





Dr. Patangrao Kadam Mahavidyalaya, Ramanandnagar (Burli).

**Short Term Course** 2022-2023

Department of Geography

Name of Course: "Soil Testing and Analysis"

## REPORT

Department of Geography conducted Short Term Course, 'Soil Testing & Analysis' for the year 2022 - 2023. In this course 10 students were admitted for this year. The Course was conducted with the aims to make student skills in soil testing and analysis. Get knowledge in testing soil and lab maintenance. This course was conducted successfully in which 95% lectures were conducted as per the timetable. The examination was conducted where 6 students were present. The certificates were distributed to the successful students.

Department of Geography

Kamanananagar (Burli)

Dr. Perengian Kallam Mahavidyalay Patangrao Kadam Mahavidyalaya,

Ramanandnagar (Burli) Tal. Palus, Dist. Sangli.

"Education Through Self-help is our Motto." - Karmaveer

Rayat Shikshan Sanstha's

# Dr. Patangrao Kadam Mahavidyalaya, Ramanandnagar (Burli)

Tal: Palus, Dist: Sangli, Pin: 416 308

## SOIL TESTING AND ANALYSIS

Short Term Course

#### CERTIFICATE

Coordinator Chief Coordinator

Department of Geography
Dr. Patangrao Kadam Mahavidyalaya,
Ramanandnagar (Burli)

I/C Principal Dr. Patangrao Kadam Mahavidyalaya, Ramanandnagar (Burli)

# Dr. Patangrao Kadam Mahavidyalaya, R. Nagar (Burli)

## **Short Term Courses**

# "Soil Testing & Analysis"

## 2022-2023

#### **MARK-SHEET**

		741	CAIVIX-DI					
Sr. No	Roll No.	Student Name	Theory (50)	Practical (30)	Field Visit (20)	Total (Marks (100)	Result	Remark
1	101	Dhende Sakshi Dadaso	29	20	15	64	Pass	Ist
2	102	Gurav Sanket Sunil	35	22	15	70	Pass	Dist.
3	103	Jadhav Siddharth Nandkumar	28	18	15	61	Pass	Ist
4	104	Kadam Pratiksha Ashok	Absent	Absent	Absent	Absent	Fail	Fail
5	105	Patil Ayush Ramesh	30	15	15	60	Pass	Ist
6	106	Patil Rushikesh Laxman	Absent	Absent	Absent	Absent	Fail	Fail
7	107	Patil Sangram Pralhad	35	20	15	70	Pass	Dist.
8	108	Pawar Dhanaraj Shashikant	Absent	Absent	Absent	Absent	Fail	Fail
9	109	Pawar Vishwajit Sanjay	Absent	Absent	Absent	Absent	Fail	Fail
10	110	Tatugade Prathmesh Sudam	29	16	15	60	Pass	Ist

Co-ordinator

Head,
Head,
Department of Geography
Dr. Patangrao Kadam Mahavidyalaya,
Ramanandnagar (Burli)

# Dr. Patangrao Kadam Mahavidyalaya, R. Nagar (Burli) Short Term Courses Examination, March -2023

Paper Name:- Soil Testing and Analysis	Sub-Code:- STC- 2
Date: - 01/3/2023 Time: - 10.30 am to 12.30 pm	Total Marks: - 50
Instructions: 1) Attempt all questions serially. 2) Figure to the right in brackets indicate full mass. 3) All questions are compulsory.	arks
Que. 1. Choose the correct option.	(20)
1. Soil is the resource. (renewable/Non- rene	ewable)
2. pH value isneutral (0/7)	
3. Soil Profile is divided intopart. (4/3)	
4is the agent of soil erosion. (Rain/Chemical)	
5. The Central Soil Salinity Research Institute is Situated-	(Hariyana/Nagpur)
6. Physical properties of soil is related(Clay/pH	)
7. Nutrition deficiency identify by(soil testing	ng/ soil erosion)
8. Soil Sampling process is(collect soil/ col	lect the particular soil)
9. Soil sample usingmeter.(Electrical Condu	activity/Photo Flame)
10. Soil test report afterRecommendation by	technician.(Fertilizer/Humus
Que. 2. Short Notes any Two.	(20)
1. Soil Profile	
2. Physical Property	
3. Report	
Que. 3. Long Answer any one	(20)
1. Write in brief on Soil Formation.	
2. Write on Importance of Soil Testing.	

