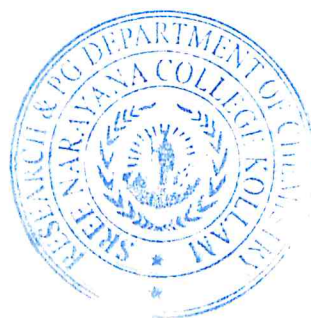


2017-2018

DEPARTMENT CERTIFICATE COURSE

CHEMISTRY OF WATER

QUALITY ANALYSIS



SREE NARAYANA COLLEGE KOLLAM

Department of chemistry ,

Certificate course 2017-2018

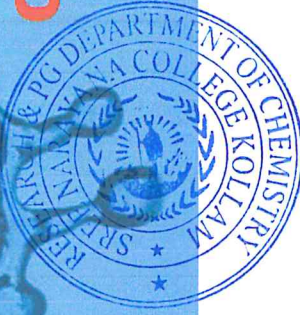
CHEMISTRY OF WATER QUALITY ANALYSIS



DURATION :6 months

Qualification: +2/ Equivalent

No AGE LIMIT



Contact:8129225858

**LIST OF APPLIED STUDENTS FOR THE CERTIFICATE COURSE
CHEMISTRY OF WATER QUALITY ANALYSIS 2017-2018**

SREE NARAYANA COLLEGE KOLLAM			
CERTIFICATE COURSE 2017-18			
Department:CHEMISTRY			
Name of Certificate course:		CHEMISTRY OF WATER QUALITY ANALYSIS	
Sl No.	Candidate Code	Name of Candidate	Department
1	CPWQA1	ASWANI S	CHEMISTRY <i>Aswani</i>
2	CPWQA2	AYANA S	CHEMISTRY <i>Ayana</i>
3	CPWQA3	GAYATHRI ANILKUMAR	CHEMISTRY <i>GA</i>
4	CPWQA4	GAYATHRI S B	CHEMISTRY <i>GSB</i>
5	CPWQA5	J PRIYA PRASAD	CHEMISTRY <i>JayPrasad</i>
6	CPWQA6	KAVYA S KUMAR	CHEMISTRY <i>KavyaKumar</i>
7	CPWQA7	KAVYA UDAY	CHEMISTRY <i>Kavya</i>
8	CPWQA8	MEGHA S MOHAN	CHEMISTRY <i>MM</i>
9	CPWQA9	NITHIN RAJU	CHEMISTRY <i>NR</i>
10	CPWQA10	SANDHYA U	CHEMISTRY <i>Sandhya</i>
11	CPWQA11	SANDRA A NAIR	CHEMISTRY <i>Sandra Nair</i>
12	CPWQA12	ADWAID.S	CHEMISTRY <i>Adwaid</i>
13	CPWQA13	AKHIL GOKUL B	CHEMISTRY <i>Akhil Gokul B</i>
14	CPWQA14	AKSHAY MURALI	CHEMISTRY <i>Akshay Murali</i>
15	CPWQA15	ANANTHAKRISHNAN S	CHEMISTRY <i>AKS</i>



Turhaththarajil
Principal
Sree Narayana College
Kollam



SYLLABUS

CERTIFICATE COURSE

(Offered By Department of Chemistry, S N College, Kollam)

Chemistry of water quality analysis

Total Hours: 30

MODULE I. Analytical instruments –Brief outline. Flame emission spectro photometer (FES), UV-Vis spectrophotometer, Atomic absorption spectrophotometer (AAS), Biological analyzers .Autoclave, incubator, water analyzer for pH, salinity and electrical conductance ; Units in which the quality parametrs are reporting during each analyzing.
(4 hrs)

MODULE II. : Soil and Water parameters – Potable drinking water and its specifications, Organic matter in soil/ pE and pH diagrams. Physical, chemical and bacterial measures of water quality Problems of groundwater contamination by As and F – Remedial measures for their treatment. The general occurrence of various constituents in groundwater, graphical representation of groundwater quality data – Collin’s diagram. Quality of groundwater for domestic, irrigational and agricultural uses. Hardness of water, alkalinity, effect of anions and cations – causes and effects – methods of estimation – removal of hardness Domestic water treatment – Sewage – Sewage analysis - Sewage treatment.
(5hrs)

MODULE IV : Inorganic materials leading to toxicity of water – Its Hazardous value, safety measures and precautions. Maximum permissible limits of toxic contaminants, Possible Reasons for water and soil contamination, Control of water pollution – ISI/BSI standards of drinking water
(3 hrs)

MODULE V : Organic materials causing water pollution, Chemically oxygen demanded COD, Biologically oxygen demanded BOD analyses. Adverse effect in biological system– pesticides , detergents, antibiotics, fertilizers. Detailed study about detergent contamination in ground water
(1hrs)



