

Certificate Course

DEPARTMENT OF CHEMISTRY

Title: Chemistry of Household Utility Products

Course Duration: 6 months

Course Contents:

Sr. No.	Module
1	Introduction
2	Importance of small business in India
3	Purpose of Household products
4	Chemicals used in Household products
5	Safety & Precaution
6	Preparation of Household Products (Any Three) Preparation of Soap Preparation of Disinfectant Preparation of Perfume Preparation of Cold Cream Preparation of Herbal Shampoo Preparation of Liquid Soap Preparation of Detergent Preparation of Essence Sticks

DEPARTMENT OF MATHEMATICS

Title: Certificate Course Statistical Analysis - An Introduction to R Software

Course Duration: 4 months

Course Contents:

Sr. No.	Module
1	Setup for R Software
2	Variables in R
3	Data types in R
4	Input-Output Features in R
5	Operators in R
6	Lists in R
7	Array in R
8	Use of R as a calculator
9	Function's operations
10	Matrix in R Application of Matrices in R
11	Vector in R
12	Mean, Mode & Median in R
13	Plotting Graph in R
14	Plotting Bar/Pie-charts in R

DEPARTMENT OF PHYSICS

1. Title: Certificate Course in Computational Physics.

Course Duration: 6 months

Course Contents:

Sr. No.	Module
1	Basics of Microsoft excel
2	Useful functions in physics
3	Radioactive decay problem
4	Planck curve Gaussian distribution
5	Fourier analysis
6	Polar curve
7	Numerical integration
8	Graphic design(turtle)

2. Title : Certificate Course in Astronomy & Astrophysics.

Course Duration: 6 months

Course Contents:

Sr. No.	Module
1	Basic physics and kinematics
2	Celestial address
3	Motion of object
4	The moon
5	The sun
6	Solar system
7	Astronomy
8	Scope in astrophysics for amateur
9	Optics

DEPARTMENT OF INFORMATION TECHNOLOGY

Title: Cyber Security

Course Duration: 6 months

Course Contents:

Sr. No.	Module
1	Introduction to Hacking & Environment
2	Scanning Networks Tool setup
3	VPN Hiding Identity, Dark Web
4	Social Media Hacking