

Meeting - 2

27.01.2022

The dept. meeting was held in the Principal's chamber on 26.01.2022. After discussing with the principal-in-charge, faculty of sciences and the students of I B.Sc (MPC, MPC, BZC), it is resolved to initiate a certificate course in "water and soil analysis" to enrich the existing curriculum for the benefit of students in this academic year 2021-22. A proposal seeking permission to start the course should be submitted to the principal in 5 days.

Course duration: 30-40 days

Student Intake: 20-30 (F/F/Chitic)

Formative Assessment: 15 M (MCQ)

Summative Assessment: 25 M (MCQ)

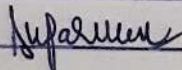
K. A. S. J.
27/1/22
Course Coordinator

Principal
S. Ch. V. P. M. R. Govt. Degree College
GANAPAVARAM-534198. (M.G. Dist)

1. Dr. Ch. Chaitanya


27/1/22

2. Sr. Parveen

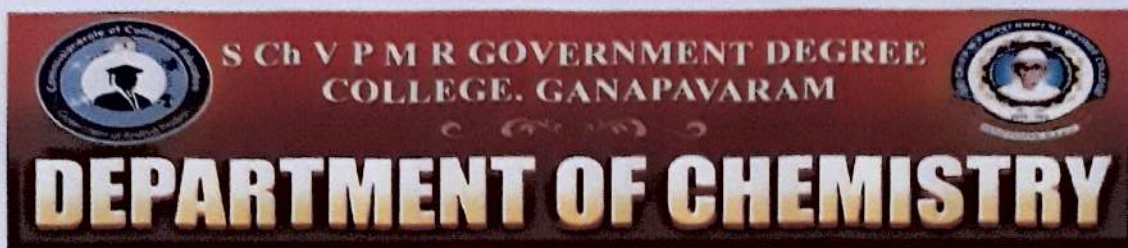


Student representatives:

1. T. Rupa, IBZC — T. Rupa

2. T. Sireesha, IBZC — T. Sireesha

3. T. Mounika, IBZC — T. Mounika



Date. 27.01.2022

From

N.V.N.B Srinivasa Rao
In-charge, Dept. of Chemistry
SCHVPMR Govt. Degree College
Ganapavaram

To

The Principal
SCHVPMR Govt. Degree College
Ganapavaram

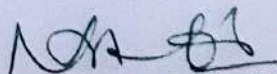
Sub: Curriculum Enrichment for 2021-22 - Dept. of Chemistry - proposal for starting a Certificate Course on Water and Soil Analysis - Request for permission - Reg.

This is to submit that the Dept. of Chemistry is proposing to start a Certificate Course on "**Water and Soil Analysis**" during the academic year 2021-22 to enrich the existing curriculum for the benefit of the students. Hence, this proposal is submitted seeking your permission.

Course duration:	30 to 40 days
Student intake:	20 to 30
Course Starts from:	03-02-2022
Name of Faculty:	N.V.N.B Srinivasa Rao
Formative Assessment	15 marks (objective type)
Summative Assessment	25 marks (objective type)
Qualifying mark	15

Objectives:

- ❖ To enrich the curriculum for the development of students
- ❖ To acquire skills involved in water and soil analysis
- ❖ To improve working ability in analytical laboratory.


In-charge, Dept. of Chemistry



SRI CHINTALAPATI VARA PRASADA MURTHY RAJU
GOVERNMENT DEGREE COLLEGE

GANAPAVARAM-534 198

ESTD 1972 • AFFILIATED TO ADIKAVI NANNAYA UNIVERSITY • ACCREDITED NAAC 'B'



Proceedings of the Principal (FAC), SCHVPMR Govt. Degree College, Ganapavaram

Present: Dr M. Syambab, M.Sc., Ph. D.,

Rc.No.23/2/CC-21-22

Dated 28.01.2022

Sub: Dept. of Chemistry - Proposal for Certificate Course on Water and Soil Analysis for the academic year 2021- 22- Permission granted - Orders issued - Reg.

The Principal, SCHVPMR Govt. Degree College, Ganapavaram is pleased to grant permission to launch a Certificate Course on “**Water and Soil Analysis**” by the Department of Chemistry during the academic year 2021-22. The In-charge, Department of Chemistry is requested to follow the due procedure for conducting the said course and submit a report thereof.

