



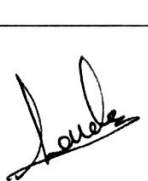
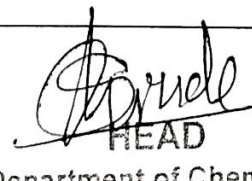
Mula Education Society's
Arts, Commerce & Science College, Sonai

Department of Chemistry

Certificate Course of Soil and Water Analysis

No. of Lectures Allotted = 30L

Section-I Soil and Water Analysis [Theory] 18L	
Soil Analysis	
1. Chemistry of soil [4L] Definition of soil, components of soil, physical properties of soil, Texture, colour, temperature, density, moisture & porosity. Chemical properties of soil- soil reaction, factors controlling soil reaction, buffering capacity exchange.	
2. Problematic Soil [2L] Acidic soils, alkaline soils, saline soils, their formation and reclamations.	
3. Soil Testing [3L] Importance of soil testing, soil fertility, factors affecting soil fertility, interpretation of soil test data, fertilizer recommendations.	
Water Analysis	
1. Introduction [2L] Introduction and classification of water, Types of hard and soft water (Soap action), Types of hardness, method for removal of hardness of water	
2. Water Chemistry [2L] Definition of water, components of water, physical properties of water	
3. Sampling of water and waste water [3L] Sample collection and preservation, risk and precautions, sample containers, number of samples. Quality of samples, sample storage before analysis, Gap between Collection and analysis, preservation techniques.	
4. Water testing and problematic water [2L] Importance of water testing, water standards, factor affecting on water quality, water standards (drinking), water standards (potable) and water standards (waste water).	
Section-II Soil and Water Analysis [Practical] (Any Six) 12L	
1. Collection and preparation of soil samples. 2. Determination of pH and electrical conductivity and total soluble salts (TDS) of soil and water. 3. Determination of available nitrogen from soil by alkaline permanganate method. 4. Determination of available phosphorous from soil by olsens colorimetric method. 5. Determination of Iron content by spectrophotometer/colorimeter method. 6. Determination of CO ₃ - /HCO ₃ - and Cl- From water samples. 7. To determine total hardness of given water sample by using EDTA method. 8. Determination of dissolved oxygen in water sample by wrinkle's method. 9. Determination of BOD of given water sample. 10. Determination of COD of given water sample. 11. To determine the turbidity of given water sample. 12. Determination of Na+ & K+ in water samples. 13. Determination of SO ₄ — Ions in water.	

 
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Department of Chemistry
Arts, Commerce and Science College
Sonai, Tal. Newasa, Dist Ahmednagar

Art's, Commerce and Science College, Sonai
Value Added Certificate course of Soil and Water Analysis
Assessment Procedure
(Academic year-2024-25)

A) Examination Pattern:

1. Theory = 50 marks(Theory Exam+ Assignment + Oral)
2. Practical = 50 marks
3. Total marks per year 30 Marks (Theory Exam) + 50 marks (practical's)+ 10 marks (Assignment)+ 10 marks (Oral) = 100 marks

Theory examination will be of 1 hour duration. for 30 marks (10M for MCQ+20 Marks for Short questions)

Practical Examination: Practical examination will be of 3 hours duration. Certified journal is compulsory to appear for practical examination. There shall be two expert and two examiners per batch for the practical examination. The pattern of question papers shall be:

- Q1. Perform one experiment for 30 Marks
- Q2. Journal for 10 Marks
- Q3. Oral for 10 Marks

B) Standard of Passing for the course.

The following standard of passing for the Value added Certificate course of Soil and water analysis in various faculties will be applicable as follows:

1. A student shall have to secure 40% of marks in Theory and Practical examination separately in order to pass in those heads of passing. He shall be declared to have passed the examination, if he/she passes in all heads of passing at examinations.
2. Grading system is to assess the student performance as follows:

Grading Scale:

Grade	Marks
A	75-100
B	65-74
C	55-64
D	45-54
E	40-44
F	Below 40

Signature

Signature
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Department of Chemistry
Arts, Commerce and Science College
Sonai, Tal. Newasa, Dist. Ahmednagar



Arts, Commerce & Science College, Sonai.

Department of Chemistry

ACA – R-23(A)

Rev : 00

Date: 15.06.2020

Class- F.Y./SY./T.Y.B.Sc.

