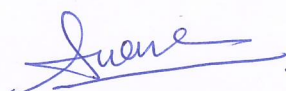



Khandala Vibhag Shikshan Samits
Rajendra Mahavidyalaya, Khandala

2018-2019

Name Of Department	-	Chemistry
Name Of Course	-	Soil & Water Testing
Duration	-	3 Months
Assesment Procedure	-	Theory Paper – 50 Marks
		Practical - 50 Marks


Course Co-ordinator
(Miss.Surve S.S.)


Principal



Khanadala Vibhag Shikshan Samiti's

Rajendra Mahavidyalaya Khandala, Khandala

Department Of Chemistry

Notice:-

All the students of B.Sc.III are hereby informed that, their regular lectures for the Course "Soil And Water Analysis" will be started from 12-11-2018

In B.Sc. III classroom.

All enrolled students must be present for the same in time Time of lecture is 9:30 am To 10:30 am Time of practical is 9 am To 12 pm (on recommended day)

Head

Department of Chemistry

Khandala Vibhag Shikshan Samitis
Rajendra Mahavidyalaya, Khandala
Department of Chemistry
Academic Year-2018-19
Certificate Course in Soil & Water Analysis
Board of Studies

Sr.No	Name of Member	College	Designation
1	Dr.Bhoite P.H.	Asst. Prof.Kisanveer Mahavidyalaya wai	Chairman
2	Prof.Surve S.S.	H.O.D. Rajendra Mahavidyalaya Khandala	Member
3	Prof. Shinde R.A	Asst.Prof.Rajendra Mahavidyalaya Khandala	Member
4	Prof.Kalokhe A.P.	Asst.Prof. Rajendra Mahavidyalaya Khandala	Member
5	Prof.More .S.S	Asst. Prof. Rajendra Mahavidyalaya 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, fothe, H.D. Wiley Books.
3. Soil Science and Management, Plaster, Edward J., Delmar Publishers.
4. Principles of Soil Chemistry (2nd ed.) 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.

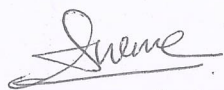
Practicals

- 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.



course coordinator

S.S. Surve

IQAC

S.R. Majgaonkar

Principal

Dr.S.R. Bamane

Secretary

K.V.S.S. Khandala

Rajendra Mahavidyalaya, Khandala

Student List – 2018-19

Course name - Soil & Water Analysis



Roll No.	Student Name
1	KOLEKAR SURAJ DADASO
2	THOMBARE CHANDRAKANT LALASO
3	SONAWANE OMKAR ROHIDAS
4	DHAYGUDE PRIYANKA RAJARAM
5	KESKAR DIPTI DATTATRAY
9	SHIRKE OMKAR PARSHURAM
10	DHAYGUDE PUNAM CHANDRAKANT
11	BHOSALE SAYALI GULAB
13	KHAMKAR SNEHAL RAJENDRA
14	SALUNKHE SAURABH LALTIKUMAR
17	KOKIL POOJA RAMESH
19	SONAWANE TANVI SURESH
21	DHAMAL NEHA HIMMATRAO
22	DHAIGUDE ABHISHEK SHRIRANG
23	GHOLAP NEHA MUKUND
24	DHAYGUDE PRASHANT RAJENDRA
25	SHELKE KALYANI DADA
28	KATE TEJRAJ RAJENDRA
29	KOLEKAR SAGAR DADASAHEB
30	GAIKWAD RANJEET ARVIND
31	KASHID TEJAS RAJENDRA
32	GADHAVE SHUBHAM VIJAY
33	DHAMAL RUSHIKESH SHARAD
34	AWARE ROHAN DATTATRAY
36	DHAYGUDE RAHUL PRALAHAD
38	BHOSALE AKASH DATTATRAY
42	MORE RUSHIKESH VISHWANATH
43	SHINDE ASHWINI BALASO
45	SALUNKHE CHETAN KASHINATH
46	BHOSALE PRATIK SHRIMANT

khandala vibhag shikshan samiti's
Rajendra Mahavidyalaya, Khandala
Time Table (Soil & Water Analysis)
Year 2018-19