PRINCIPAL 28/1/22
PRINCIPAL
S.CH.V.P.M.R.Govt.Degree
GANAPAVARAM-534198. (W.G.D.)

circuler - III

28.01.2022

All the students of P.B.Sc (MPC, MPC, B7C) are hereby informed that the department of Chemistry of our college is going to start a certificate course on "Water and Soil analysis" from 03-02-2022 to enrich the curriculum. Hence all the students are requested to enroll in the course and make use of it.

- Enrollment forms are available in the department
- A copy of course syllabus is enclosed herewith.

Course Design

TITLE of the course: "Water and Soil Analysis"

Course Duration: 30-40 days.

Student Intake: 20 to 30 (FCFS)

Course Start Date: 3-02-2022 (Time 4:30-5:30 PM)

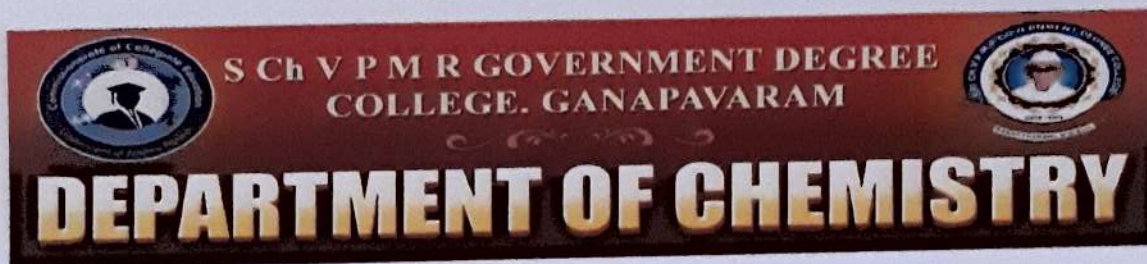
Formative Assessment: 15 M (MCA)

Summative assessment: 25 M (MCA)

Note: 75% attendance is mandatory to be eligible to write the test. Qualifying mark is 15. All the qualified candidates are given certificates.

NCh
28/1/22
course coordinator

PRINCIPAL
S.CH.V.P.M.B. Govt. Degree College
GANAPAVARAM-534199. (W.G. Dist)



Certificate Course on "Water and Soil Analysis"

Academic Year 2021-22

Total Instructional Hours: 30

Syllabus

Unit 1

Chemistry of Water, Water Quality Parameters and Standards- Properties of water- colour, odour, turbidity, total salt content, total suspended water (5 hours)

Unit 2

Collection of water samples, Determination of total hardness, alkalinity, pH, conductivity, TDS, TOC, ammonia, macro, and micro nutrients in water (8 hours)

Unit 3

Water pollution causes and remedies. (5 hours)

Unit 4

Soil development and Chemical composition-composition of earth's crust, minerals in soil, contents of chemical elements of soil, physical chemistry of soil. (5 hours)

Unit 5

Determination of pH and Electrical Conductivity of soil, Water holding capacity, Lime and Gypsum requirement, Nitrogen, Phosphorus, Potassium, Organic carbon (7 hours)


N.V.N.B Srinivasa Rao

Course Coordinator



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Department of Chemistry

Certificate Course on "Water and Soil Analysis"

Course Outline


Course Duration	30 to 40 days
Course Fee	Nil
Target Group	B.Sc
Student intake	20 to 30 (First Come-First Serve)
Start Date	03.02.2022
No. of Modules	5
Formative Assessment	15 marks (objective type)
Summative Assessment	25 marks (objective type)
Qualifying Mark	15
Name of the Course Coordinator	N.V.N.B Srinivasa Rao

Student Registration Form

Date: 03.02.2022

Name of the Student : S. Mohan
Admission Number : 7008
Batch : 10
Year and Program studying : 1st year (BZC)
Semester : III semester

S. Mohan
Signature of the Student


Signature of the Course Coordinator



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Department of Chemistry

Certificate Course on "Water and Soil Analysis"

Course Outline


Course Duration	30 to 40 days
Course Fee	Nil
Target Group	B.Sc
Student intake	20 to 30 (First Come-First Serve)
Start Date	03.02.2022
No. of Modules	5
Formative Assessment	15 marks (objective type)
Summative Assessment	25 marks (objective type)
Qualifying Mark	15
Name of the Course Coordinator	N.V.N.B Srinivasa Rao

Student Registration Form

Date: 02-02-2022

Name of the Student : Y. Krishna Kumari
Admission Number : 6942
Batch : Batch-10
Year and Program studying : 1st year
Semester : 1st Semester

Y. Krishna Kumari
Signature of the Student


Signature of the Course Coordinator



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(Affiliated to Adikavi Nannaya University, Rajamahendravaram, A.P.)

