

Khandala Vibhag Shikshan Samiti's

Sushila Shankarrao Gadhave Mahavidyalaya, Khandala

Supportive Documents For Certificate Course

1. Notice regarding the introduction date of the course.
2. BOS resolution.
3. Syllabus of the course.
4. Course objectives & outcomes.
5. List of enrolled students.
6. Time table.
7. Attendance Sheets.
8. Result of the course.
9. One sample certificate of the pass student.



Date - 20/3/2023

Khandala Vibhag Shikshan Samiti's

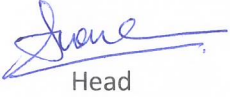
Sushila Shankarrao Gadhave Mahavidyalaya, Khandala

Department of Chemistry

Notice

All the students of B.Sc -III(Chemistry) are hereby informed that industrial visit
Is arranged at **Ajininkyatara Sahkari Sakhar Karkhana Shendre Tal ,dist- Satara** on
Saturday 25th March 2023.

All enrolled students must remain present at college campus at 8 .00 am .



Head

Department of Chemistry

S.S.G.M.Khandala



Principal

S.S.G.M Khandala

Principal

**Sushila Shankarrao Gadhave Mahavidyalay
Khandala, Tal.Khandala,Dist.Satara**

Khandala vibhag Shikshan samitis
Sushila Shankarrao Gadhave Mahavidyalaya, Khandala
Department of Chemistry
Certificate Course-Soil & Water Analysis
Board of Studies
Year-2022-23

Sr.No.	Name of Member	College	Designation
1	Dr.Jadhav H.V	Principal (S.S.G.M.Khandala)	Chairman
2	Dr.Zambare D.N	Asst.Prof.Kisanveer Mahavidyalaya Wai	Member
3	Prof. Kambale U.B	Asst.Prof.Kisanveer Mahavidyalaya Wai	Member
4	Prof. Surve S.S	H.O.D (S.S.G.M ,Khandala)	Member
5	Prof. Shinde R.A	Asst.Prof.(S.S.G.M.khandala)	Member
6	Prof.More S.S.	Asst.Prof.(S.S.G.M.khandala)	Member



Syllabus



Certificate course in Soil and Water analysis:

Max. Marks : 50

Part I: Soil Analysis

Unit I: Introduction to Soil Science

Definition of Soil as a natural body, Soil Components inorganic and organic solids, Types of Soils & Basic Concepts.

Properties of Soil:

Introduction to properties of Soil:

A) Physical Properties :-

Soil Texture and Structure, Temperature, Colour, Properties of Soil Mixture Particle Density.

B) Chemical Properties :-

Chemistry of Clays, Ionic Exchange, Acidity, Alkalinity, pH, Salinity, Reactions in Liming and Acidification.

C) Biological Properties :-

Soil Organic Matter, C:N Relationships, N-Transformation, Soil Organisms, Sulfur Transformation.

Books Recommended :

1. Soils and soil fertility, Troch, F.R. And Thompson, L.M. Oxford Press.
2. Fundamentals of soil science, foth, H.D. Wiley Books.
3. Soil Science and Management, Plaster, Edward J., Delmar Publishers.
4. Principles of Soil Chemistry (2Wed.) Marcel Dekker Inc., New York.

Unit II: Soil Testing & Analysis

Unit I: Sample Collection and Processing

Purpose of Soil testing and analysis, selection of field, Method of Soil Sample collection Methods of soil sample processing, precautions during soil collection & processing, Preservation labeling and Storage of soil samples



Practicals

1. Visit to Soil Testing Laboratory & Report writing.
2. Visit to Farmers Fields for Collection of Soil Samples, identification of nutrient deficiency Symptoms in Crop.
3. Preparation of Various Chemical reagents required for soil testing.
4. Processing of Soil Sampling for analysis
5. Determination of PH of soil sample using PH meter
6. Determination of Electrical Conductivity of Soil Sample using Electrical Conductivity meter.
7. Determination of Organic Carbon by wet Oxidation method.
8. Determination of available Nitrogen from Soil Sample.
9. Determination of available phosphorus from soil sample.

