



**SRI JAGADGURU MURUGHARAJENDRA
COLLEGE OF ARTS, SCIENCE & COMMERCE
CHANDRAVALLI, CHITRADURGA-577502**



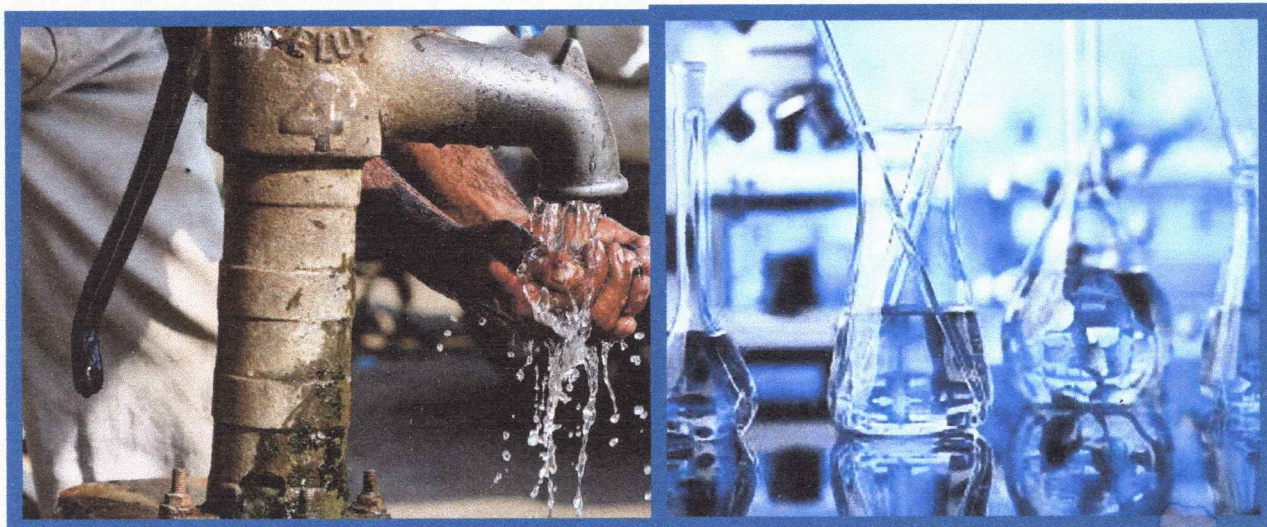
Affiliated to Davangere University, Davangere
Accredited with 'A' Grade Third cycle



**CERTIFICATE COURSE
ON
GROUND WATER
ANALYSIS**

From : 26-08-2022 To 25-09-2022

2021-22



Organized by

DEPARTMENT OF CHEMISTRY

ASSOCIATION WITH

IQAC



S J M COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA – 577501

Email : sjmasccta@rediffmail.com

Web : www.sjmcscchitradurga.edu.in

Contact No. :

ABOUT THE COLLEGE

Sri Jagadguru Murugharajendra College of Arts Science & Commerce (SJMC), Chitradurga was popularly known as SJM College of Arts, Science & Commerce, Chitradurga was established on 1st June 1969 managed by S.J.M. Vidyapeetha (R.) which was established in 1966. It is one of the premier colleges established to impart & provide in the field of higher education for the deserving candidates and prove to be a milestone in the part of progress.

The college is at present affiliated with Davangere University, Davangere. Formerly affiliated with Kuvempu University, Shivamogga and it is recognized by the University Grants Commission (UGC) under section 2(f) and 12(B) on 31st March 1971 under Act. 1956. It is re-accredited by National Assessment and Accreditation Council (NAAC) with "A" Grade (CGPA Score 3.05 on a 4 Point Scale in 3rd Cycle) on 28th March, 2017.

Sri Jagadguru Murugharajendra College of Arts, Science, and Commerce (S.J.M) is one of the reputed institutions which is well administered and offered good infrastructure, facilities and excellent academic activities in Chitradurga which is in the state of Karnataka and this college excels not only in academic activities but also in Extra curricular activities and in Sports too. The college strives to produce intellectually competent, morally upright and strong, compassionately committed, spiritually inspired and nationally dedicated men and women.

At present, the college is situated in a splendid place called Chandravalli,

which has a panoramic view of mountains, greeneries, caves and historically significant Chandravalli Tank on Holalkere Road in outskirts of the city. The college is built on a land of 10 acres with all necessary infrastructures. The college offers three years undergraduate courses in B.A, B.Sc, and B.Com.

The college aims at an integral and personalized education of the young by providing well planned undergraduate courses like Arts, Science and Commerce streams. The College has a fine team of qualified, experienced and dedicated faculty and staff members.

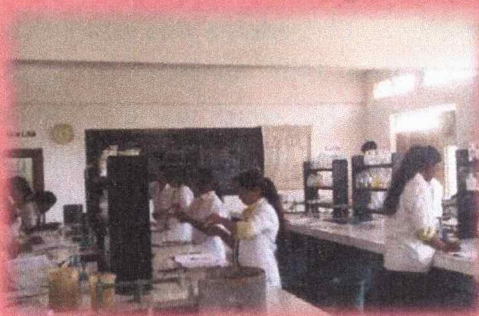
Value based and skill based initiatives are given priority in each department. Community Oriented Programs such as Reaching the Unreached, Service Beyond Self, creating opportunities for re-energizing students.

Admissions in the institutions are according to the norms of Davangere University and Regulations of Government of Karnataka. In the beginning of every academic year, one orientation program is conducted for degree students to familiarize them

with the nature of courses offered, semester system, tests, assignments, project works, attendance and all the facilities available in the college.

ABOUT THE DEPARTMENT

The department of Chemistry was established in the year 1969. The major objective of the department is to impart high quality education and to encourage to the students in persuing research. Our department has good infrastructure and facilities to being practical knowledge with Global competition environment.



DEPARTMENT FACULTY



Dr. K.C. Ramesh
Principal



Prof. H.M. Manjunatha Swamy
HOD



B. Nagaraja
Asst. Prof.



Dr. Harshavardhan A
Asst. Prof.

http : //www.sjmcaschitradurga.edu.in
email : sjmasccta@rediffmail.com

ಎಸ್.ಜಿ.ಎಂ.ವಿದ್ಯಾಪೀಠ (ರಿ.), ಚಿತ್ರದುರ್ಗ

☎ ಕಛೇರಿ : 08194-222506

ಶ್ರೀ ಜಗದ್ಗುರು ಮುರುಘರಾಜೇಂದ್ರ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ವಿದ್ಯಾಲಯ

ಚಂದ್ರವಳ್ಳಿ, ಚಿತ್ರದುರ್ಗ - 577 501. ಪೋಸ್ಟ್ ಬಾಕ್ಸ್ ನಂ. 88

ನ್ಯಾಕ್ ಪುನರ್ಮಾನ್ಯತೆ : 'ಎ' ಗ್ರೇಡ್ ಸಿ.ಐ.ಸಿ.ಎ. 3.05

SRI JAGADGURU MURUGHARAJENDRA COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA - 577 501. Post Box No. 88, Karnataka

NAAC Reaccredited with 'A' Grade CGPA 3.05

ಕ್ರಮಾಂಕ : ಎಸ್.ಜಿ.ಎಂ.ಸಿ. /

/ 20 -20

ದಿನಾಂಕ : 20/8/22.....

