Certificate course- Food additive & adulteration

COURSE CODE: SHCHADD4
COURSE NAME: FOOD ADDITIVE & ADULTERATION
YEAR OF IMPLEMENTATION: 2022

Course Outcome: This certificate course aims to familiarize students about the importance of various food additives and government regulations regarding food additives. Course also describes Food adulteration, Food laws and standards etc. This course imparts practical knowledge to identify and remove the different adulterants present in common household food items.

CO 1: Describe food additives

CO 2: Understand food adulteration

CO 3: Describe government regulations related to food additive & adulteration

SYLLABUS

Unit 1: Food Additives (12 Hrs)

Food additives – definition. Preservatives, Food colours - permitted and non-permitted, Spurious colours, Toxicology. Flavours - natural and synthetic. Artificial sweeteners, Emulsifying agents, Antioxidants, Leavening agents and Flavour enhancers. Importance of food additives. Government regulations, Soft drinks - formulation and health effects. Fast foods and junk foods and their health effects. Composition of chocolate, milk powder.

Unit 2: Food adulteration (8 Hrs)

Food adulteration. Food adulterants, Food laws and standards. Food Safety and Standards Act, 2006. Common food adulterants in various food materials and their identification: Milk and milk products, vegetable oils, cereals, tea, coffee powder and chilli powder. Artificial ripening of fruits.

Unit 3: Method for detection of Food adulterants (5 Hrs)

Common methods for the identification and removal of adulterants in household food items, Advanced chromatographic techniques like HPLC, Gas chromatography etc. Biosensors.

Unit 4: Modern food preservation methods (5 Hrs)

Methods of preservation: Need for preservation - Classification - Freezing, smoking, use of sugar, pickling, artificial food additives, canning and bottling, high pressure, burial in the ground, controlled use of micro organism and bio-preservation. Packaging of foods: Classification - Materials used for packaging – Harmful effects.

References

1. B. Srilakshmi, Food Science, 5 th Edn., New Age Publishers, New Delhi, 2010.

2. B. Sreelakshmi, Food Science, New Age International Pvt. Ltd, New Delhi, 2015

3. Srinivasan Damodaran, Kirk L. Parkin, Owen R. Fennema, Food Chemistry, 4 th Edn., CRC Press, New York, 2007.

4. K. Singh, Chemistry in Daily Life, Prentice Hall of India, New Delhi, 2008.

BROCHURE:


Sacred Heart College, Chalakudy
Light shines in darkness
Govt Aided College, Affiliated to the University of Calicut
Re-accredited by NAAC with A+ grade in 2023 (4th cycle)
ADD-ON COURSE
Food Additive &
Adulteration
STARTS ON
22/11/2023
OFFERED BY
THE DEPARTMENT OF CHEMISTRY
SACRED HEART COLLEGE, CHALAKUDY

Sacred Heart College, Chalakudy

Department of Chemistry

ADD-ON COURSE CERTIFICATE

This is to certify that **Aysha N F (BSc. Zoology)** has successfully completed the Add-on course on **Food additive and Adulteration** conducted by the Department of Chemistry, Sacred Heart College, Chalakudy for the period 2023-24.

Head of the Department
Dr. Santhosh Paul

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Sacred Heart College
Chalakudy

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Accredited by NAAC with A+ Grade (3.65CGPA)
CHALAKUDY

Principal
Dr. Sr. Reena Ittyachan

Sacred Heart College, Chalakudy

Department of Chemistry

ADD-ON COURSE CERTIFICATE

This is to certify that **Shahala V (B.A. History)** has successfully completed the Add-on course on **Food additive and Adulteration** conducted by the Department of Chemistry, Sacred Heart College, Chalakudy for the period 2023-24.

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ADD-ON COURSE CERTIFICATE

This is to certify that **Shahsadi M (B.A. History)** has successfully completed the Add-on course on **Food additive and Adulteration** conducted by the Department of Chemistry, Sacred Heart College, Chalakudy for the period 2023-24.

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ADD-ON COURSE CERTIFICATE

This is to certify that **Dilshada K K (BSc. Physics)** has successfully completed the Add-on course on **Food additive and Adulteration** conducted by the Department of Chemistry, Sacred Heart College, Chalakudy for the period 2023-24.

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ADD-ON COURSE CERTIFICATE

This is to certify that **Anakha (B.A. Economics)** has successfully completed the Add-on course on **Food additive and Adulteration** conducted by the Department of Chemistry, Sacred Heart College, Chalakudy for the period 2023-24.

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ADD-ON COURSE CERTIFICATE

This is to certify that **Sivani T G (B.A. Economics)** has successfully completed the Add-on course on **Food additive and Adulteration** conducted by the Department of Chemistry, Sacred Heart College, Chalakudy for the period 2023-24.

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ADD-ON COURSE CERTIFICATE

This is to certify that **Anagha V K (B.A. Economics)** has successfully completed the Add-on course on **Food additive and Adulteration** conducted by the Department of Chemistry, Sacred Heart College, Chalakudy for the period 2023-24.

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ADD-ON COURSE CERTIFICATE

This is to certify that **Ananya K J (B.A. Economics)** has successfully completed the Add-on course on **Food additive and Adulteration** conducted by the Department of Chemistry, Sacred Heart College, Chalakudy for the period 2023-24.

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