Reference Books:

1. Introduction To soil laboratory manual: j.j.harsett stipes
2. Introduction To soil science laboratory manual: palmer & troch

Part II: Water Analysis

Unit III: Introduction to Water analysis .

Types of Water, Water pollutants, role of water testing for environment, Uses of water analysis.

Unit IV: Introduction to Water analysis, Types of Water, Water pollutants, role of water testing for environment, Uses of water analysis.

Temp, Turbidity, Acidity, Alkalinity, Biological oxygen demand (BOD), Conductivity and specific conductance, Chemical oxygen demand (COD), Residual Chlorine, Dissolved oxygen, Fluoride, Hardness, Total nitrogen, pH, Phosphorus, Total solids (TS), Total dissolved solids (TDS), Total suspended solids (TSS), Sodium, Potassium.

Practicals

- 1) To determine hardness of water.
- 2) To determine P^H of given water sample.
- 3) To determine alkalinity of water.
- 4) To determine TDS of given sample of water.

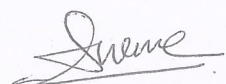
Reference Book:

Manual for analysis of water

This proposal is placed before IQAC of Sushila Shankarrao Gadhave Mahavidyalaya, Khandala for syllabus approval.

IQAC

S.R.Majgaonkar


course coordinator

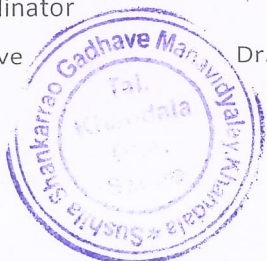
S.S.Surve

Principal

Dr.S.R.Bamane

Secretary

K.V.S.S.Khandala



Khanadala Vibhag Shikshan Samiti's
Sushila Shankarrao Gadhave Mahavidyalaya, Khandala
Department Of Chemistry
Certificate course in Soil and Water Analysis

Sushila Shankarrao Gadhave Mahavidyalaya, Khandala and IQAC department in its meeting decided to introduce self finance certificate course in **Soil and Water Analysis** for academic year 2018-19. This course will continue for next three years.

Objectives of the Course:-

1. To develop basic understanding regarding soil testing in the students.
2. To introduce them with macro and micro nutrients for soil.
3. To enhance their skills about water analysis.
4. To propagate the importance of the course for farmers.

Instructional Design:-

This course includes theory classes, field Visit.

Course Structure and Examination Scheme:-

Course No.	Course Name	Contact Classes (Hour)	Laboratory Experiment (Hour)	Total Marks
1	Soil and Water analysis	10	20	50

Quality Assurance Mechanism:

The quality of the course will be ensured through continuous evaluation of feedback from students and course coordinator by IQAC department of the College.



Knandala Vidnag Shikshan Samiti's
Sushila Shankarrao Gadhave Mahavidyalaya ,Khandala
Name of list 2022-2023
Short Term Course –Soil and water Analysis

Roll no	Student name
1	Raut Prasad .D
2	Thombare Rupali .S
3	Wagh Rohit .R
4	Waghmode Akshay .B
5	Dhaygude swarup .T
6	Phadtare Manthan .B
7	Chougule Piraji .V
8	Dhapate Prashant .D
9	Yadav Pratik .R
10	Mali Pratik .R
11	Wagh sonali .S
12	Dhamal Akshay .M
13	Dhamal siddhant .S
14	Bhिलारे sakshi .S
15	Jadhav Harshada .S
16	Kasurde sanket .A
17	Mandhare Abhishek .A
18	Gadhave Abhishek. Gajanan
19	Khandagale Shivani Tanaji
20	Pawar Pooja Mohan
21	Dhapte Ujwala Keshav
22	Jadhav Surbhi Sunil
23	Pawar Amruta Ramesh
24	Yadav Akanksha Uday
25	Gore Amruta Jitendra
26	Langade Ashvini Dyaneshwar
27	Dhaygude Ankita Nanaso
28	Pawar Vaishnvi Chandrasen
29	Devade Pranali Kisan
30	Bhosale Sayali Sachin



Khandala Vibhag Shaikshan samiti

Sushila Shakarrao Gadhave Mahavidyalaya Khandala



Department of Chemistry

Short term Course

Certificate Course in Soil & Water Analysis

Assesment & Evaluation

Theory (50)

Quesestion paper including 50 marks of objective question.