Notice

It is hereby informed to all the B.Sc students that, the college starts the offline Certificate course on Water Analysis from this academic year 2021-22.

The course starts from 26-08-22 B.Sc students can join this course. Those students who are interested to join this Certificate course can contact, the course coordinator Sri.Nagraja B,Assistant Professor,Department of Chemistry

Principal

Dr.K.C.Ramesh

Principal,

Sri Jagadguru Murugharajendra College
of Arts, Science & Commerce,
CHITRADURGA

From:
Co-Ordinator
Certificate course on Water Analysis
Department of chemistry
SJM College Chandravalli
Chitradurga



TO:
The principal
SJM College Chandravalli
Chitradurga

Sir,

Subject: permission for certificate course on Water analysis

With reference to the cited above, Our department has decided to start certificate course on "**Water Analysis**" for B.Sc degree students for the academic year 2021-22, So request you grant permission to start certificate course with self-financial assistance.

Thanking you sir

Place: Chitradurga
Date : 18-08-2022

Your's faithfully

B. A. S.

Co-Ordinator

KCB
18.8.22

ಶ್ರೀ ಜಗದ್ಗುರು ಮುರುಘರಾಜೇಂದ್ರ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ

ಚಂದ್ರವಳ್ಳಿ, ಚಿತ್ರದುರ್ಗ - 577 501. ಪೋಸ್ಟ್ ಬಾಕ್ಸ್ ನಂ. 88

ನ್ಯಾಕ್ ಪುನರ್ಮಾನ್ಯತೆ : 'ಎ' ಗ್ರೇಡ್ ಸಿ.ಐ.ಸಿ.ಎ. 3.05

SRI JAGADGURU MURUGHARAJENDRA COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA - 577 501. Post Box No. 88, Karnataka

NAAC Reaccredited with 'A' Grade CGPA 3.05

ಕ್ರಮಾಂಕ : ಎಸ್.ಜಿ.ಎಂ.ಸಿ. /

/ 2021 - 2022

ದಿನಾಂಕ : 11.11.2021

To

The Co-Ordinator
Certificate course on Water Analysis
Department of chemistry
SJM College Chandravalli
Chitradurga



**Subject: Regarding for permission to grant certificate course on
"Water Analysis"**

With reference to the above, the permission has been granted to
department to start certificate course on "Water Analysis" for B.Sc degree
students for the academic year 2021-22 with Non-financial assistance.

Principal

Dr. K. C. Ramesh.
Principal,

Sri Jagadguru Murugharajendra College
of Arts, Science & Commerce,
CHITRADURGA.

ಶ್ರೀ ಜಗದ್ಗುರು ಮುರುಘರಾಜೇಂದ್ರ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ

ಚಂದ್ರವಳ್ಳಿ, ಚಿತ್ರದುರ್ಗ - 577 501. ಪೋಸ್ಟ್ ಬಾಕ್ಸ್ ನಂ. 88

ನ್ಯಾಕ್ ಫೆನರ್ಮಾನ್ಯತೆ : 'ಎ' ಗ್ರೇಡ್ ಸಿ.ಜಿ.ಸಿ.ಎ. 3.05

SRI JAGADGURU MURUGHARAJENDRA COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA - 577 501. Post Box No. 88, Karnataka

NAAC Reaccredited with 'A' Grade CGPA 3.05



ಕ್ರಮಾಂಕ : ಎಸ್.ಜಿ.ಎಂ.ಸಿ. /

/ 20 -20

ದಿನಾಂಕ : 23/8/22

To,

S.i Nagaraja B
Assistant Professor,
SJM College of Arts, Science & Commerce,
Chandravalli, Chitradurga

Respected Sir,

Sub: Regarding providing service as a Member for B.O.S. for Certificate Course on Water Analysis.

Our Department has planned to conduct a Certificate Course on "Water Analysis".

In this academic year 2021-22 for B.Sc., students. Hence I am requesting you to provide honorable Service as a Member of Board of Studies for this Certificate Course

Thanking you sir,

Principal

Dr K C Ramesh
Principal,

Sri Jagadguru Murugharajendra College
of Arts, Science & Commerce,
CHITRADURGA.

ಶ್ರೀ ಜಗದ್ಗುರು ಮುರುಘರಾಜೇಂದ್ರ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ

ಚಂದ್ರವಳ್ಳಿ, ಚಿತ್ರದುರ್ಗ - 577 501. ಪೋಸ್ಟ್ ಬಾಕ್ಸ್ ನಂ. 88

ನ್ಯಾಕ್ ಫುನಕ್ಷನ್ಯತೆ : 'ಎ' ಗ್ರೇಡ್ ಸಿ.ಐ.ಸಿ.ಎ. 3.05

SRI JAGADGURU MURUGHARAJENDRA COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA - 577 501. Post Box No. 88, Karnataka

NAAC Reaccredited with 'A' Grade CGPA 3.05

ಕ್ರಮಾಂಕ : ಎಸ್.ಜೆ.ಎಂ.ಸಿ. /

/ 20 -20

ದಿನಾಂಕ : 22/11/2020

Office Order

Sri,Nagraja B, Assistant Professor of Chemistry has been appointed as a Coordinator for the Certificate course on Water Analysis for the academic year 2021-22.

Principal

Dr.K.C.Ramesh

Principal,

Sri Jagadguru Murugharajendra College
of Arts, Science & Commerce,
CHITRADURGA.

ಶ್ರೀ ಜಗದ್ಗುರು ಮುರುಘರಾಜೇಂದ್ರ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ

ಚಂದ್ರವಳ್ಳಿ, ಚಿತ್ರದುರ್ಗ - 577 501. ಪೋಸ್ಟ್ ಬಾಕ್ಸ್ ನಂ. 88

ನ್ಯಾಕ್ ಫೆನರಾನ್ಯತೆ : 'ಎ' ಗ್ರೇಡ್ ಸಿ.ಐ.ಸಿ.ಎ. 3.05

SRI JAGADGURU MURUGHARAJENDRA COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA - 577 501. Post Box No. 88, Karnataka

NAAC Reaccredited with 'A' Grade CGPA 3.05



ಕ್ರಮಾಂಕ : ಎಸ್.ಜಿ.ಎಂ.ಸಿ. /

/ 20 -20

ದಿನಾಂಕ : 23/8/22

To,

Sri Nagraj S
Associate Professor,
Govt Science College, Chitradurga

Respected Sir,

Sub: Regarding providing service as a Chairman for B.O.S. for Certificate Course on Water Analysis.

Our Department has planned to conduct a Certificate Course on "Water Analysis".

In this academic year 2021-22 for B.Sc., students. Hence I am requesting you to provide your honorable Service as a Chairman of Board of Studies for this Certificate Course

Thanking you sir,

Principal

Dr K C Ramesh

Principal,
Sri Jagadguru Murugharajendra College
of Arts, Science & Commerce,
CHITRADURGA.