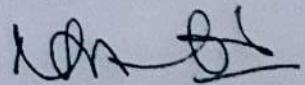
Department of Chemistry

Certificate course on "Water and Soil Analysis"

Academic Year: 2021-22

List of Students Enrolled

Sl.No.	Admn. No.	Class	Name of the Student	Signature of the Student
1	7008	I CBZ	SANKELLA MOHAN DIVAKAR SRINIVAS	S. Mohan
2	7009	I CBZ	SAPPA SHANMUKHI	S. Shanmukhi
3	7010	I CBZ	SRINIVASULA VYSHNAVI	S. Vyshnavi
4	7011	I CBZ	TADELA ESTHERU	T. Estheru
5	7012	I CBZ	TADELA RUPA	T. Rupa
6	7013	I CBZ	TENTI NAGESWARI	T. Nageswari
7	7014	I CBZ	THATIPAKA MOUNIKA	T. Mounika
8	7015	I CBZ	THUPAKULA SIREESHA	T. Siresha
9	7016	I CBZ	VEERAVALLI LAKSHMAN	V. Lakshman
10	6931	I MPC	BARNALA DAVID RAJU	B. David Raju
11	6932	I MPC	BETHU JYANA PRASOONA	B. Jyana Prasoon
12	6935	I MPC	EELI SIVANAGARAJU	E. Sivanagaraju
13	6936	I MPC	MORU UMA SATYANARAYANA	M. Uma Satyanarayana
14	6937	I MPC	NAGISETTI JOHNRAJU	N. John Raju
15	6938	I MPC	NOWDU MAHESWARI	N. Maheswari
16	6939	I MPC	POLISETTI LAKSHMI DURGA	P. Lakshmi Durga
17	6940	I MPC	SANKU VENKATA SUBRAHMANYAM	S. V. Subrahmanyam
18	6941	I MPC	VARRI NIHARIKA	V. Niharika
19	6942	I MPC	YARRAMSETTI KRISHNA KUMARI	Y. Krishna Kumari
20	6998	I CBZ	KONAGALA BHARATHI	K. Bharathi


course coordinator

Circular - VI

17-02-2022

All the students are hereby informed that a formative assessment test in "Water and Soil analysis" certificate courses will be conducted on 23.02.2022.

Attendance in the test is mandatory.

Syllabus prescribed for the test: unit - I & II.

[Signature]
Course Coordinator

I B.A. (MPC)	Revathi
(MPC)	Revathi
(BTE)	✓

[Signature]
12/2/22
PRINCIPAL
S.CH.M.P.M.R. Govt. Degree College
GANAPAVARAM-534198. (W.G.D.C.)



S Ch V P M R GOVERNMENT DEGREE
COLLEGE, GANAPAVARAM



DEPARTMENT OF CHEMISTRY

Certificate course on "Water and Soil Analysis"

Formative Assessment Test

Dt: 23.02.2022

Max. Marks: 15 Time: 30 minutes

Name of the Student: S. Mohan

Group: 13+ (B2C)

Admn. No.: 7008

Answer all the following (15 X 1 = 15)