Fill in the Blanks

Oral Test (10)

Assignments (20)

Project (20)

Grades:

Percentage	Grade
Below 40%	F (Fail)
40-49 %	P (Pass)
50-59 %	C (Average)
60 - 69 %	B (Good)
70 – 79 %	A (Very Good)
80 – 89 %	A+ (Excellent)
90 – 100 %	O (Outstanding)



Khandala Vibhag Shikshan Samitis, Khanadala

Sushila Shankarrao Gadhave Mahavidyalaya, Khandala

Timetable Year (2022-23)

Short term Course- Soil and Water Analysis

Sr.No	Dates	Teacher Name	Lecture	Practical
1	15/2/2023	Prof. Surve .S.S	8:30-9:30 am	
2	16/2/2023	Prof. Shinde .R.A	8:30-9:30 am	
3	17/2/2023	Prof. More.S.S		8:30-11:30 am
4	20/2/2023	Prof. Surve .S.S	8:30-9:30 am	
5	21/2/2023	Prof. Shinde .R.A	8:30-9:30 am	
6	22/2/2023	Prof. More.S.S		8:30-11:30 am
7	23/2/2023	Prof. Surve .S.S	8:30-9:30 am	
8	24/2/2023	Prof.Shinde.R.A	8:30-9:30 am	
9	25/2/2023	Prof.More.S.S		8:30-11:30 am
10	27/2/2023	Prof.Surve.S.S	8:30-9:30 am	
11	28/2/2023	Prof.Shinde.R.A	8:30-9:30 am	
12	1/3/2023	Prof.More.S.S		8:30-11:30 am
13	2/3/2023	Prof.Surve.S.S	8:30-9:30 am	
14	3/3/2023	Prof.Ravisha R.A	8:30-9:30 am	
15	4/3/2023	Prof.More.S.S		8:30-11:30 am



Khandala Vibhag Shikshan Samitis Khanadala

Sushila Shankarrao Gadhave Mahavidyalaya ,Khandala

Attendance Sheet 2022-23

Course - Soil and Water Analysis



Sr No.	Students name	15/12/23	16/12	17/12	20/12	21/12	22/12	23/12	24/12	25/12	27/12	28/12	01/13	02/13	03/13	4/13
1	Raut Prasad .D	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P
2	Thombare Rupali .S	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P
3	Wagh Rohit .R	P	P	P	A	P	P	P	P	A	P	P	P	A	P	A
4	Waghmode Akshay .B	P	P	A	P	P	P	P	P	P	A	P	P	A	P	A
5	Dhaygude Swarup .T	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P
6	Phandtare Manthan.B	P	P	P		P	P	P	P	A	P	P	P	P	P	A
7	Chaugule piraji .V	P	A	P	P	P	P	A	P	P	P	P	P	P	A	P
8	Dhapate Prashant .D	P	P	P	P	A	P	P	P	P	P	P	P	A	P	P
9	Yadav pratik .R	P	A	P	P	P	P	P	A	P	P	P	P	P	P	P
10	Mali pratik .S	P	P	P	A	P	P	A	P	P	P	P	P	P	P	P
11	Wagh Sonali .S	P	P	P	P	P	P	P	P	P	P	A	P	P	A	P
12	Dhamal Akshay .M	P	A	P	A	P	P	P	P	P	P	P	P	A	P	P
13	Dhamal Siddhat .S	P	P	P	P	P	A	P	A	P	P	P	P	P	P	P
14	Bhilare Sakshi .S	P	P	P	A	P	P	P	P	A	P	P	P	P	P	P