## Dr. Patangrao Kadam Mahavidyalaya, R. Nagar (Burli)

# **Short Term Courses Examination, March -2023**

Paper Name:- Soil Testing and Analysis  Sub-Code:- STC- 2  Date: - 01/3/2023 Time: - 10.30 am to 12.30 pm Total Marks: - 50				
Que. 1. Choose the correct option.	(20)			
1. Soil is the resource. (ren	ewable/Non- renewable)			
2. pH value isneutral (0/7				
3. Soil Profile is divided into	part. (4/3)			
4is the agent of soil erosion. (Ra	in/Chemical)			
5. The Central Soil Salinity Research Inc	stitute is Situated(Hariyana/Nagpur)			
6. Physical properties of soil is related	(Clay/pH)			
7. Nutrition deficiency identify by	(soil testing/ soil erosion)			
8. Soil Sampling process is	-(collect soil/ collect the particular soil)			
9. Soil sample usingmeter	(Electrical Conductivity/Photo Flame)			
10. Soil test report afterRec	ommendation by technician.(Fertilizer/Humus)			
Que. 2. Short Notes any Two.	(20)			
1. Soil Profile				
2. Physical Property				
3. Report				
Que. 3. Long Answer any one	(20)			
1. Write in brief on Soil Formation.				
2. Write on Importance of Soil Testing.				

Seat No	
---------	--

# Dr. Patangrao Kadam Mahavidyalaya, R. Nagar (Burli) Short Term Courses Examination, March -2023

Paper Name:- Soil Testing and Analysis (Practical)

Sub-Code:- STC- 2

Date: - 31/3/2023 Time: - 10.30 am to 12.30 pm Total Marks: - 30

Instructions: 1) Attempt all questions.

Que. 1. Preparation of Chemical required for soil testing.

Que.2. Processing of Soil Sampling for analysis.

Que.3. Determination of PH of soil sample using PH meter.

## Dr. Patangrao Kadam Mahavidyalaya, R. Nagar (Burli)

## **Short Term Courses**

## "Soil Testing and Analysis"

#### **NOTICE**

All the Students of "Soil Testing and Analysis" short term course of the Geography Department are hereby informed that of examination (Theory and Practical) will be conducted in month of 30 & 31 March 2023. The Dates and time table are as fallows.

Examination	Date	Time		
Theory	30.03.2023	10.30. a.m. to 12.30 p.m.		
Practical	34.03.2023	10.30 a.m. to 12.30 p.m.		

Course Co-ordinator

PATANGRAO PARAMENTANA PARAMENT

Department of Geography
Dr. Packenrao Kadam Mahavidyalaya,
Rarkanandnagar (Burli)

## Dr. Patangrao Kadam Mahavidyalaya, Ramanandnagar (Burli)

**Short Term Course Department of Geography** 

**TIME TABLE: 2022 -2023** 

## Soil Testing and Analysis

P.N. / Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
10:30 to 11:30	Mr. Gawari D. P.	-	Mr. Gawari D. P.			Mr. Maske S. A.
11:30 to 12:30	-	Ms. Madavi A. B.	Mr. Gawari D. P.			Ms. Madavi A. B.
12:00 to12:50	Ms. Madavi A. B.	Mr. Maske S. A.	Mr. Gawari D. P.	Mr. Gawari D. P.	Mr. Maske S. A.	Ms. Madavi A. B.

Short Term Course Co-Ordinator

Department of Geography
Department of Geography
Dr. Patangrao Kadam Mahavidyaiaya,
Ramanandnagar (Burli)

Principal,
Or. Patangraio viadam Mahavidyalaya.
Ramanandnagar (Burli)
Tal. Palus. Divi. Cangli.

# Dr. Patangrao Kadam Mahavidyalaya, Ramanandnagar (Burli) Department of Geography

2022-2023

# **Short Term Course Soil Testing and Analysis**

#### **ENROLLMENT**

Sr.No.	Student Name
1.	Dhende Sakshi Dadaso
2.	Gurav Sanket Sunil
3.	Jadhav Siddharth Nandkumar
4.	Kadam Pratiksha Ashok
5.	Patil Ayush Ramesh
6.	Patil Rushikesh Laxman
7.	Patil Sangram Pralhad
8.	Pawar Dhanaraj Shashikant
9.	Pawar Vishwajit Sanjay
10.	Tatugade Prathmesh Sudam



Head,
Department of Geography
Dr. Patangrap Kadam Mahavidyalaya,
Tanagar (Burli)

## Rayat Shikshan Sanstha,Satara Karmaveer Vidyaprabodhini

#### 2022-2023

Name of College: - Dr. Patangrao Kadam Mahavidyalaya. Ramanandnagar (Burli)

Department: Geography

#### **Short Term Course**

Name of Course: "Soil Testing and Analysis"

(Duration 90Hours)

Total Credits 4:- 1 Credit = 15 Hours of Theory and one

1 Credit = 30 Hours of Practical

#### **Objectives**

- 1) To provide basic knowledge of soil testing and analysis.
- 2) To provide skills education of soil testing and analysis.
- 3) To skills in soil & water testing lab maintenance.
- 4) To develop communication and management skill.