12
15

- The pH of pure water at 25°C
a) 8 b) 4 c) 7 d) 10 (c) ✓
- The maximum permissible limit for fluoride content in drinking water
a) 1.5 mg/L b) 5 mg/L c) 0.1 mg/L d) 10 mg/L (a) ✓
- Methemoglobinemia disease in infants is caused due to
a) Chlorides b) Sulphides c) Nitrates d) None (c) ✓
- The acceptable limit of total hardness (as CaCO₃) in drinking water shall not be more than
a) 200 mg/L b) 1000 mg/L c) 100 mg/L d) 500 mg/L (a) ✓
- Typhoid is----- borne disease
a) Air b) Water c) Soil d) None (b) ✓
- TDS unit in drinking water
a) 1000 mg/L b) 100 mg/L c) 10 mg/L d) 2000 mg/L (d) ✓
- The acceptable limit for Chlorides in drinking water is
a) 100 mg/L b) 250 mg/L c) 10 mg/L d) 1000 mg/L (a) ✓
- Which of the following Indian standard code provides specification for drinking water
a) IS 10500:2012 b) IS 10500:2016 c) IS 10500:2015 d) IS 10500:2014 (c) ✓
- Which of the following is considered as good COD level in water
a) 40-100 mg/L b) 100-150 mg/L c) 5-20 mg/L d) 400-1000 mg/L (c) ✓
- As per WHO the permissible level of BOD for water bodies
a) 20 mg/L b) 100 mg/L c) 0.5 mg/L d) 5 mg/L (b) ✓
- BOD is the measure of
a) Air Pollution b) Water Pollution c) Soil Pollution d) None (a) ✓
- Which pollutant is the major source of marine pollution
a) Oil Spill b) Sewage c) industrial waste water d) Agricultural run off water (b) ✓
- In comparison to pure water, boiling point of impure water
a) is same b) increases c) decreases d) all are correct (d) ✓
- Reason for water pollution is
a) Pesticides b) Human activity c) population growth d) All the above (a) ✓
- TOC means
a) Total Organic Carbon b) Total Oxide carbon c) Total Oxygen Carbon d) None of the above



S Ch V P M R GOVERNMENT DEGREE
COLLEGE, GANAPAVARAM



DEPARTMENT OF CHEMISTRY

Certificate course on "Water and Soil Analysis"

Formative Assessment Test

Dt: 23.02.2022

Max. Marks: 15 Time: 30 minutes

Name of the Student: Y. Krishna Kumari

Group: I BSc (MPC)

Admn. No.: 6942

Answer all the following (15 X 1 = 15)

13
15

- The pH of pure water at 25°C
a) 8 b) 4 c) 7 d) 10 (c) ✓
- The maximum permissible limit for fluoride content in drinking water
a) 1.5 mg/L b) 5 mg/L c) 0.1 mg/L d) 10 mg/L (a) ✓
- Methemoglobinemia disease in infants is caused due to
a) Chlorides b) Sulphides c) Nitrates d) None (c) ✓
- The acceptable limit of total hardness (as CaCO₃) in drinking water shall not be more than
a) 200 mg/L b) 1000 mg/L c) 100 mg/L d) 500 mg/L (d) ✓
- Typhoid is----- borne disease
a) Air b) Water c) Soil d) None (b) ✓
- TDS unit in drinking water
a) 1000 mg/L b) 100 mg/L c) 10 mg/L d) 2000 mg/L (d) ✓
- The acceptable limit for Chlorides in drinking water is
a) 100 mg/L b) 250 mg/L c) 10 mg/L d) 1000 mg/L (b) ✓
- Which of the following Indian standard code provides specification for drinking water
a) IS 10500:2012 b) IS 10500:2016 c) IS 10500:2015 d) IS 10500:2014 (c) ✓
- Which of the following is considered as good COD level in water
a) 40-100 mg/L b) 100-150 mg/L c) 5-20 mg/L d) 400-1000 mg/L (c) ✓
- As per WHO the permissible level of BOD for water bodies
a) 20 mg/L b) 100 mg/L c) 0.5 mg/L d) 5 mg/L (d) ✓
- BOD is the measure of
a) Air Pollution b) Water Pollution c) Soil Pollution d) None (b) ✓
- Which pollutant is the major source of marine pollution
a) Oil Spill b) Sewage c) industrial waste water d) Agricultural run off water (a) ✓
- In comparison to pure water, boiling point of impure water
a) is same b) increases c) decreases d) all are correct (b) ✓
- Reason for water pollution is
a) Pesticides b) Human activity c) population growth d) All the above (d) ✓
- TOC means
a) Total Organic Carbon b) Total Oxide carbon c) Total Oxygen Carbon d) None of the above (a) ✓

Circular - VII

15-03-2022

All the students are hereby informed that the last day of instruction for the certificate course on "Water and Soil analysis" is 17.03.2022. A summative assessment test will be conducted on 21.03.2022 on the entire syllabus.

The qualifying mark to get the certificate is 15. It is also informed that 75% attendance during the course is mandatory to appear for the test.

