

Certificate programme -3

Morigaon College

Department of Chemistry

Manufacturing Domestic Items

Course Duration – 30 Hours

Course credit- 3

Course Objectives

By experiencing practical as well as preparation of household common products, learners are more skill with traditional knowledge on chemistry, its important in carrier opportunities and find out self employability.

Course Outcome

A chemistry, industrial chemistry, or biology undergraduate degree opens up a wide range of career options. For students interested in professions in small-scale manufacture of some household goods, this course provides solid instruction. Students can learn a lot from this course. After completing this course, students are able to combine numerous household things that are highly beneficial in people's daily lives. They also gain critical thinking abilities and confidence that are crucial for starting their own small manufacturing business. This course is far more engaging for both practise and study. Because it impacts all of us, the course is particularly helpful for students in identifying adulteration in food products and testing methodologies. Students can study how water hardness influences the cleaning power of soap and detergents from this course. Furthermore the negative effects of various substances in ice cream, cosmetics, etc. To offer their goods to clien's, a small manufacturing facility can be established. Additionally, students can learn how to figure out the pricing and selling price of synthesised materials.

Eligibility

All B.Sc. students who are Honours/Generic in chemistry are eligible.

Module-1

Practical

Preparations include liquid soap, white and black phenyl, dishwashing powder, detergent powder and cake, bath soap using a semi-hot method, cold cream, potash alum, several types of ink and conserving cream, hydro alcoholic gel formulation for hand sanitizer, synthetic detergent's total alkali content to that of commercial detergent and determine its total alkali content. Oils and fats quality testing, to spot hazards and adulteration in samples of butter, sugar, fat, ice cream, turmeric, and chilli powder.

Module- 2

Theory

- (1) The detergent's mode of action.
- (2) Chemical adulteration and tainted food
- (3) Spot tests for food adulteration and risks.

Reference Book

- (1) Chemical Technology by C.C. Maheta, Rashikbhai Suthar, J.B. Patel and C.T. Brahmbhat. B. S. Shah Publication, Ahmedabad.
- (2) Practical Chemistry by N. K. Verma, B.K. Vermani and K.K. Rehani. Laxmi Publication (p) Ltd, New Delhi.
- (3) Synthetic organic chemistry by Gurdeep R. Chatwal. Himalaya Publishing House.
- (4) Adulteration and its side effect in food by Dr. Bhavna Chauhan, Yogesh Vadvala et al. Food and nutrition and chemistry department of S.M. Patel college of home science.

Approved. *Rupnarayan*
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