ಶ್ರೀ ಜಗದ್ಗುರು ಮುರುಘರಾಜೇಂದ್ರ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ

ಚಂದ್ರವಳ್ಳಿ, ಚಿತ್ರದುರ್ಗ - 577 501. ಪೋಸ್ಟ್ ಬಾಕ್ಸ್ ನಂ. 88

ನ್ಯಾಕ್ ಪ್ರನಿರ್ದೇಶನ : 'ಎ' ಗ್ರೇಡ್ ಸಿ.ಜಿ.ಸಿ.ಎ. 3.05

SRI JAGADGURU MURUGHARAJENDRA COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA - 577 501. Post Box No. 88, Karnataka

NAAC Reaccredited with 'A' Grade CGPA 3.05



ಕ್ರಮಾಂಕ : ಎಸ್.ಜೆ.ಎಂ.ಸಿ. /

/ 20 -20

ದಿನಾಂಕ : 23/8/22

Circular

With the consent of the following, we have framed BOS Chairman and members for the Certificate course on Water Analysis to be conducted from the Department of Chemistry academic year 2021-22

Sl no	Name	Designation	Signature
01	Sri Nagraj S Assistant Professor, Govt First Grade College, Chitradurga	Chairman	
02	Sri Manjunathaswamy H.M Assistant Professor, SJM College of Arts, Science & Commerce, Chandravalli, Chitradurga	Director	
03	Sri Nagraja B Assistant Professor, SJM College of Arts, Science & Commerce, Chandravalli, Chitradurga	Member	
04	Smt Manasa J Assistant Professor, HPPC Govt First Grade College, Challakere	Member	

PRINCIPAL

Dr. K. C. Ramesh

Principal,

Sri Jagadguru Murugharajendra College
of Arts, Science & Commerce,
CHITRADURGA.

ಶ್ರೀ ಜಗದ್ಗುರು ಮುರುಘರಾಜೇಂದ್ರ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ

ಚಂದ್ರವಳ್ಳಿ, ಚಿತ್ರದುರ್ಗ - 577 501. ಪೋಸ್ಟ್ ಬಾಕ್ಸ್ ನಂ. 88

ನ್ಯಾಕ್ ಪ್ರನಿರ್ದೇಶನ: 'ಎ' ಗ್ರೇಡ್ ಸಿ.ಐ.ಸಿ.ಎ. 3.05

SRI JAGADGURU MURUGHARAJENDRA COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA - 577 501. Post Box No. 88, Karnataka

NAAC Reaccredited with 'A' Grade CGPA 3.05

ಕ್ರಮಾಂಕ : ಎಸ್.ಜಿ.ಎಂ.ಸಿ. /

/ 20 -20

ದಿನಾಂಕ : 22/11/22

To,

Sri Manjunathaswamy H.M
Assistant Professor,
SJM College of Arts, Science & Commerce,
Chandravalli, Chitradurga



Respected Sir,

Sub: Regarding providing service as a Director for Certificate Course on Water Analysis.

Our Department has planned to conduct a Certificate Course on "Water Analysis".

In this academic year 2021-22 for B.Sc., students. Hence I am requesting you to provide honorable Service as a Director of Board of Studies for this Certificate Course

Thanking you sir,

Principal

Dr K.C. Ramesh

Principal,

Sri Jagadguru Murugharajendra College
of Arts, Science & Commerce,
CHITRADURGA.

ಶ್ರೀ ಜಗದ್ಗುರು ಮುರುಘರಾಜೇಂದ್ರ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ

ಚಂದ್ರವಳ್ಳಿ, ಚಿತ್ರದುರ್ಗ - 577 501. ಪೋಸ್ಟ್ ಬಾಕ್ಸ್ ನಂ. 88

ನ್ಯಾಕ್ ಪ್ರನಿಶ್ಚಿತತೆ : 'ಎ' ಗ್ರೇಡ್ ಸಿ.ಐ.ಸಿ.ಎ. 3.05

SRI JAGADGURU MURUGHARAJENDRA COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA - 577 501. Post Box No. 88, Karnataka

NAAC Reaccredited with 'A' Grade CGPA 3.05



ಕ್ರಮಾಂಕ : ಎಸ್.ಜಿ.ಎಂ.ಸಿ. /

/ 20 -20

ದಿನಾಂಕ : 23/8/22

Notice

It is hereby requested to The Chairman and members of BOS to attend the online BOS meeting on for discussing about framing the syllabus for Certificate course on “Water Analysis”

Sl no	Name	Designation
01	Sri Nagraj S Assistant Professor, Govt First Grade College,Chitradurga	Chairman
02	Sri Manjunathaswamy H.M Assistant Professor, SJM College of Arts, Science & Commerce, Chandravalli, Chitradurga	Director
03	Sri Nagraja B Assistant Professor, SJM College of Arts, Science & Commerce, Chandravalli, Chitradurga	Member
04	Smt Manasa J Assistant Professor, HPPC Govt First Grade College,Challakere	Member

Principal

Dr.K.C. Ramesh

Principal,

Sri Jagadguru Murugharajendra College
of Arts, Science & Commerce,
CHITRADURGA.



BOS meeting proceedings of Certificate course on Water Analysis

D: 24/8/22

The BOS meeting of Certificate course on Water Analysis was held under the chairmanship of the BOS. After a thorough discussion the following resolutions have been passed regarding conducting the Certificate course.

Sl no	Proposal	Resolution
01	To form rules and regulations to conduct this course	It has been decided to entrust the responsibility of framing rules and regulations for this course to Principal and Director and coordinator of this course
02	To frame the syllabus to this course	Thorough discussions were held for finalizing the syllabus for this course.
03	Nature of examination	*It has been decided to conduct examination for hundred marks (100 Marks) *It includes 60 marks for Theory and 40 marks for Practical examination

Name & Signature of the BOE Chairman

S. NAGARAJA

Name & Signature of the BOE Members

①
(Manasa, J)
Assistant Professor
H.P.C GFGC, Channarayana
②
③ B. N.

ಶ್ರೀ ಜಗದ್ಗುರು ಮುರುಘರಾಜೇಂದ್ರ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ

ಚಂದ್ರವಳ್ಳಿ, ಚಿತ್ರದುರ್ಗ - 577 501. ಪೋಸ್ಟ್ ಬಾಕ್ಸ್ ನಂ. 88
ನ್ಯಾಕ್ ಪುನರ್ಮಾನ್ಯತೆ : 'ಎ' ಗ್ರೇಡ್ ಸಿ.ಜಿ.ಸಿ.ಎ. 3.05

SRI JAGADGURU MURUGHARAJENDRA COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA - 577 501. Post Box No. 88, Karnataka
NAAC Reaccredited with 'A' Grade CGPA 3.05

ಕ್ರಮಾಂಕ : ಎಸ್.ಜಿ.ಎಂ.ಸಿ. /

/ 2021 - 2022

ದಿನಾಂಕ : 24/8/22

To

Kumari.Nausheen

Lecturer

S J M College of Arts, Science and Commerce

Respected Madam,

Sub: Regarding providing service as Resource Person for Certificate course

On Water Analysis

Our Department has planned to conduct a short term course on "Water Analysis" in this academic year 2021-22 for B.Sc Students.

Hence I am requesting you to provide your honorable service as a Resource Person for this Certificate Course.

Thanking you Madam,

Principal

Dr.K.C.Ramesh

Principal,

Sri Jagadguru Murugharajendra College
of Arts, Science & Commerce,
CHITRADURGA

Date: 24/3/2022

Place: Chitradurga

From,
Nausheen,
Lecturer in Chemistry,
SJM Arts, Science & Commerce,
College Chitradurga.



