

St. Joseph's College of Arts and science
(Autonomous),
Cuddalore-I

PG & RESEARCH DEPARTMENT OF CHEMISTRY
OFFERS

VALUE ADDED COURSE
ON

BASIC ANALYTICAL TECHNIQUES

OBJECTIVES

- Enabling the students to get exposures on chemical laboratory techniques
- Equipping the students to perform the industrial calculations on concentrations
- Enabling the students to handle the trouble shooting
- Getting exposures on basic analytical instruments used in the industry
- Equipping the students to face interview for R&D, Production etc

START DATE
13TH AUGUST 2019

END DATE
29TH SEPTEMBER 2019

COURSE FEE

RS. 225 ONLY

LAST DATE FOR REGISTRATION

12TH AUGUST 2019

FOR MORE DETAILS PLEASE CONTACT

MR. T. ANTONY SANDOSH
HEAD
PG & RESEARCH DEPARTMENT OF
CHEMISTRY

MR. G. ANAND
ASSISTANT PROFESSOR
PG & RESEARCH DEPARTMENT OF
CHEMISTRY




9095079197

**ST. JOSEPH'S COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)
CUDDALORE-607001.**

**VALUE ADDED COURSES-(ODD SEMESTER)
(2019-2020)**

Course Title : BASIC ANALYTICAL TECHNIQUES
Course Code : VACH 02
Department : CHEMISTRY
Course Coordinator : G. ANAND
List of Faculty : 1. G. ANAND
2. K. VENGADESAN
3. S. DAVID AMALRAJ
4. S. ALBERT NIKSON
5. D. BAKYARAJ
6. C. ADAIKALARAJ
No. of Students Enrolled : 48
No of Student completed : 48
Course Fee : Rs. 225
Eligibility : All UG students, Shift II
Class hour per day : 2 hours
Total Hours : 30
Timing : 10.00 am to 1.00 pm
Date : 07.09.2019 to 27.09.2019


Co-ordinator's signature

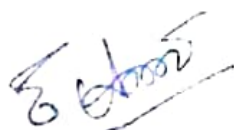

HOD

St. Joseph's college of arts and science (Autonomous), Cuddalore-1

VALUE ADDED COURSES -2019-2020 (Odd Semester)

NOMINAL ROLL**Department: CHEMISTRY****Course Title: BASIC ANALYTICAL TECHNIQUES****Course code: VACH02****Batch: II****Name of the coordinator: G. ANAND**

S.NO	APPLICATION NUMBER	ROLL NUMBER	NAME OF THE STUDENT
01.	10001	A17CHE01	ABIRAMI . S
02.	10002	A17CHE02	AGALYA . E
03.	10003	A17CHE03	ALAMELU . M
04.	10004	A17CHE04	ANITHA . T
05.	10005	A17CHE05	ATCHAYA . R
06.	1000	A17CHE06	BANU PRIYA . N
07.	10007	A17CHE07	BHUVANESHWARI.N
08.	10008	A17CHE08	DEEPIKA . M
09.	10009	A17CHE09	DURGA SRI . M
10.	10010	A17CHE10	FARKANA FARVEEN .M
11.	10011	A17CHE11	GAYATHIRI . R
12.	10012	A17CHE12	HARINI .K
13.	10013	A17CHE13	HARISHITHA . L.R
14.	10014	A17CHE14	JOSEPHINE SHERMILA . S
15.	10015	A17CHE15	JOTHIKA . J
16.	10016	A17CHE16	KALAIVANI .K
17.	10017	A17CHE17	KANI PREETHA . A
18.	10018	A17CHE19	LAVANYA . P
19.	10019	A17CHE20	MANJUALA DEVI . S
20.	10020	A17CHE21	MUGUNTHA PRIYA . M
21.	10021	A17CHE22	MULLAI MALAR . A
22.	10022	A17CHE23	MUSTIRI JOHN . S
23.	10023	A17CHE24	NITHIA SRI . P.R
24.	10024	A17CHE25	NIVEDHA . T
25.	10025	A17CHE26	PAVITHRA . V
26.	10026	A17CHE27	POORNIMA . V
27.	10027	A17CHE28	PRADEEPA . S
28.	10028	A17CHE29	PRIYANGA . G
29.	10029	A17CHE30	RAGAVI . S
30.	10030	A17CHE31	RAMADEVI . R
31.	10031	A17CHE33	SANJU SHREE . G
32.	10032	A17CHE34	SARUMATHI . K
33.	10033	A17CHE36	SHAMEEM FATHIMA . A
34.	10034	A17CHE37	SHARMILA DEVI . B
35.	10035	A17CHE38	SHIVANI . A
36.	10036	A17CHE39	SINDHU KAVI . S
37.	10037	A17CHE40	SOUNDARYA . C
38.	10038	A17CHE41	SOWMIYA . S
39.	10039	A17CHE42	SUBASHINI . K
40.	10040	A17CHE43	SUDIASHREE . M
41.	10041	A17CHE44	SWATHY . M
42.	10042	A17CHE45	VALARMATHI . G
43.	10043	A17CHE46	VASUKI . R
44.	10044	A17CHE47	VIJAYA PRIYA . V
45.	10045	A17CHE48	VIMALA . S
46.	10046	A17CHE50	YUVASRI . V
47.	10047	A17CHE51	SIARUMATHI . E
48.	10048	A17CHE52	SANDHIYA . A



B.Sc(Chem)	BASIC ANALYTICAL TECHNIQUES (Effective from 2019 onwards)	VACH02
VALUE ADDED COURSE		

Objectives:

1. To enable the student to develop the habit of handling analytical data.
2. To learn the principles of basic analytical methods and their applications

Unit – I

(6 Hrs)

Safety and hygiene in the Chemistry Lab Storage and handling of chemicals, handling of acids, ethers, toxic and poisonous chemicals, antidotes, threshold vapour concentration and first aid procedure. Heating methods, stirring methods filtration techniques.

Unit – II

(6 Hrs)

Handling of instruments - Rotavapour – simple distillation-double distillation method – Soxhlet apparatus - UV and IR– COD – dissolved oxygen-detection of TDS and EC by conductivity meter

Unit – III

(6 Hrs)

Chromatography –TLC –preparation – separation of amino acids , organic compounds and plant extract - spotting by iodine chamber, ninhydrin, UV chamber – column chromatography

Unit – IV

(6 Hrs)

Solution preparation-problems – normality to molarity – molarity to normality – ppm – mass percentage - preparation of normal and molar solutions by dilution

Unit – V

(6 Hrs)

Preparation of Buffer solution and Buffer tablets – pH detection using litmus paper - pH detection of milk and water sample – detection of alkaloids, tannins, phenols in plant extract

Text Books:

1. V.K. Srivastava, K.K. Srivastava, Introduction to Chromatography: Theory and Practice, S. Chand and company, New Delhi, 1987.
2. D.A. Skoog, D.M. West and F.J. Holler, Analytical Chemistry: An Introduction, 5th edition, Saunders college publishing, Philadelphia, 1990.

Reference Books:

1. A.K. Srivastava, P.C. Jain, Chemical Analysis: An Instrumental Approach for B.Sc. Hons. and M.Sc. Classes, S. Chand and company Ltd., Ram Nagar, New Delhi.
2. R. Gopalan, Analytical Chemistry, S. Chand and Co., New Delhi