Sr. No	Dates	Teacher Name	lecture	practical
1	11/12/2018	Prof.Miss. More S.S	8.30-9.30 am	
2	11/13/2018	Prof.Miss.Shinde R.A	8.30-9.30 am	
3	11/14/2018	Prof.Miss. Surve.S.S		8.30-11.30 am
4	11/15/2018	Prof.Miss.Kalokhe A.P	8.30-9.30 am	
5	11/16/2018	Prof.Miss.Dere S.D	8.30-9.30 am	
6	11/17/2018	Prof.Miss .Chavan .V B.		8.30-11.30 am
7	11/19/2018	Prof.Miss.Kalokhe A.P	8.30-9.30 am	
8	11/21/2018	Prof.Miss.Kalokhe A.P	8.30-9.30 am	
9	11/22/2018	Prof.Miss. More S.S		8.30-11.30 am
10	11/24/2018	Prof.Miss.Kalokhe A.P	8.30-9.30 am	
11	11/26/2018	Prof.Miss.Kalokhe A.P	8.30-9.30 am	
12	11/27/2018	Prof.Miss .Chavan .V B.		8.30-11.30 am
13	11/28/2018	Prof.Miss.Dere S.D	8.30-9.30 am	
14	11/29/2018	Prof.Miss. Surve.S.S	8.30-9.30 am	
15	11/30/2018	Prof.Miss.Shinde R.A		8.30-11.30 am



SHIVAJI UNIVERSITY, KOLHAPUR



Paper Wise Attendance Sheet and Junior Supervisor Report For – 2018-19

Course name - Soil & Water Analysis

Center Name –Rajendra Mahavidyalaya, Khandala

Date & time _

Total students -30

Roll No.	Student Name	Marks	Percentage	Grade
1	KOLEKAR SURAJ DADASO	80	80	A+
2	THOMBARE CHANDRAKANT LALASO	96	96	O
3	SONAWANE OMKAR ROHIDAS	84	84	A+
4	DHAYGUDE PRIYANKA RAJARAM	92	92	O
5	KESKAR DIPTI DATTATRAY	80	80	A+
9	SHIRKE OMKAR PARSHURAM	84	84	A+
10	DHAYGUDE PUNAM CHANDRAKANT	92	92	C
11	BHOSALE SAYALI GULAB	92	92	O
13	KHAMKAR SNEHAL RAJENDRA	84	84	O
14	SALUNKHE SAURABH LALTIKUMAR	88	88	O
17	KOKIL POOJA RAMESH	84	84	A+
19	SONAWANE TANVI SURESH	76	76	A
21	DHAMAL NEHA HIMMATRAO	64	64	B
22	DHAIGUDE ABHISHEK SHRIRANG	80	80	A+
23	GHOLAP NEHA MUKUND	88	88	A+
24	DHAYGUDE PRASHANT RAJENDRA	64	64	B
25	SHELKE KALYANI DADA	88	88	A+
28	KATE TEJRAJ RAJENDRA	64	64	B
29	KOLEKAR SAGAR DADASAHEB	88	88	A+
30	GAIKWAD RANJEET ARVIND	76	76	A-
31	KASHID TEJAS RAJENDRA	92	92	O
32	GADHAVE SHUBHAM VIJAY	88	88	A+
33	DHAMAL RUSHIKESH SHARAD	80	80	A+
34	AWARE ROHAN DATTATRAY	80	80	A+
36	DHAYGUDE RAHUL PRALAHAD	88	88	A+
38	BHOSALE AKASH DATTATRAY	88	88	A+
42	MORE RUSHIKESH VISHWANATH	84	84	A+
43	SHINDE ASHWINI BALASO	84	84	A+
45	SALUNKHE CHETAN KASHINATH	92	92	O
46	BHOSALE PRATIK SHRIMANT	96	96	O



Khandala Vibhag Shikshan Samiti's

RAJENDRA MAHAVIDYALAYA, KHANDALA



Certificate

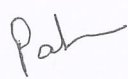
This is to certify that Shri / Smt. Sonawane Omkar Rohidas

has attended the certificate course in Soil and water Testing

under the Extension programme in the Academic Year 2018 - 2019

and completed the course satisfactorily.


Co-ordinator


I/C. Principal