I BSc (MPC)

Dewett

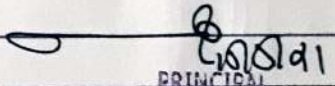
I BSc (BZE)

Dewett

I BSc (MPC)

Dewett

15/3/22
course coordinator


PRINCIPAL

S.CH.V.P.M.R.Govt.Degree College
GANAPAVARATI-534150. (W.G.Dist)

water and soil Analysis Pupils Attendance Register

Sl. No.	Roll No.	Name	03-09-22	04-09-22	05-09-22	06-09-22	07-09-22	08-09-22	09-09-22	10-09-22	11-09-22	12-09-22	13-09-22	14-09-22	15-09-22	16-09-22	17-09-22	18-09-22	19-09-22	20-09-22	
7008	1	S.Mohan Sivakar Srinivas	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7009	2	Sappa Shanmukhi	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7010	3	Srinivasula vyshnavi	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7011	4	Tadela Esther	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7012	5	Tadela Rupa	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7013	6	Teni Nageswari	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7014	7	Thadipaka Mounika	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7015	8	Thupakula Srinsha	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7016	9	veervalli lakshman	P	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
6931	10	Barnala David Raju	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6932	11	Bethu jyana prasanna	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6935	12	Geli Sivanagaraju	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6936	13	Mora uma satyanarayana	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6937	14	Nagiseti John Raju	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6938	15	Nalada Maheswari	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6939	16	poliseti lakshmi Durga	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6940	17	S.V. Subrahmanyam	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6941	18	vavri Niharika	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6942	19	yarramselli krishnakumari	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6948	20	konagala Bharathi	P	P	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a

Introduction of course
 water quality
 water properties
 water properties
 Total salt content
 Total suspended water
 Colloidal water samples
 Determinat hardness
 alkalinity
 pH
 Conductivity
 TDS
 TCC, Ammonia

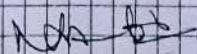
Micro nutrient water
 Formative Assessment Test
 water pollution
 Causes of water pollution
 Causes of water pollution
 Causes of water pollution
 Remedies of water pollution
 Soil deacidification
 Chemical composition
 Earth crust
 Minerals in soil
 Determination of pH
 Electrical conductivity
 Water holding capacity
 Nitre and Oxygen
 Nitrogen phosphorus
 potassium
 Organic carbon
 Summative Assessment Test

పాఠశాల హాజరుపట్టి

Sl. No.	Roll No.	Name	03-09-22	04-09-22	05-09-22	06-09-22	07-09-22	08-09-22	09-09-22	10-09-22	11-09-22	12-09-22	13-09-22	14-09-22	15-09-22	16-09-22	17-09-22	18-09-22	19-09-22	20-09-22	
7008	1	S.Mohan Sivakar Srinivas	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7009	2	Sappa Shanmukhi	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7010	3	Srinivasula vyshnavi	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7011	4	Tadela Esther	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7012	5	Tadela Rupa	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7013	6	Teni Nageswari	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7014	7	Thadipaka Mounika	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7015	8	Thupakula Srinsha	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7016	9	veervalli lakshman	P	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
6931	10	Barnala David Raju	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6932	11	Bethu jyana prasanna	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6935	12	Geli Sivanagaraju	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6936	13	Mora uma satyanarayana	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6937	14	Nagiseti John Raju	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6938	15	Nalada Maheswari	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6939	16	poliseti lakshmi Durga	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6940	17	S.V. Subrahmanyam	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6941	18	vavri Niharika	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6942	19	yarramselli krishnakumari	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6948	20	konagala Bharathi	P	P	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a

Total days	30
Present	29
Absent	01

పాఠశాల అధికారి
 ప్రధానాధికారి
 పాఠశాల అధికారి
 ప్రధానాధికారి


 Head of Institution

PRINCIPAL
 S.Ch.V.P.M.R.Govt.Degree College
 GANAPAVARAM-534198. (M.G.DHU)



S Ch V P M R GOVERNMENT DEGREE
COLLEGE, GANAPAVARAM



DEPARTMENT OF CHEMISTRY

Certificate course on "Water and Soil Analysis"

Summative Assessment Test Dt: 21.03.2022

Max. Marks: 25 Time: 50 minutes

Name of the Student: G. Mohan

Group: 1st (BZC)

Admn. No.: 7008

Answer all the following (25 X 1 = 25)