TO,
The Co-ordinator,
Department of Chemistry,
SJM Arts, Science & Commerce,
College Chitradurga.

Respected Sir,


Sub - Accepting as a resource
person for certificate course
on ground water Analysis

With reference to the cited above I agreed to do
the service as a resource person for certificate
course on ground water Analysis from today
onwards.

Thanking you

Your's faithful
Nshu


Principal,
Jagadguru Murugharajendra College
of Arts, Science & Commerce,
CHITRADURGA

Accepted
B. N. 
(Alagarajulu)
Co-ordinator



DETAILED THEORY SYLLABUS

Ground Water Analysis

20 Hrs

1. **Introduction:-** Need for protective water supply essential, water supply environmental and its effects on health activity. **03 Hrs**

2. **Quantity of Water:** - Population fore Casting Arithmetic increase Method. Geometrical increase Method, rate of demand, factors affecting rate of demand **03 Hrs**

3. **Sources:-** Surface sub surface sources, suitability of surface water and sub surface water sources with regard to quality and Quality Aquifers well in confined and unconfined aquifers. Yield of well under steady flow condition. **07 Hrs**

4. **Treatment: -**

a) Theory of Sedimentation, settling tanks.

b) Theory of **Filtration** types of **filters** slow rapid sand filters. **07 Hrs**

c) Theory of **disinfection**, Methods of disinfection Chlorination, Chlorine demand use of Bleaching Powder, Chlorine

References:

1) Manual on Water supply and treatment (Third edition) CPHEEO ministry of Urban Development, NEW DELHI.

2) S.K. Garg, Water supply engineering Khanna Publishers ZB. North marked Nai eara Delhi

3) Environmental engineering 1-B C. Puniy & Ashok Jain

4) Water Technology by Mehatha

Name & Signature of the BOE Chairman

Name & Signature of the BOE Members

S. NAGARAJA

①

②

③



PRACTICAL SYLLABUS

WATER ANALYSIS

12 Hrs

1. Determination of chlorides
2. Determination of P^H
3. Determination of Total Hardness of Ground Water (Calcium, Magnesium)
4. Determination of COD

References:

1. Manual on water wastewater analysis - Neeri Publication
2. Standard Methods for Examination of Water and Waste Water (1995) - American Publications - Association. Water pollution control Federation Washington DC
3. Sawyer and McCarthy Chemistry Environmental Engineering

Name & Signature of the BOE Chairman

Ker

S. NAGARAJA

[Signature]

Name & Signature of the BOE Members

① [Signature]

② [Signature]

③ [Signature]

CHITRADURGA
DEPARTMENT OF CHEMISTRY

CERTIFICATE COURSE EXAMINATION 2021-22



SUBJECT-WATER ANALYSIS

Hours -2hrs

Max.marks-60.

SECTION-A

I. Answer any SIX of the following questions

5 X 6 = 30

- 1) With the help of neat diagram, explain infiltration gallery & infiltration well? 5
- 2) Enlist any four types of pumps usually used in water supply system & the main factors which are to be considered while selecting a suitable pump 5
- 3.a) Define per capita demand 1
b) List any four major factor affecting the rate of demand of water & Explain the concept of fluctuation in water demand 4
- 4.a) Define intake works in a water supply scheme 2
b) With the help of a neat figure explain any one type of intake structure 3
- 5) Distinguish between slow sand & rapid gravity filters 5
- 6.a) Distinguish between discrete particle settling flocculent settling. 2
b) Derive an expression for Settling velocity of a discrete particle in water 3
- 7) Enlist & explain the different layout of distribution networks with their merits & demerits 5
- 8) Discuss demineralisation process & electro dialysis in water treatment 5

SECTION-B

II. Answer any THREE of the following questions

10 X 3 = 30

- 9.a) Illustrate with a sketch , the different functional zones of a rectangular sedimentation tank 7
b) Compare alum & iron salts as coagulants. 3
- 10.a) What are the requirements of a good distribution system. 5
b) Explain the equivalent pipe method with a neat sketch 5
- 11.a) Discuss the methods of arriving at the quantity of water to be supplied to a community. 7
b) Define MPN. Explain the significance of determining the same. 3
- 12.a) Describe any two mixing device of coagulants. 6
b) Distinguish between Type I & Type II settling of suspended particles. 4
- 13.a) Explain logistic curve method of population forecasting. 5
b) Explain any five chemical characteristics of water. 5



SJM Vidyapeetha(R,)

**S.J.M COLLEGE OF ARTS ,SCIENCE AND
COMMERCE
CHANDRAVALLI,CHITRADURGA**

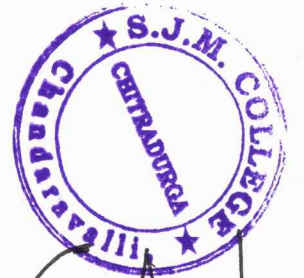
NAAC Reaccredited with 'A' Grade CGPA 3.05

**DEPARTMENT OF CHEMISTRY
ORGANISE**

CERTIFICATE COURSE
ON
GROUND WATER ANALYSIS 2021-22

ATTENDANCE REGISTER

Principal,
Sri Jagadguru Murugharajendra College
of Arts, Science & Commerce,
CHITRADURGA.



PRACTICAL

ATTENDANCE

n dance



Sr No	Student Name.	2/9	9/9	16/9	23/9
17	Asha Lakshmi	1	2	3	4
18	Jamuna.	1	2	3	4
19.	Rakshitha. Bai	1	2	3	4
20.	Kanya. S	1	2	3	4
21.	Ruchitha. T	1	2	3	4
22.	Shalini. R	1	2	3	4
23.	Pooja Kumari H.N	1	2	3	4
24	Adarsh C.P	1	2	3	4
25	Chandana. D	1	2	3	4
26.	Syed Saniya	1	2	3	4
27.	Sonika. E	1	2	3	4

B.A.
(Nagaraja B)
Co-ordinator.


Principal,
Sri Jagadguru Murugharajendra College
of Arts, Science & Commerce,
CHITRAOURGA.

unit 1.



	9/9	10/9	11/9	12/9	13/9	14/9	15/9	16/9	17/9	18/9	19/9	20/9	21/9
9	10	11	12	13	14	A	15	16	17	18	19		
8	A	9	10	11	12	13	14	15	16	17	18		
10	11	12	13	14	15	16	17	18	19	20	21		
A	8	A	A	9	10	11	12	13	A	14	15		
A	A	10	11	12	13	14	15	16	17	18	19		
10	11	12	13	A	14	15	16	17	18	19	20		
10	11	12	13	14	15	16	17	18	19	20	21		
10	11	12	13	A	14	15	16	17	18	19	20		
9	10	11	12	A	A	A	13	14	15	16	17		
8	9	10	11	12	13	14	15	16	A	17	A		
A	8	9	10	11	12	A	A	13	14	15	16		
10	11	12	13	14	15	16	17	18	19	20	21		
10	11	12	13	14	15	16	17	18	19	20	21		
A	9	10	11	12	13	A	14	15	16	17	18		
10	11	12	13	14	15	16	17	18	19	20	21		
10	11	12	13	14	15	16	17	18	19	20	21		

