE-XII-Chemistry-Project-FoodAdulteration#gsc.tab=0> (Downloadable e material on food adulteration)
5. <https://www.fssai.gov.in/>
6. <https://indianlegalsolution.com/laws-on-food-adulteration/>
7. <https://fssai.gov.in/dart/>
8. <https://byjus.com/biology/food-adulteration/>
9. Wikipedia, 10. Vikaspedia

## MODEL QUESTION PAPER

**Max. Marks: 50 M**

**Time: 1½ hrs (90 Minutes)**

### SECTION- A

**(4x5M=20 Marks)**

Answer any four questions. Each answer carries 5 marks

(At least 1 question should be given from each Unit)

1. Define food adulteration?
2. Explain the adulteration through Food Additives
3. Name few cheap substitutes used in food adulteration
4. Give examples for food additives and sweetening agents
5. Write a short notes on processed food
6. Explain the procedures to complain about the food adulteration
7. Name the laws that governs the food adulteration
8. Explain the procedure to get compensation to the victims of food adulteration

### SECTION B

**(3x10M = 30 Marks)**

Answer any three questions. Each answer carries 10 marks

(At least 1 question should be given from each Unit)

9. Write an essay on the common Foods which are subjected to Adulteration and explain the types poisonous substances added for food adulteration
10. Describe the highlights of Food Safety and Standards Act 2006 (FSSAI)
11. Explain the food testing and standardized testing methods and protocols
12. Write in detail about the general Impact of food adulteration on Human Health
13. Write an essay on different types of offenses of food adulteration and the penalties imposed

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