19

25

1. Phosphorous uptake in alkali soil in the form of
a) HPO_4^{-2} b) $\text{H}_2\text{PO}_4^{-1}$ c) PO_4^{-2} d) H_3PO_4
2. Which fertilizer produce acidity in soil
a) Ammonium Sulphate b) Sodium Nitrate c) Calcium Nitrate d) Calcium Carbonate
3. The phenomenon slickenside is found in which soil
a) Inceptisol b) Vertisol c) Gelisol d) Spodosol
4. Soil colloid particle shows the phenomena
a) Plasticity b) Cohesion c) Flocculation d) All the above
5. The central cation in silica tetrahedron
a) Al^{+3} b) Fe^{+2} c) Si^{+4} d) Mg^{+2}
6. Denitrification is a process of
a) Oxidation b) Reduction c) Hydration d) Carbonation
7. Which microorganism is responsible for conversion of nitrite to nitrate
a) Nitrosomonas b) Nitrobacter c) Pseudomonas d) Bacillus
8. pH range for neutral soil is
a) 3-4 b) 10-12 c) 6.5-7.5 d) 0-5
9. pH range for alkaline soil is
a) 3-4 b) 5-6 c) 0-2 d) > 7.5
10. Electrical conductivity of alkaline soil is
a) $< 4000 \mu\text{ohms/cm}$ b) $< 6000 \mu\text{ohms/cm}$ c) $> 4000 \mu\text{ohms/cm}$ d) None
11. Which soil has highest water holding capacity
a) Coarse soil b) Clay soil c) Sandy loams d) Silt loams

(c) ✓

(a) ✓

(c) ✓

(a) ✓

(c) ✓

(b) ✓

(b) ✓



(c) ✓

(d) ✓

(c) ✓

(b) ✓

12. Chemical Formula of lime (a) ✓
a) CaO b) CaCO₃ c) CaCl₂ d) CaSO₄
13. Chemical Formula of gypsum (c) ✓
a) CaCl₂ b) CaSO₄ c) CaSO₄ · 2H₂O d) MgSO₄
14. Normal phosphate level in the ocean (d) ✓
a) 0.01 ppm b) 0.007 ppm c) 0.009 ppm d) 0.07 ppm
15. The black soil is also known as (d) ✓
a) Bhangar b) Humus c) Crystalline d) Regur
16. Which type of soil covers most of the deccan plateau (d) ✓
a) Alluvial Soil b) Red soil c) yellow Soil d) Black Soil
17. Healthy levels of potassium in soil (a) ✗
a) 20-40 ppm b) 10-20 ppm c) 40-80 ppm d) 100-200 ppm
18. TDS means (b) ✓
a) Total Dissolved solids b) Total Dissolved Sulphur c) Total Dissolved Silicon d) None
19. TDS level of RO water (b) ✗
a) 75 ppm b) 25 ppm c) 100 ppm d) 1000 ppm
20. Polluter water have a BOD value (c) ✗
a) 5ppm b) 10 ppm c) 17 ppm d) 1ppm
21. Apatite is a mineral which mainly consists of (b) ✓
a) Sulphur b) Phosphorous c) Nitrogen d) Magnesium
22. Electrical conductivity meter measures (b) ✓
a) Total salt in soil b) soluble salt in soil c) both A and B d) None
23. Primary macro nutrients are (d) ✓
a) N,P b) N,K c) P, K d) N,P,K
24. potassium availability is high in soil of ph. (d) ✗
a) 4 b) 6 c) 9 d) 3
25. TDS level of Bisleri is. (d) ✓
a) 100ppm b) 10ppm c) 15ppm d) 150ppm


S Ch V P M R GOVERNMENT DEGREE COLLEGE, GANAPAVARAM


DEPARTMENT OF CHEMISTRY

Certificate course on "Water and Soil Analysis"

Summative Assessment Test Dt: 21.03.2022

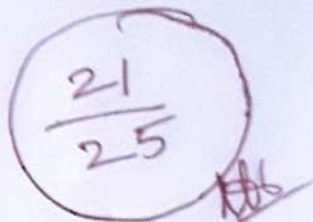
Max. Marks: 25 Time: 50 minutes

Name of the Student: Y. Krishna Kumari

Group: I BSc (MPC)

Admn. No.: 6942

Answer all the following (25 X 1 = 25)