MODULE VI : Sea water intrusion, Quality of groundwater – methods of collection and analysis of water samples as related to Ground water investigations.. Determination of Soil texture- its significance (2 hrs)

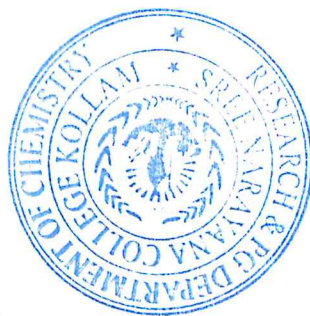
Practical:

1. Determination of Hardness; total hardness, calcium hardness and magnesium hardness.
2. pH ,salinity and total dissolved salt determination
3. Sulphate , chloride, nitrate content of ground water determination
4. Water analysis procedures to determine the various toxic metals using AAS; Cu, Fe, Cr, Cd
5. Determination of soli texture and classification of slit, clay, sand percentage.

(5x 3 =15 hrs)

References

1. Environmental Chemistry, A.K. De.
2. Environmental Chemistry, P.S. Sindhu
3. Essentials of environmental studies, S.P. Misra & S.N. Pandey
4. Davis, Stanley N. and Deweist, Roger J. M. Hydrogeology. John Wiley & Sons, 1966
5. Krauskopf K. B. Introduction to Geochemistry.
6. Davis, Stanley N. and Deweist, Roger J. M. Hydrogeology. John Wiley & Sons, 1966
7. Chemical and biological methods for water pollution studies – P.K. Goel and R.K. Thrivedi
8. Analytical Chemistry: (J.W) G. D. Christian
9. Instrumental Methods of Inorganic Analysis(ELBS) : A.I. Vogel



**LIST OF STUDENTS PASSED THE CERTIFICATE COURSE
CHEMISTRY OF WATER QUALITY ANALYSIS**

SREE NARAYANA COLLEGE KOLLAM				
CERTIFICATE COURSE 2017-18				
Department:CHEMISTRY				
Name of Certificate course:		CHEMISTRY OF WATER QUALITY ANALYSIS		
No.of students enrolled: 15				
No. of students SELECTED:15				
Sl No.	Candidate Code	Name of Candidate	Department	Status
1	CPWQA1	ASWANI S	CHEMISTRY	PASSED
2	CPWQA2	AYANA S	CHEMISTRY	PASSED
3	CPWQA3	GAYATHRI ANILKUMAR	CHEMISTRY	PASSED
4	CPWQA4	GAYATHRI S B	CHEMISTRY	PASSED
5	CPWQA5	J PRIYA PRASAD	CHEMISTRY	PASSED
6	CPWQA6	KAVYA S KUMAR	CHEMISTRY	PASSED
7	CPWQA7	KAVYA UDAY	CHEMISTRY	PASSED
8	CPWQA8	MEGHA S MOHAN	CHEMISTRY	PASSED
9	CPWQA9	NITHIN RAJU	CHEMISTRY	PASSED
10	CPWQA10	SANDHYA U	CHEMISTRY	PASSED
11	CPWQA11	SANDRA A NAIR	CHEMISTRY	PASSED
12	CPWQA12	ADWAID.S	CHEMISTRY	PASSED
13	CPWQA13	AKHIL GOKUL B	CHEMISTRY	PASSED
14	CPWQA14	AKSHAY MURALI	CHEMISTRY	PASSED
15	CPWQA15	ANANTHAKRISHNAN S	CHEMISTRY	PASSED



**LIST OF SELECTED STUDENTS FOR THE CERTIFICATE COURSE
CHEMISTRY OF WATER QUALITY ANALYSIS**

SREE NARAYANA COLLEGE KOLLAM				
CERTIFICATE COURSE 2017-18				
Department:CHEMISTRY				
Name of Certificate course:		CHEMISTRY OF WATER QUALITY ANALYSIS		
No.of students enrolled: 15				
No. of students SELECTED:15				
Sl No.	Candidate Code	Name of Candidate	Department	Status
1	CPWQA1	ASWANI S	CHEMISTRY	SELECTED
2	CPWQA2	AYANA S	CHEMISTRY	SELECTED
3	CPWQA3	GAYATHRI ANILKUMAR	CHEMISTRY	SELECTED
4	CPWQA4	GAYATHRI S B	CHEMISTRY	SELECTED
5	CPWQA5	J PRIYA PRASAD	CHEMISTRY	SELECTED
6	CPWQA6	KAVYA S KUMAR	CHEMISTRY	SELECTED
7	CPWQA7	KAVYA UDAY	CHEMISTRY	SELECTED
8	CPWQA8	MEGHA S MOHAN	CHEMISTRY	SELECTED
9	CPWQA9	NITHIN RAJU	CHEMISTRY	SELECTED
10	CPWQA10	SANDHYA U	CHEMISTRY	SELECTED
11	CPWQA11	SANDRA A NAIR	CHEMISTRY	SELECTED
12	CPWQA12	ADWAID.S	CHEMISTRY	SELECTED
13	CPWQA13	AKHIL GOKUL B	CHEMISTRY	SELECTED
14	CPWQA14	AKSHAY MURALI	CHEMISTRY	SELECTED
15	CPWQA15	ANANTHAKRISHNAN S	CHEMISTRY	SELECTED