Sl No	Student Name	26/9	27/9	29/9	30/9	2/9	3/9	5/9
17.	Asha lakshmi	1	2	3	4	A	A	5
18	Jamuna	1	2	3	4	5	6	7
19.	Rakshitha Bai	1	2	3	4	5	6	7
20.	Kanya. S	1	2	3	4	5	6	7
21.	Ruchitha. T	1	2	3	4	5	6	7
22	Shalini. R	1	2	3	4	5	6	7
23.	pooja kumari H.N	1	2	3	4	5	6	7
24	Adarsh C. P	1	2	3	A	A	A	4
25	Chandana. D	1	2	3	4	5	6	7
26	Syed Saniya.	1	2	3	4	5	A	A
27	Sonika. E	1	2	3	4	5	6	7



17	9	8	9	10	11	12	13	14	15	A	16	17	18
3	2	9	10	11	12	13	14	15	16	A	A	17	18
	8	9	10	11	12	13	14	15	16	17	18	19	20
	A	9	10	11	12	13	14	15	16	17	18	19	20
	9	10	11	12	13	14	15	16	17	18	19	20	21
	9	10	11	12	13	14	15	16	17	18	19	20	21
	9	10	11	12	13	14	15	16	17	18	19	20	21
	9	10	11	12	13	14	15	16	17	18	19	20	21
	7	10	11	12	13	14	15	16	17	18	19	20	21
	A	6	A	A	7	8	A	A	9	10	11	12	13
	9	10	11	12	13	14	15	16	17	18	19	20	21
	2	8	9	10	11	12	13	14	15	16	17	18	19
	9	10	11	12	13	14	15	16	17	18	19	20	21



B.A.
 (Nagaraja S)
 Co-ordinator


 Principal,
 Sri Jagadguru Murugharajendra College
 of Arts, Science & Commerce,
 CHITRADURGA.

THEORY



ATTENDANCE

Theory Class HW

Sl No	Student Name	24/8	25/8	26/8	30/8	2/9	3/9	5/9	6/9
1.	Chandana. B.S	1	2	3	4	A	5	6	7
2.	Ashitha	1	2	3	4	5	A	A	6
3.	Sariya Tehreen	1	2	3	4	5	6	7	8
4.	Manoj. C	1	2	3	A	A	4	5	6
5.	Ravi Kiran M.D	1	2	3	4	5	6	7	8
6.	Prिया M.T	1	2	3	4	5	6	7	8
7.	Rakshitha .T	1	2	3	4	5	6	7	8
8.	Prिया .C.V	1	2	3	4	5	6	7	8
9.	Nagratna C.R	1	2	3	4	A	5	6	7
10.	Srushti .S	1	2	3	4	5	A	A	6
11.	Ulfath Banu. K	1	2	3	4	A	A	5	6
12.	Meghana. V	1	2	3	4	5	6	7	8
13.	Tejasvini. V	1	2	3	4	5	6	7	8
14.	Shwetha Kumari	1	2	3	4	5	6	7	8
15.	Bhoomika C.N	1	2	3	4	5	6	7	8
16.	Tejasvini. S	1	2	3	4	5	6	7	8

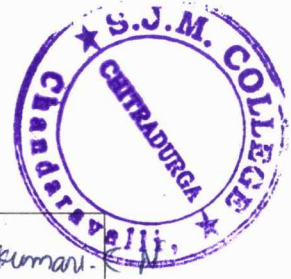
S.J.M. College of Arts, Science and Commerce,
Chandravalli, Chitradurga
Department of Chemistry
Certificate Course on Water Analysis 2021-22
Theory Exam Attendance Sheet



Date:

Time:

SL no	Name of the Students	Reg No	Combination	Signature
1	Chandana.B.S	CHMWA003	I st B.Sc (C Z)	Chandana.B.S
2	Ashitha	CHMWA007	I st B.Sc (M C)	Ashitha. R.
3	Sariya Tehreen	CHMWA010	I st B.Sc (B Z)	Sariya Tehreen
4	Manoj.C	CHMWA011	I st B.Sc (B Z)	AB
5	Ravikiran.M.D	CHMWA023	I st B.Sc (C Z)	Ravikiran.M.D.
6	Priya.M.T	CHMWA026	I st B.Sc (C- OE)	Priya.M.T
7	Rakshitha.T	CHMWA029	I st B.Sc (C- OE)	Rakshitha.T
8	Priya C V	CHMWA033	I st B.Sc (C- OE)	Priya.C.V
9	Nagarathna C R	CHMWA034	I st B.Sc (C- OE)	Nagarathna
10	Srusti.S	CHMWA035	I st B.Sc (C- OE)	Srusti.S
11	Ulfath Banu.K	CHMWA036	I st B.Sc (M C)	Ulfath Banu.K
12	Meghana.V	CHMWA038	I st B.Sc (C M)	Meghana.V
13	Tejasvini.V	CHMWA040	I st B.Sc (C Z)	Teja.V




14	Shweetha Kumari	CHMWA043	1 st B.Sc (CZ)	Shweetha Kumari.
15	Bhoomika C N	CHMWA047	1 st B.Sc (CZ) P.M.	Bhoomika C N
16	Tejasvini.S	CHMWA049	1 st B.Sc (CZ) P.M.	Tejasvini.S
17	Asha Lakshmi	CHMWA051	1 st B.Sc (C P)	Asha Lakshmi.S
18	Jamuna	CHMWA052	1 st B.Sc (C Z)	Jamuna G
19	Rakshitha Bai	CHMWA055	1 st B.Sc (C M)	Rakshitha.S
20	Kavya S	CHMWA056	1 st B.Sc (C Z)	Kavya S
21	Ruchita T	CHMWA064	1 st B.Sc (C Z)	Ruchita T Rakshitha.S
22	Shalini.R	CHMWA068	1 st B.Sc (C Z)	Shalini. R
23	Pooja Kumari.H.N	CHMWA069	1 st B.Sc (C Z)	Pooja Kumari.H.N.
24	Adarsha C P	CHMWA070	1 st B.Sc (C- OE)	Adarsha C P
25	Chandana.D	CHMWA072	1 st B.Sc (C- OE)	Chandana.D
26	Syed Saniya	CHMWA073	1 st B.Sc (C Z)	Syeda Saniya. S

27. Sonika.E.

CHMWA032 1st BSC PM.

Sonika.E

No of Students Present	26
No of students Absent	01


(NAUSHERA)

Name & Signature of Invigilator

Model application form.



SJM Vidyapeetha (R) Chitradurga
S.J.M College Of Arts, Science and Commerce,
Chandravalli, Chitradurga 577501.

NAAC Reaccredited with "A" Grade, CGPA3.05

Department of Chemistry



Admission Application Form of Short- term Course on **Water Analysis**

1	NAME OF THE STUDENT		PHOTO	
2	FATHER'S NAME			
3	MOTHER'S NAME			
4	DATE OF BIRTH			
5	GENDER M/F			
6	CONTACT NUMBER			
7	EMAIL ID			
8	PRESENT COURSE STUDYING	B.A <input type="checkbox"/>	B.Sc, <input type="checkbox"/>	B. Com <input type="checkbox"/>
9	POSTAL ADDRESS			

DATE :-


Principal,
Sri Jagadguru Murugharajendra College
of Arts, Science & Commerce,
CHITRADURGA.