15	Jadhav Harshada Satish	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
16	Kasurde Sanket Anandrao	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
17	Mandhare Abhishek Arjun	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
18	Gadhawe Abhishek Gajanan	P	A	P	P	A	P	P	A	P	P	P	P	P	A	P
19	Khandagale Shivani Tanaji	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
20	Pawar Pooja Mohan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
21	Dhapte Ujwala Keshav	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
22	Jadhav Surbhi Sunil	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
23	Pawar Amruta Ramesh	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
24	Yadav Akanksha Uday	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
25	Gore Amruta Jitendra	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
26	Langade Ashwini Dyaneshwar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P



27	Dhaygude Ankita Nanaso	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
28	Pawar Vaishnavi Chandrasen	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
29	Devade Pranali kisan	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
30	Bhosale sayali Sachin	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P



Shivaji University ,Kolhapur

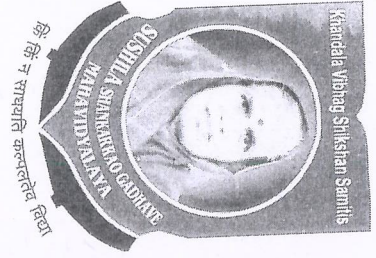
Result Sheet 2022-2023

Short Term Course –Soil and water Analysis

Center name -Sushila Shankarrao Gadhave Mahavidyalaya ,Khandala

Roll no	Student name	Marks	Percentage	Grade
1	Raut Prasad .D	45	90%	O
2	Thombare Rupali .S	47	94%	O
3	Wagh Rohit .R	46	92%	O
4	Waghmode Akshay .B	44	88%	A+
5	Dhaygude swarup .T	43	86%	A+
6	Phadtare Manthan .B	43	86%	A+
7	Chougule Piraji .V	42	84%	A+
8	Dhapate Prashant .D	45	90%	O
9	Yadav Pratik .R	46	92%	O
10	Mali Pratik .R	43	86%	A+
11	Wagh sonali .S	40	80%	A+
12	Dhamal Akshay .M	41	82%	A+
13	Dhamal siddhant .S	40	80%	A+
14	Bhilare sakshi .S	43	86%	A+
15	Jadhav Harshada .S	42	84%	A+
16	Kasurde sanket .A	44	88%	A+
17	Mandhare Abhishek .A	46	92%	O
18	Gadhave Abhishek. Gajanan	49	98%	O
19	Khandagale Shivani Tanaji	47	94%	O
20	Pawar Pooja Mohan	47	94%	O
21	Dhapte Ujwala Keshav	45	90%	O
22	Jadhav Surbhi Sunil	44	88%	A+
23	Pawar Amruta Ramesh	44	88%	A+
24	Yadav Akanksha Uday	40	80%	A+
25	Gore Amruta Jitendra	43	86%	A+
26	Langade Ashvini Dyaneshwar	47	94%	O
27	Dhaygude Ankita Nanaso	46	92%	O
28	Pawar Vaishnvi Chandrasen	42	84%	A+
29	Devade Pranali Kisan	43	86%	A+
30	Bhosale Sayali Sachin	43	86%	A+





Khandala Vibhag Shikshan Samitee's

SUSHILA SHANKARRAO GADHAVE MAHAVIDYALAYA, KHANDALA

(Arts, Commerce, Science & BCA)
Tal. Khandala, Dist. Satara, Pin - 412802



This is to certify that Smt. / Smt. Dhapathe Ujjwala Keshav D.
has Participated / Completed in Soil & Water Analysis

During the Academic Year 2022 - 2023

Shene
Co - ordinator



Prinipal
Shankarrao Gadhave Mahavidyalay
Tal. Khandala, Dist. Satara