1. Phosphorous uptake in alkali soil in the form of
 a) HPO_4^{-2} b) $\text{H}_2\text{PO}_4^{-1}$ c) PO_4^{-2} d) H_3PO_4 (C) ✓
2. Which fertilizer produce acidity in soil
 a) Ammonium Sulphate b) Sodium Nitrate c) Calcium Nitrate d) Calcium Carbonate (a) ✓
3. The phenomenon slickenside is found in which soil
 a) Inceptisol b) Vertisol c) Gelisol d) Spodosol (b) ✓
4. Soil colloid particle shows the phenomena
 a) Plasticity b) Cohesion c) Flocculation d) All the above (a) ✓
5. The central cation in silica tetrahedron
 a) Al^{+3} b) Fe^{+2} c) Si^{+4} d) Mg^{+2} (C) ✓
6. Denitrification is a process of
 a) Oxidation b) Reduction c) Hydration d) Carbonation (b) ✓
7. Which microorganism is responsible for conversion of nitrite to nitrate
 a) Nitrosomonas b) Nitrobacter c) Pseudomonas d) Bacillus (b) ✓
8. pH range for neutral soil is
 a) 3-4 b) 10-12 c) 6.5-7.5 d) 0-5 (C) ✓
9. pH range for alkaline soil is
 a) 3-4 b) 5-6 c) 0-2 d) > 7.5 (d) ✓
10. Electrical conductivity of alkaline soil is
 a) <4000 $\mu\text{ohms/cm}$ b) <6000 $\mu\text{ohms/cm}$ c) >4000 $\mu\text{ohms/cm}$ d) None (C) ✓
11. Which soil has highest water holding capacity
 a) Coarse soil b) Clay soil c) Sandy loams d) Silt loams (b) ✓

12. Chemical Formula of lime

- a) CaO b) CaCO₃ c) CaCl₂ d) CaSO₄

(a) ✓

13. Chemical Formula of gypsum

- a) CaCl₂ b) CaSO₄ c) CaSO₄ · 2H₂O d) MgSO₄

(c) ✓

14. Normal phosphate level in the ocean

- a) 0.01 ppm b) 0.007 ppm c) 0.009 ppm d) 0.07 ppm

(d) ✓

15. The black soil is also known as

- a) Bhangar b) Humus c) Crystalline d) Regur

(d) ✓

16. Which type of soil covers most of the deccan plateau

- a) Alluvial Soil b) Red soil c) yellow Soil d) Black Soil

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17. Healthy levels of potassium in soil

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- a) Total Dissolved solids b) Total Dissolved Sulphur c) Total Dissolved Silicon d) None

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20. Polluter water have a BOD value

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- a) Sulphur b) Phosphorous c) Nitrogen d) Magnesium

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22. Electrical conductivity meter measures

- a) Total salt in soil b) soluble salt in soil c) both A and B d) None

(d) ✓

23. Primary macro nutrients are

- a) N,P b) N,K c) P, K d) N,P,K

(d) ✓

24. potassium availability is high in soil of ph.

- a) 4 b) 6 c) 9 d) 3

(b) ✓

25. TDS level of Bisleri is.

- a) 100ppm b) 10ppm c) 15ppm d) 150ppm

(d) ✓



(Affiliated to Adikavi Nannaya University, Rajamahendravaram, A.P.)

Department of Chemistry


Certificate course on "Water and Soil Analysis"

