Rayat Shikshan Sanstha's
KARMAVEER BHAURAO PATIL COLLEGE, VASHI, NAVI MUMBAI

Department of Chemistry
Skill Based Course (F.Y. B. Sc.) 2018-2019

Forensic Science"

Details of the Certificate Course:

Eligibility	: HSC
Duration	: Three Months
Intake Capacity	: 40 Students
Theory & Practical	: 30 Hrs
Fees Structure	: Rs. 2000
Examination Pattern:	
Theory	: 50%
Practical	: 50%

Objectives of the Course:

1 Current applications of chemistry in forensic sciences to the students

2. Concepts in Forensic Toxicological examinations and its significance.

3. Practical knowledge of food adulteration, poisons and various adulterants in alcohol, vegetable oils, petrol and diesel

Syllabus-Theory& Practical
Name of the Course: Forensic Science
Theory

Chapter I
Introduction

(2 lectures)

1.1 Introduction and Concept of Forensic Toxicological Examination and its Significance

Chapter II
Poisons **(6 lectures)**

2.1 Classification of poisons, types of poisoning, collection and preservation of toxicological samples

2.2 Preservation of toxicological exhibits in fatal and survival cases, signs and symptoms of poisoning

2.3Mode of action and its effect on vital functions, medico-legal and postmortem examination report/finding studies

Chapter III
Analysis of Toxic samples **(7 lectures)**

3.1 Specific analysis plan/ approach to toxicological examination of poisoning

samples

3.2 Excretion of poisons, detection of poisons on the basis of their metabolic studies,

interpretation of analytical data and forming of opinion.

Ref:

1.Introduction to Forensic Science in Crime Investigation By Dr.(Mrs.) Rukmani Krishnamurthy

2. Henry Lee's Crime Scene Handbook by Henry C Lee

3. Forensic Biology by Shrikant H. Lade

4. Crime Scene Processing and Laboratory Work Book by Patric Jones

5. Forensic Science: An Introduction to Scientific and Investigative Techniques 3rd ed. by Stuart H. James

Practical Syllabus

Sr. No	Title of the Experiment	Hrs (15)
1	Separation of Sampling Material by TLC (drugs and poisons)	**03**
2	Identification of food adulteration.-vegetable oil and Cold drinks	**03**
3	Adulteration in Petrol and Diesel.	**03**
4	Detection and determination Examination of fire arson cases by GC, TLC	**03**
5	Detection of various adulterants in alcohol, by colour tests.(Qualitative Analysis)	**03**

Ref:

1. Qualitative Analysis by Vogel
2. Physical Chemistry Parcticals by J.B. Yadav
3. Drug Abuse Handbook, Karch.s.
4. Analysis of Plant Poisons, Dr. M P Goutam.