## Theory Syllabus (30Hrs. = 2 Credits)

Module	Theory Hrs.	Total Hrs.
odule 1. Introduction to Soil Science		
• Definition of soil,		
• Formation of Soil.	15	15
• Soil Properties		
Soil Profile		
<ul> <li>Odule 2. Soil Testing And Analysis</li> <li>Importance of Soil Testing and analysis.</li> </ul>		
<ul> <li>Study of Instrument.</li> <li>Soil Test Report and Fertilizer</li> </ul>	15	15
Recommendation.		
<ul> <li>Study of Laboratory Setup</li> </ul>		

## Practical Syllabus ( 60Hrs.= 2 Credit)

# List of 15 Practical

Module	Practical Hrs.	Total Hrs.
Module 1. Field Visit & Report Writing		
Visit to Soil Testing Laboratory		
Report writing.		
• Visit to farmers fields for collection of soil	16	16
samples.		
• Identification of nutrient deficiency Symptoms		
in Crop		
Module 2. Soil Testing And Analysis		
• Preparation of Chemical required for soil		
testing.		
<ul> <li>Processing of Soil Sampling for analysis.</li> </ul>		
• Determination of PH of soil sample using PH		
meter.	28	28
Determination of Electrical Conductivity of soil		
sample using Electrical Conductivity meter.		
• Determination of available Nitrogen from soil		
sample.		
• Determination of available Phosphorus from		
soil sample.		
<ul> <li>Determination of available Potassium from soil</li> </ul>		- 7
sample.		
Module 3. Preparation of soil test summaries		
<ul> <li>Preparation of soil test report.</li> </ul>	12	12
• Interpretation of result.		
• Fertilizer recommendation.		
Module 4. Preparation of soil Health Card	04	04
Total - 90 Hours	Theory	Practical 60
	30 Hrs.	Hrs.

#### **Learning Outcomes:-**

- 1. To understand of definitions and concept of soil science
- 2. To understanding the application.
- 3. Identify the importance of soil and soil related problem.
- 4. Students get skills of soil sample collection, anyalisis and interpretation of soil sample.
- 5. To create report and Fertilizer recommendation to farmer.

#### • References :-

- 1. Soil Science: Dr. Satish Bhagwantrao Aher & Dr. Dharmendra Singh
- 2. Soil Testing: K. V. S. Apparao
- 3. Soil Analysis: An Interpretational Manual: S. S. Jatav & E. Sathyanarayan
- 4. Laboratory Manual for Soil Testing :- Dr. D.K. Maharaj & S.K. Kataria
- 5. मृदा भूगोल :- A.K. Khatib

• Examination Pattern :- Theory Examination

: 50 Marks

Practical

: 30 Marks

Field visit / Industrial visit

: 20 Marks

#### **Board of Studies:-**

Sr.	Name	Designation	Mobile No	e-mail
1	Dr. A.S. Khade	Head of Department	7720889888	askhade11@gmail.com
2	Ms. A. B. Mamlayya	Chief Co-ordinator	7410781096	anumamlayya@gmail.com
3	Ms. A. B. Madavi	Short Term Course Co- ordinator	8975134076	Asha.madavi@gmail.com
4	Mr. D. N. Gawari	Placement Officer	9960343569	gawaridhanesh@ymail.com
5	Mr. S.R. Patil	Expert From Respective Field	9860271729	karntisugar.env@gmail.com

Short Term Course Co-ordinator

Ms. A. B. Madavi

RANA ROURING AR BURLING WILLIAM ANALYD HARMAN ANALYD HARMA

& Principal

### Dr. Patangrao Kadam Mahavidyalaya. Ramanandnagar (Burli)

### Karmaveer Vidyaprabodhini

#### **Short Term Course**

#### 2022-2023

#### **Department of Geography**

Name of Course: "Soil Testing and Analysis"

(Duration 90Hours) Total Credits 4:

**Short Term Course: -**

Ms. Asha Budharam Madavi

Co-ordinator

Email:-

asha.madavi@gmail.com

Mobile No.: -

8975134076

Course Fee: -

500/- per student

**Total Students:-**

10

MoU:-

01

**Board of Studies:-**

Sr.	Name	Designation	Mobile No	e-mail
1	Dr. A.S. Khade	Head of Department	7720889888	askhade11@gmail.com
2	Ms. A. B. Mamlayya	Chief Co-ordinator	7410781096	anumamlayya@gmail.com
3	Ms. A. B. Madavi	Short Term Course Co- ordinator	8975134076	asha.madavi@gmail.com
4	Mr. D. N. Gawari	Placement Officer	9960343569	gawaridhanesh@ymail.com
5	Mr. S.R. Patil	Expert From Respective Field	9860271729	karntisugar.env@gmail.com

Short Term Course Co-ordinator

Principal