Signature



S.J.M. College of Arts, Science and Commerce,
Chandravalli, Chitradurga
Department of Chemistry

Students List for Certificate Course on Ground Water Analysis 2021-22

SL no	Name of the Students	Combination	Signature
1	Chandana.B.S	I st B.Sc (C Z)	Chandana.B.S
2	Ashitha	I st B.Sc (M C)	Ashitha.R.
3	Sariya Tehreen	I st B.Sc (B Z)	Sariya Tehreem
4	Manoj.C	I st B.Sc (B Z)	Manoj.C
5	Ravikiran.M.D	I st B.Sc (C Z)	Ravikiran.M.D
6	Priya.M.T	I st B.Sc (C- OE) PM	Priya.M.T.
7	Rakshitha.T	I st B.Sc (C- OE)	Rakshitha.T
8	Priya C V	I st B.Sc (C- OE)	Priya.C.V
9	Nagaratna C R	I st B.Sc (C- OE)	
10	Srusti.S SRUSHTI.S	I st B.Sc (C- OE) M (M- OE)	Srusti.S
11	Ulfath Banu.K	I st B.Sc (M C)	Ulfath Banu.K
12	Meghana.V	I st B.Sc (C M)	Meghana.V
13	Tejasvini.V	I st B.Sc (C Z)	Tejasvini.V

Principal,
Sri Jagadguru Murugharajendra College
of Arts, Science & Commerce,
CHITRADURGA.



14	Shweetha Kumari	I st B.Sc (EZ) PM	Shweetha. C.N
15	Bhoomika C N	I st B.Sc (CM)	Bhoomika.C.N
16	Tejasvini.S	I st B.Sc (EZ) PM	Tejasvini S
17	Asha Lakshmi	I st B.Sc (CM)	Asha Lakshmi
18	Jamuna	I st B.Sc (EZ) PM	JAMUNA.G
19	Rakshitha Bai	I st B.Sc (CM)	Rakshitha.S
20	Kavya S	I st B.Sc (CZ)	Kavya.S
21	Ruchita T	I st B.Sc (CZ)	Ruchita.
22	Shalini.R	I st B.Sc (CZ)	Shalini.R
23	Pooja Kumari.H.N	I st B.Sc (PM) PM	Pooja Kumari
24	Adarsha C P	I st B.Sc (B-OE) (CZ) (CB-OE)	Adarsha C.P
25	Chandana.D	I st B.Sc (E-OE) PM	Chandana.D
26	Syed Saniya	I st B.Sc (EZ) CM	Syeda Saniya.S

27 Sonita

B.Sc (PM)

Sonita.S

B.A.
Channarayana S)
Co-ordinator.


Principal,
Sri Jagadguru Murugarajendra College
of Arts, Science & Commerce,
CHITRADURGA.

**COURSE STRUCTURE AND DETAILED SYLLABUS OF CERTIFICATE COURSES ON
WATER ANALYSIS**



Course: Certificate Course in Ground water analysis

Regulations

One Month Course in Ground Water analysis Eligibility for admission: A candidate who has passed pre university or 10+2 Science Education shall be eligible for admission and the candidate should be pursuing his/her B.Sc. degree in the college.

Duration of the Course: - The Course of study for one month

Hours per week: There shall be 5 hours of theory and 3 hours of practical per week

Attendance progress and conduct: As per regulations of Davangere University

Scheme of Examination: - There shall be one paper each in theory and practical. Theory paper carries Maximum of 60 Marks and Practical paper carries a maximum of 40 Marks.

Passing: A candidate is expected to score minimum marks of 50 % in the total marks to be declared pass in the Certificate Course. The Minimum requirement to obtain First Class is 60%.

Certificate Course-1 Water analysis

Paper	Title/Theory/Practical	Total Marks	Hrs	Week
Paper-1	Water analysis	60	20	5
Practical	Water analysis	40	12	3

Key

Model.

S.J.M. College of Arts, Science and Commerce,
Chandravalli, Chitradurga
Department of Chemistry
Certificate Course on Water Analysis 2021-22



1. Register No.

--	--	--	--	--	--	--	--	--	--

2. Candidate Name.....

3: Degree.....

4. Exam (Year/Semester).....

5. Subject.....

6. Exam Date

Candidate

Signature :

Invigilator

Signature :

Name

Model



S.J.M. College of Arts, Science and Commerce,
Chandravalli, Chitradurga
Department of Chemistry
Certificate Course on Water Analysis 2021-22

Section A

Section B

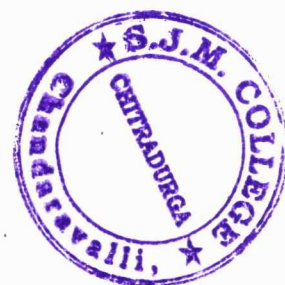
Qn.	Marks		Total Marks	Qn.	Marks		Total Marks
	A	B			A	B	
1				9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			
8				16			
		Sub Total				Sub Total	

Grand Total

Grand Total in Words.....

Name & Signature of the Examiner

Date.....




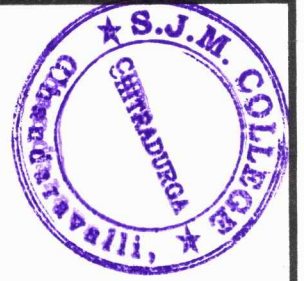
S.J.M. College of Arts, Science and Commerce,
Chandravalli, Chitradurga
Department of Chemistry
Certificate Course on Ground Water Analysis 2021-22
Theory Work sheet

SLno	Reg No	Theory (Max:60)
1	CHMWA003	58
2	CHMWA007	48
3	CHMWA010	55
4	CHMWA011	AB
5	CHMWA023	35
6	CHMWA026	40
7	CHMWA029	40
8	CHMWA032	52
9	CHMWA033	55
10	CHMWA034	35
11	CHMWA035	35
12	CHMWA036	55
13	CHMWA038	50
14	CHMWA040	48



SLno	Reg No	Theory(Max:60)
15	CHMWA043	55
16	CHMWA047	35
17	CHMWA049	48
18	CHMWA051	35
19	CHMWA052	45
20	CHMWA055	50
21	CHMWA056	47
22	CHMWA064	50
23	CHMWA068	40
24	CHMWA069	47
25	CHMWA070	59
26	CHMWA072	46
27	CHMWA073	45

Examiner
Name : NAUSHEEN
College/Designation : lecturer in SJM ARTS, SCIENCE & COMMERCE COLLEGE CHITRADURGA
Signature : 
Date & Time : 25/10/2022



