B.S.N.V. P.G. COLLEGE, LUCKNOW

Department Of Chemistry

Station Road, Charbagh, Lucknow - 226001 (INDIA)

SKILL DEVELOPMENT COURSE VALUE ADDED COURSE

Syllabus of FOOD ADULTERATION

Total 30 hrs

Max Marks: 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 detectng 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.

SYLLABUS:

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 vountary 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-corricular Activities (Including Hands on Exercises):

(05hrs)

- 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.

Assignments, Group discussion, Quiz etc.

Reference e Books and Websites:

- 1. A first course in FoodAnalysis–A.Y.Sathe, New Age International(P)Ltd.,1999
- 2. Food Safety, case studies—Ramesh. V. Bhat , NIN , 1992
- 3. Foods and their adultration by harvey washington wiley.
- 4. Food adultration and its detection by jesse p. battershall.
- 5. Detection of the common food adulterants by edwin m.bruce
- 6. Principles of food chemistry by john deman springer.
- 7. https://old.fssai.gov.in/Portals/0/Pdf/Draft_Manuals/Beverages and confectionary.pdf
- 8. https://cbseportal.com/project/Download-CBSE-XII-Chemistry-Project-Food-Adulteration#gsc.tab=0 (Downloadable e material on food adulteration)
- 9. https://www.fssai.gov.in/
- 10. https://indianlegalsolution.com/laws-on-food-adulteration/
- 11. https://fssai.gov.in/dart/
- 12. https://byjus.com/biology/food-adulteration/
- 13. Wikiepedia
- 14. Vikaspedia

Practical Book

- 1. A laboratory manual of food analysis by Shalini Sehgal
- 2. Food and Beverage adultration by Gajanan shirke
- **3.** Food science experiment and applications by Mohini Sethi.Erams.Rao.