

PERIYAR UNIVERSITY (NAAC 'A' Grade- State University- NIRF Rank 68) SALEM — 636 011 DEPARTMENT OF CHEMISTRY

### Value Added course: Certificate course on Cosmetics Formulations (19UPCHE1A01)

### Course mentor: Dr. V. Raj and Dr. D. Gopi

### **Introduction:**

This cosmetics formulations value added course is offered by the Department of Chemistry for all the science students, which help the individual students to develop their own skills in this cosmetic field. This course is ideal for those who want to know the basics of cosmetic science and formulating them to put their own products together without getting lost in unnecessary chemical and technical jargon. This comprehensive yet simple course teaches the student to know:

- all about the functions of ingredients
- ingredient safety and where to go for the right information

This course furnishes essential concepts to the state-of-the-art in the particular area of cosmetic formulation. So, all the students must be aware to know the uses and importance of cosmetics and its formulations process.

### Course outcome:

After completing this online course, the students will have a

CO 1: Better understanding of cosmetics,

- CO 2 : Better understanding of the ingredients used to create cosmetics
- CO 3 : will be able to test the cosmetic products
- **CO 4 : will be able to create some basic formulations.**

## Syllabus:

Functions of the common ingredients -Identification - processing; Investigation and evaluation -varied ingredients -ingredient selection

Identification - Good Manufacturing Practice (GMP) - principles product safety. Identification - preservatives - self-preserving formulas – antioxidants - various preservatives.

Evaluation and selection - gums and thickeners - lipids - altering, emollient and skin

Application - safe, effective and stable personal care products. Testing - stability - cosmetic creams and lotions - surfactants - stable foaming body wash - shampoo – formulations - sunscreens.

Developing method – stability analysis

# **Course Duration: 36 Hours**



## PERIYAR UNIVERSITY (NAAC 'A' Grade- State University- NIRF Rank 68) SALEM — 636 011 DEPARTMENT OF CHEMISTRY

## Value Added course: Certificate course on Water and Starch Analysis (UPCHE1A02) Course mentor: Dr. V. Raj and Dr. D. Gopi

### **Introduction:**

This value added course is offered by the Department of Chemistry as on open course, for all the science students who want to acquire knowledge about Water and Starch Analysis. This course provides fundamental concepts to the state-of-the-art in the respective area of water and starch analysis. Water and starch analysis desires potential requirements to meet many of the challenges facing the world. For the past several decades there has been lot of interest in the determination of starch for various applications.

### **Course outcome:**

- CO1 : Acquire a fundamental knowledge on water analysis
- CO2 : Develop an analysis for the estimation ions in water
- CO3 : Learn the different methods for phosphorous and solids
- CO4 : Acquire a fundamental knowledge on starch and develop a method for analysis

### Syllabus:

Introduction-Sample preservation-washing laboratory glassware-special chemical procedures. Organic carbon; soils-fluorometric measurement.

Chloride - specific conductance - dissolved oxygen - biochemical oxygen demand - chemical oxygen demand. Soluble iron, -reactive nitrite - ammonia.

Organic nitrogen - oils and grease, - phosphorus in sediments - Solids determination – Seston - suspended solids. Solids - Total dissolve - Sulfate - silica.

Starch Introduction- history – applications – reagents – apparatus - sample preparation - colorimetry - HPLC –calculations - measurement.

Quality control – troubleshooting - quality control - methodological considerationsvalidation of resistant starch - comparison with other methods- total starch- rate and extent of starch digestion.

## Course Duration: 36 Hours



Dr. V. Raj Professor and Head

## Department of Chemistry பெரியார் பல்கலைக்கழகம் PERIYAR UNIVERSITY (NAAC A Grade - State University- NIRF Rank 68) SALEM-636 011, TAMIL NADU, INDIA

Date: 24.01.2020

## **Board of Studies meeting**

The Board of Studies meeting for M.Sc. Chemistry was held on 24-01-2020 at 11.30am in the HOD's Room, Department of Chemistry, Periyar University, Periyar Palkalai Nagar, Salem - 636 011 to discuss about the Add on /Value added/Certificate courses to be offered for the students of Periyar University for the academic year 2019-2020.

### **Members Present**

1. Dr. V. Raj	- Professor and Head
2. Dr. P. Viswanathamurthi	- Professor
3. Dr. D.Gopi	- Professor
4. Dr. A. Lalitha	- Associate Professor
5. Dr. R. Rajavel	- Associate Professor

6. Dr. K. Shanmuga Bharathi - Assistant Professor

### Resolutions

It is resolved to offer the following Add on/Value added/Certificate courses for the students of Periyar University for the academic year 2019-2020.

Sl.No	Course Code	Title of the Course
01.	19UPCHE1A01	Certificate course on
		Cosmetics formulations
02.	19UPCHE1A02	Certificate course on Water
		and Starch Analysis

## Signatures

1. Dr. V. Raj

2. Dr. P. Viswanathamurthi

3. Dr. D.Gopi

4. Dr. A. Lalitha

5. Dr. R. Rajavel

6. Dr. K. Shanmuga Bharathi

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Department of Chemistry பெரியார் பல்கலைக்கழகம் PERIYAR UNIVERSITY (NAAC A Grade - State University- NIRF Rank 68) SALEM-636 011, TAMIL NADU, INDIA

Dr. V. Raj Professor and Head Date: 31.01.2020

The department faculty meeting was held on 24-01-2020 at 11.30am in the HOD's Room, Department of Chemistry, Periyar University, Periyar Palkalai Nagar, Salem - 636 011 to choose the Add on /Value added/Certificate course to be offered for the students of Periyar University for the academic year 2019-2020.

### **Members Present**

1. Dr. V. Raj	- Professor and Head	
2. Dr. P. Viswanathamurthi	- Professor	
3. Dr. D.Gopi	- Professor	
4. Dr. A. Lalitha	- Associate Professor	
5. Dr. R. Rajavel	- Associate Professor	
6. Dr. K. Shanmuga Bharathi - Assistant Professor		
7. Dr.C.S.Maheswari	- Guest Lecturer	

#### Resolutions

S1.No	Course Code	Title of the Course	Number of students willing
01.	19UPCHE1A01	Certificate course on Cosmetics formulations	9
02.	19UPCHE1A02	Certificate course on Water and Starch Analysis	35

Based on the demand of majority of students, It is resolved to offer the following Add on/Value added/Certificate course for the students of Periyar University for the academic year 2019-2020.

01,	19UPCHE1A2	Certificate course on Water
		and Starch Analysis

## Signatures

- 1. Dr. V. Raj
- 2. Dr. P. Viswanathamurthi

3. Dr. D.Gopi

4. Dr. A. Lalitha

5. Dr. R. Rajavel

6. Dr. K. Shanmuga Bharathi -

7. Dr.C.S.Maheswari