**MARKLIST STUDENTS FOR THE CERTIFICATE COURSE
CHEMISTRY OF WATER QUALITY ANALYSIS**

SREE NARAYANA COLLEGE KOLLAM				
CERTIFICATE COURSE 2017-18				
Department: CHEMISTRY				
Name of Certificate course: CHEMISTRY OF WATER QUALITY ANALYSIS				
No.of students enrolled: 15				
No. of students passed: 15				
Sl No.	Candidate Code	Name of Candidate	MARK S OBTAINED	
			THEORY(50)	PRACTICAL(50)
1	CPWQA1	ASWANI S	46	46
2	CPWQA2	AYANA S	45	46
3	CPWQA3	GAYATHRI ANILKUMAR	43	48
4	CPWQA4	GAYATHRI S B	40	47
5	CPWQA5	J PRIYA PRASAD	45	49
6	CPWQA6	KAVYA S KUMAR	46	49
7	CPWQA7	KAVYA UDAY	42	50
8	CPWQA8	MEGHA S MOHAN	41	50
9	CPWQA9	NITHIN RAJU	40	49
10	CPWQA10	SANDHYA U	46	48
11	CPWQA11	SANDRA A NAIR	47	19
12	CPWQA12	ADWAID.S	48	46
13	CPWQA13	AKHIL GOKUL B	42	49
14	CPWQA14	AKSHAY MURALI	43	48
15	CPWQA15	ANANTHAKRISHNAN S	42	49

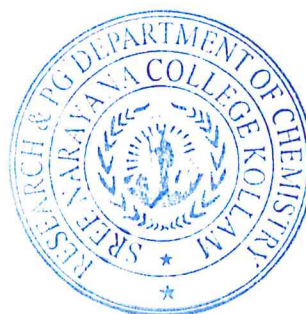


REPORT

THE CERTIFICATE COURSE ON CHEMISTRY OF WATER QUALITY ANALYSIS

The Certificate Course on Chemistry of water quality analysis by Department of Chemistry Sree Narayana college, Kollam, 5th June 2018 to 29th January 2018 at Department of Chemistry Sree Narayana college, Kollam. The total Number of Participants was 15 and was our graduate students. They got certificates and the aim was to increase their academic grade points. The Brochure, and other details furnished. The number of seats were limited and gave admission to all the applied students, All were passed the examination conducted. Department faculties handled the class in fixed schedule. Total teaching hour was 30 hours among these hours 16 practical hours included.

Abdul Karim
Principal
Sree Narayana College
Kollam





Sree Narayana College, Kollam

Affiliated to the University of Kerala

(Accredited by NAAC Grade 'A')

(ATAL 'A' Band Institution)



CERTIFICATE

This is to certify that Mr./Ms./Mrs. *Aswami S*

Reg. No. *CPMAI*

Department of *Chemistry*

completed certificate course in *Chemistry of Water Quality Analysis* has successfully

..... during *January* *2017* to *July* *2018*

COURSE CO-ORDINATOR



PRINCIPAL





Sree Narayana College, Kollam

Affiliated to the University of Kerala

(Accredited by NAAC Grade 'A')

(ATAL 'A' Band Institution)

CERTIFICATE

This is to certify that Mr./Ms./Mrs.....*Argama S*.....

Reg. No.*C.P.M.Q. 2*..... Department of.....*Chemistry*..... has successfully

completed certificate course in.....*chemistry of water quality analysis*.....

..... during *January*..... 2017 to *July*..... 2018

COURSE CO-ORDINATOR



PRINCIPAL



Sree Narayana College, Kollam

Affiliated to the University of Kerala

(Accredited by NAAC Grade 'A')

(ATAI 'A' Band Institution)

CERTIFICATE

This is to certify that Mr./Ms./Mrs. *Gayathri Amilkumar*

Reg. No. *CPN1803* Department of *Chemistry*

completed certificate course in... *Chemistry of Water Quality Analysis* has successfully

..... during *January* 2019 to *July* 2018 .

COURSE CO-ORDINATOR



PRINCIPAL



Sree Narayana College, Kollam

Affiliated to the University of Kerala

(Accredited by NAAC Grade 'A')

(ATAI 'A' Band Institution)

CERTIFICATE

This is to certify that Mr./Ms./Mrs. Gayathri S B

Reg. No. CP.NR.A4 Department of Chemistry has successfully

completed certificate course in Chemistry of Water Quality Analysis

..... during January 2017 to July

COURSE CO-ORDINATOR



PRINCIPAL