S.J.M. College of Arts, Science and Commerce,
Chandravalli, Chitradurga

Department of Chemistry

Certificate Course on Water Analysis 2021-22

Practical Exam Attendance Sheet

Date: 18/10/2022

Batch-1

Time: 2.30 to 4.30 pm

SLno	Name of the Students	Reg No	Combination	Signature
1	Chandana.B.S	CHMWA003	I st B.Sc (C Z)	Chandana.B.S
2	Ashitha	CHMWA007	I st B.Sc (M C)	Ashitha.R.
3	Sariya Tehreen	CHMWA010	I st B.Sc (B Z)	Sariya Tehreen
4	Manoj.C	CHMWA011	I st B.Sc (B Z)	Manoj.C
5	Ravikiran.M.D	CHMWA023	I st B.Sc (C Z)	Ravikiran.M.D.
6	Priya.M.T	CHMWA026	I st B.Sc (C- OE)	Priya.M.T
7	Rakshitha.T	CHMWA029	I st B.Sc (C- OE)	Rakshitha.T.
8	Priya C V	CHMWA033	I st B.Sc (C- OE)	Priya.C.V
9	Nagaratna C R	CHMWA034	I st B.Sc (C- OE)	- AB -
10	Srusti.S Srushti.s.	CHMWA035	I st B.Sc (C- OE)	Srushti.S
11	Ulfath Banu.K	CHMWA036	I st B.Sc (M C)	Ulfath Banu.K
12	Meghana.V	CHMWA038	I st B.Sc (C M)	Megha
13	Tejasvini.V	CHMWA040	I st B.Sc (C Z)	Tejasvini.V

Signature of the Examiner 1

Signature of the Examiner 2

Date: 18/10/2022

Date: 18/10/2022

Name of the Examiner 1 in Block Letters

Name of the Examiner 2 in Block Letters

**S.J.M. College of Arts, Science and Commerce,
Chandravalli, Chitradurga
Department of Chemistry
Certificate Course on Water Analysis 2021-22
Practical Exam Attendance Sheet**



Date: 18/10/2022 Batch-2

Time: 2.30 pm to 4.30 pm

01	Shweetha Kumari	CHMWA043	I st B.Sc (C Z)	Shweetha Kumari C.N.
02	Bhoomika C N	CHMWA047	I st B.Sc (C Z)	Bhoomika C.N
03	Tejasvini.S / Tejaswini - Pri S	CHMWA049	I st B.Sc (C Z)	Tejasvini.S
04	Asha Lakshmi	CHMWA051	I st B.Sc (P C)	Ashalakshmi
05	Jamuna	CHMWA052	I st B.Sc (C Z)	Jamuna.G
06	Rakshitha Bai	CHMWA055	I st B.Sc (C M)	Rakshitha.S
07	Kavya S	CHMWA056	I st B.Sc (C Z)	Kavya S
08	Ruchita T	CHMWA064	I st B.Sc (C Z)	Ruchita.
09	Shalini.R	CHMWA068	I st B.Sc (C Z)	Shalini, R
10	PoojaKumari.H.N	CHMWA069	I st B.Sc (C Z)	Poojakumariv
11	Adarsha C P	CHMWA070	I st B.Sc (C- OE)	Adarsha C.P
12	Chandana.D	CHMWA072	I st B.Sc (C- OE)	chandana.D
13	Syed Saniya	CHMWA073	I st B.Sc (C Z)	
14	Sonika.E	CHMWA063	I B.Sc (Pm)	Sonika.E

Signature of the Examiner 1

Date: 18/10/2022

Name of the Examiner 1 in Block Letters

Signature of the Examiner 2

Date: 18/10/2022

Name of the Examiner 2 in Block Letters

Model.

S.J.M. College of Arts, Science and Commerce,
Chandravalli, Chitradurga

Practical Examination for Certificate Course on Water Analysis
Organized by Department of chemistry - 2021-22



Roll no

Examination.....Date.....Month.....Year.....

Maximum Marks for

- i) Practical
- ii) Class Records.....
- iii) Viva.....
- iv) Any other.....

Marks Awarded

Question / Part 1:

Question / Part 2:

Class Records:

Viva:

Any other.....

Total

.....

Marks Awarded in Words.....

Date.....

Signature of the Examiner 1

Name of the Examiner 1 in Block Letters

Date.....

Signature of the Examiner 2

Name of the Examiner 2 in Block Letters

S.J.M. College of Arts, Science and Commerce,
Chandravalli, Chitradurga
Department of Chemistry
Certificate Course on Water Analysis 2021-22
Practical/Record Work sheet



Date:

Batch-1

Time: 12-2pm

SLno	Reg No	Practical (Max:40)
1	CHMWA003	38
2	CHMWA007	36
3	CHMWA010	39
4	CHMWA011	35
5	CHMWA023	38
6	CHMWA026	35
7	CHMWA029	36
8	CHMWA033	35
9	CHMWA034	37
10	CHMWA035	37
11	CHMWA036	37
12	CHMWA038	39
13	CHMWA040	39

Examiner 01

Examiner 02

Name

: RASU. K. M.

NAVSHREEN

College/Designation

: Lecturer / GSC. CTA.

Lecturer

Signature

:

Date & Time

: 18/10/2022

18/10/2022

12-2pm

12-2pm

ಶ್ರೀ ಜಗದ್ಗುರು ಮುರುಘರಾಜೇಂದ್ರ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ

ಚಂದ್ರವಳ್ಳಿ, ಚಿತ್ರದುರ್ಗ - 577 501. ಪೋಸ್ಟ್ ಬಾಕ್ಸ್ ನಂ. 88

ನ್ಯಾಕ್ ಪ್ರನಾಂಶ್ಯತೆ : 'ಎ' ಗ್ರೇಡ್ ಸಿ.ಐ.ಸಿ.ಎ. 3.05

SRI JAGADGURU MURUGHARAJENDRA COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA - 577 501. Post Box No. 88, Karnataka

NAAC Reaccredited with 'A' Grade CGPA 3.05



ಕ್ರಮಾಂಕ : ಎಸ್.ಜಿ.ಎಂ.ಸಿ. /

/ 20 -20

ದಿನಾಂಕ : 23/8/22

To,

Smt Manasa J

Assistant Professor,

HPPC Govt First Grade College, Challakere

Respected Madam,

Sub: Regarding providing service as a Member for B.O.S. for Certificate Course on Water Analysis.

Our Department has planned to conduct a **Certificate** Course on "Water Analysis".

In this academic year 2021-22 for B.Sc., students. Hence I am requesting you to provide you're honorable Service as a Member of Board of Studies for this **Certificate** Course

Thanking you Madam,

A. Manasa

Principal

K C Ramesh

Dr K C Ramesh
Principal,

Sri Jagadguru Murugarajendra College
of Arts, Science & Commerce,
CHITRADURGA.

Career Objective:

Seeking a career of **chemistry lecturer** position to share my knowledge and experience with students and gain more experience into the education and teaching field.

Summary of Skills:

An innovative and knowledgeable professional having 2+ years of experience as a lecturer.