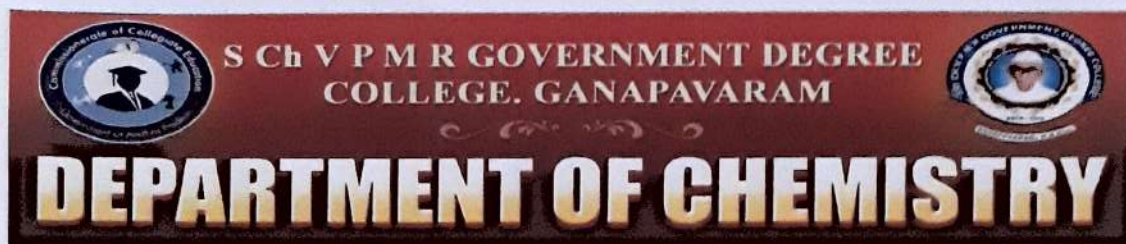
Academic Year: 2021-22

RESULT SHEET

Sl. No.	Admn. No.	Class	Name of the Student	FA Marks	SA Marks	Total	Grade	Student Signature
				15	25	40		
1	7008	I CBZ	SANKELLA MOHAN DIVAKAR SRINIVAS	12	19	31	A	S. Mohan
2	7009	I CBZ	SAPPA SHANMUKHI	12	21	33	A	S. Shanmukhi
3	7010	I CBZ	SRINIVASULA VYSHNAVI	10	18	28	B	S. Vyshnavi
4	7011	I CBZ	TADELA ESTHERU	08	14	22	C	T. Estheru
5	7012	I CBZ	TADELA RUPA	09	18	27	B	T. Rupa
6	7013	I CBZ	TENTI NAGESWARI	10	17	27	B	T. Nageswari
7	7014	I CBZ	THATIPAKA MOUNIKA	11	16	27	B	T. Mounika
8	7015	I CBZ	THUPAKULA SIREESHA	11	20	31	A	T. Sireesha
9	7016	I CBZ	VEERAVALLI LAKSHMAN	AB	AB	AB	F	V. Lakshman
10	6931	I MPC	BARNALA DAVID RAJU	08	18	26	B	B. David Raju
11	6932	I MPC	BETHU JYANA PRASOONA	11	21	32	A	B. Jyana Prasoon
12	6935	I MPC	EELI SIVANAGARAJU	10	16	26	B	E. Sivanagaraju
13	6936	I MPC	MORU UMA SATYANARAYANA	12	20	32	A	M. Uma Satyanarayana
14	6937	I MPC	NAGISETTI JOHNRAJU	08	13	21	C	N. John Raju
15	6938	I MPC	NOWDU MAHESWARI	13	18	31	A	N. Maheswari
16	6939	I MPC	POLISETTI LAKSHMI DURGA	12	20	32	A	P. Lakshmi Durga
17	6940	I MPC	SANKU VENKATA SUBRAHMANYAM	12	19	31	A	S. V. Subrahmanyam
18	6941	I MPC	VARRI NIHARIKA	11	20	31	A	V. Niharika
19	6942	I MPC	YARRAMSETTI KRISHNA KUMARI	13	21	34	A	Y. Krishnakumari
20	6998	I CBZ	KONAGALA BHARATHI	AB	AB	AB	F	K. Bharathi

Grade: > 30 - A, 26-30 - B, 21-25 - C, 15-20 - D, <15 - F


NVNB Srinivasa Rao
Course Coordinator




Certificate Course on “Water and Soil Analysis”

Report

Course started on 3rd February 2022 with a view to enrich the curriculum by giving knowledge on water and soil analysis. Twenty students from I B.Sc joined and 18 students completed the course successfully. It is useful to every science to learn about the analysis of water and soil. Course covered the concepts such as water quality parameters, water sampling and analysis, collection of soil sample and analysis of soil parameters. Finally, the course succeeds in making students able to analyse and assess water and soil which is essential in aqua industry.

Course Outcomes

- ❖ Students can analyse water and soil.
- ❖ Students learned different instrumental analytical methods.
- ❖ Students can do scientific calculations.


N.V.N.B Srinivasa Rao
Course Coordinator



SRI CHINTALAPATI VARA PRASADA MURTHY RAJU
GOVERNMENT DEGREE COLLEGE

GANAPAVARAM-534 198

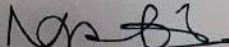
ESTD. 1972 • AFFILIATED TO ADIKAVI NANNAYA UNIVERSITY • ACCREDITED NAAC 'B'




CERTIFICATE

This is to certify that

Kum. YERRAMSETTI KRISHNA KUMARI, I MPC (Admn No.6942)
SCHVPMR Govt Degree College, Ganapavaram
has successfully completed certificate course on
“Water and Soil analysis” held from 03 Feb - 17 Mar, 2022
offered by Department of Chemistry with grade **“A”**


NVNB Srinivasa Rao
Course Coordinator


Dr. T. Akkiraju
IQAC Coordinator


Dr. M. Syam Bab
Principal



SRI CHINTALAPATI VARA PRASADA MURTHY RAJU
GOVERNMENT DEGREE COLLEGE

GANAPAVARAM-634 198

ESTD. 1972 • AFFILIATED TO ADIKAVI NANNAYA UNIVERSITY • ACCREDITED NAAC 'B'



CERTIFICATE

This is to certify that

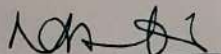
Mr. SANKELLA MOHAN DIVAKAR SRINIVAS, I BZC (Admn No.7008)

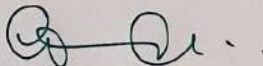
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Course Coordinator


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Dr. M. Syam Bab
Principal