- Strong theoretical and practical knowledge of chemistry
- In-depth knowledge of chemistry and ability to teach students
- Ability to develop and execute lesson plans
- Skilled in a variety of teaching methods and techniques



Work Experience:

Chemistry guest lecturer

Government Science college, Chitradurga
August 2016 to date

Preparing and giving lectures to students and conducting discussion on the topic taught

- Scheduling practicals, and inspecting equipments and components in labs

Chemistry lecturer

SJM Pu college Chandravalli Chitradurga
June 2015 to Date

Chemistry lecturer

SJM Pu college Chandravalli Chitradurga
June 2015 to Date

- Assisted the Department by handling Theory and practical classes for PUC students

Personal Information

01	Name	<u>NAUSHEEN</u>
02	Address	D/O Inayath Hussain, Asif Manzil 3 rd cross, Neharu Nagara, HLK road Chitradurga District, Karnataka State, India.
03	Contact number	+918792229694
04	e-mail	<u>nausheen93@gmail.com</u>
05	Date of Birth	14-06-1993
06	Gender	Female
07	Marital status	Unmarried
08	Nationality	Indian
09	Subject	Chemistry

Educational Qualification

M.Sc in General Chemistry
Govt Science College
Davanagere University
Chitradurga



Year of Passing : June 2015

Eligible in State lecturership eligible test (SLET) Conducted on Dec 2015

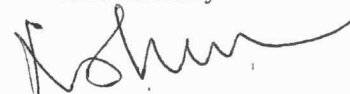
Seminars Attended

1. Oneday Seminar on "**Synthetic Chemistry**" held at Tumkur University, on 19th March 2015.
2. Two days seminar on **Nano Science** held at Govt Science college Chitradurga on 20th 21st April 2017

Solely declare that the information given above is true to my knowledge and belief.

Date:
Place:

Yours Sincerely


(Nausheen)

S.J.M. College of Arts, Science and Commerce,
Chandravalli, Chitradurga
Department of Chemistry
Certificate Course on Water Analysis 2021-22
Practical/Record Work sheet





Date:

Batch-2

Time: 2:30 - 4:30 pm

SLno	Reg No	Practical (Max:40)
01	CHMWA043	36
02	CHMWA047	37
03	CHMWA049	37
04	CHMWA051	36
05	CHMWA052	39
06	CHMWA055	39
07	CHMWA056	36
08	CHMWA064	35
09	CHMWA068	38
10	CHMWA069	36
11	CHMWA070	38
12	CHMWA072	36
13	CHMWA073	39

Examiner 01
Name : RASU . K . M .
College/Designation : Lecturer / GSC . CTA .
Signature : 
Date & Time : 18/10/2022
2:30 - 4:30 pm

Examiner 02
Name : NAUSHIEN
College/Designation : Lecturer
Signature : 
Date & Time : 18/10/2022
2:30 - 4:30 pm

Report

S.J.M. College of Arts, Science and Commerce
Chandravalli, Chitradurga



Department of Chemistry

REPORT ON GROUND WATER ANALYSIS

Certificate course on ground water analysis commence from 26-08-2022 to 25-09-2022. After the completion of the course practical exam was conducted on 18-10-2022 & theory exam conducted on 23-10-2022.

Certificate course on ground water analysis is very important to the students of undergraduate because it exposed them to the real work environment for surveying. During this course student will understand the essential of water sources and quality of water at different geographical locations and factors affecting the rate of demand. Discuss about hygienic importance of water and treatment of the ground water analysis.

This certificate course on water analysis improves the student about the knowledge of ground water analysis & know about physical, chemical and biological characteristic of ground water.

B. N.
(Nayavaja B)
Co-ordinator



697J+77F, Davalagiri Badavane 2nd Phase, Davalagiri Badavane, Chitradurga, Karnataka 577501, India

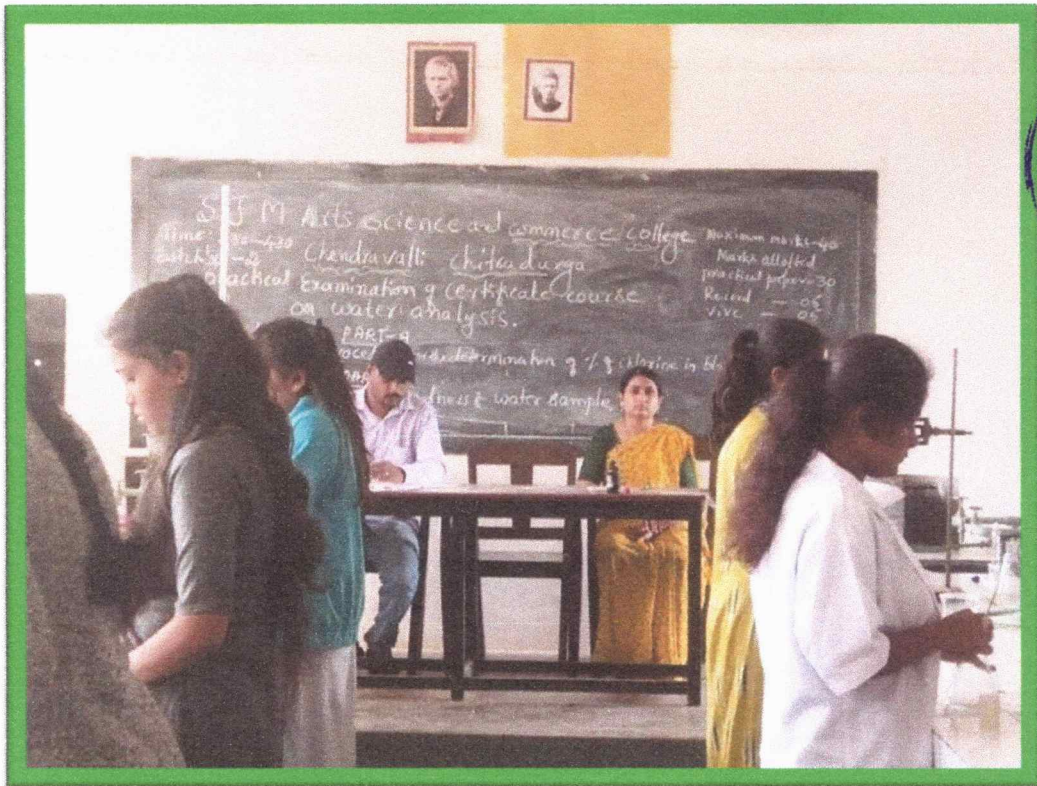
Latitude
14.2133814°

Longitude
76.3809113°

Local 10:07:56 AM
GMT 04:37:56 AM

Altitude 761 m
Thursday, 31.08.2023

Practical Class – Ground Water Analysis



Practical Examination – Ground Water Analysis



Course outcome

- * After Completion of the Skills necessary for water resource management.
- * To apply knowledge of Chemistry and Geology.
- * To have knowledge of contemporary issues.
- * To identify, formulate and solve environmental problems.
- * To recognize the need for, and an ability to engage in life-long learning.



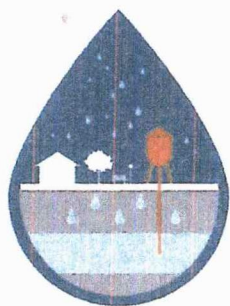
S.J.M. COLLEGE OF ARTS, SCIENCE AND COMMERCE

Chandravalli, Chitradurga - 577501

www.sjmcaschitradurga.com e-mail- sjmasecta@rediffmail.com

NAAC Reaccredited with 'A' Grade CGPA - 3.05

Department of Chemistry



CERTIFICATE COURSE ON GROUND WATER ANALYSIS - 2021-22

This is Certify that Kumari/Kumara. *Meghana.v*
Ist. B.Se. [C.M.]has participated in "Certificate Course on Ground Water analysis"
2021-22 at S.J.M. College of Arts, Science & Commerce, Chandravalli, Chitradurga.


Director


Co-ordinator


Principal
S.J.M. College, Chitradurga
Principal,
Sri Jagadguru Murugharajendra College
of Arts, Science & Commerce,
CHITRADURGA.