Soil and Water Analysis
Roll Call List -

Subject –Chemistry

Academic Year: 2024-25

Annual /Semester: I

S.N	Name Of The Student	Gender	Class	Category	Contact No.	Email ID	Sign
1.	Adherao Diksha Ajinath	F	T.Y.B.Sc.	Open	9356870309	dikshaadherao@gmail.com	Adherao
2.	Bankar Bhakti Shivaji	F	T.Y.B.Sc.	OBC	9359506517	Bankarbhakti290@gmail.com	B.S. Bankar
3.	Bansode Ashvini Balasaheb	F	F.Y.B.Sc.	NTC	9699246540	Ashvinib42@gmail.com	A. Bansode
4.	Dahatonde Jyoti Sanjay	F	F.Y.B.Sc.	OBC	8180097716	Sanjaydahatonde94@gmail.com	Jyoti S.D
5.	Dahatonde Sakshi Rajendra	F	F.Y.B.Sc.	OBC	8999845503	Pranavdahatonde729@gmail.com	Sakshi D
6.	Dahatonde Sandhya Sanjay	F	F.Y.B.Sc.				Sandhya
7.	Dahatonde Sonali Machindra	F	F.Y.B.Sc.	OBC	7218210805	Premdahatonde04@gmail.com	Sonali
8.	Darandale Harshad Balasaheb	M	T.Y.B.Sc.	OBC	7972065301	darandalehb@gmail.com	Harshad
9.	Darandale Tushar Somnath	M	T.Y.B.Sc.	OBC	9322378122	tushardarandale65@gmail.com	Tushar
10.	Dushing Pranali Anil	F	T.Y.B.Sc.	OBC	8459010017	dushingnilesh84@gmail.com	Pranali
11.	Gavhane Nikhil Sunil	M	T.Y.B.Sc.	Open	775007175	Nishantgavhane5780@gmail.com	Nikhil
12.	Gawali Nikita Sopan	F	F.Y.B.Sc.	OBC	8080207536	Gawalinikita151@gmail.com	Nikita
13.	Ghawate Saurabh Dilip	M	F.Y.B.Sc.	OBC	9021976528	ghawatesourabh71@gmail.com	Saurabh
14.	Hapase Komal Sambhaji	F	T.Y.B.Sc.	OBC	9699955053	SambhajiHapse93@gmail.com	Komal
15.	Jangale Mayur Vilas	M	T.Y.B.Sc.	OBC	9860696725	mayurjangale2004@gmail.com	Mayur
16.	Jangale Narendra Bhausaheb	M	F.Y.B.Sc.	OPEN	7058553146	Narendrangangale2004@gmail.com	Narendra
17.	Jangale Nilesh Kailas	M	F.Y.B.Sc.	OBC	9623676637	nileshjangale7@gmail.com	Nilesh
18.	Jangale Pratik Gorakshanath	M	F.Y.B.Sc.	OPEN	8459846605	Pratikjangale2005@gmail.com	Pratik



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Department of Chemistry

19.	JangaleSanketNavnath	M	F.Y.B.Sc.	OPEN	9834740462	Sankejangale050505@gmail.com	
20.	Jangalesiddharth Satish	M	T.Y.B.Sc.	OBC	9021955138	SiddharthJangale@gmail.com	
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29.	NimaseSiddgarthDigmbar	M	T.Y.B.Sc.	OBC	7499559605	Siddharthnimase96@gmail.com	
30.	PhatakeTejas Ramnath	M	T.Y.B.Sc.	OBC	7249614942	tejasphatake464@gmail.com	
31.	Pondhe Abhishek Sarjearo	M	T.Y.B.Sc.	N.T.C.	7756914303	Abhishekpondhe10@gmail.com	
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34.	Sawant Amol Bhaurao	M	F.Y.B.Sc.	NTB	8263043088	Sawantamol278@gmail.com	
35.	Shaikh Anwar Shakir	M	F.Y.B.Sc.	OPEN	7774913232	shakirasekha@gmail.com	
36.	Shelake Ajay Nagesh	M	F.Y.B.Sc.	OBC	9270171138	ajayshelake9850@gmail.com	
37.	Tambe Mayuri Balasaheb	F	T.Y.B.Sc.	Open	9881314938	Mayuritambe1551@gmail.com	
38.	TarawadeKomalJalindar	F	T.Y.B.Sc.	Open	9545400689	TarawadeKomal2003@gmail.com	
39.	Thorat Samir Popat	M	F.Y.B.Sc.	NTC	9022042241	thoratsamir.789@gmail.com	
40.	YelwandeVaishnaviGorakshnath	F	T.Y.B.Sc.	OBC	8482984311	yelwandeVaishnavi33@gmail.com	 V.G. Yelwande



Mula Education Society's
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Department of Chemistry

ACA – R-28
Rev : 00
Date: 15.06.2018

Test Time Table
Value added Course in Soil and Water Analysis

Academic Year: 2024-25
Annual /Semester-I/II

Date: 14/09/2024

Ref: MES/ACSC/ACA/ /

All the students of Value added Course in Soil and Water Analysis are hereby informed that following is the schedule for the lecture and practical to be conducted from 18/09/2024

Theory Time Table

Sr. No	Date/Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1.	11:30am-12:30am 16/09/2024- 21/09/2024	-	-	WNB	WNB	LMB	LMB
2.	11:30am-12:30am 23/09/2024- 28/09/2024	LMB	LMB	LMB	LMB	LMB	WNB
3.	11:30am-12:30am 30/09/2024- 05/10/2024	LMB	LMB	WNB	-	-	-
4.	11:30am-12:30am 16/12/2024- 21/12/2024	LMB	LMB	LMB	LMB	LMB	-

Practical Time Table

Sr.No	Date/Time	Lab No.	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
5.	12:00pm- 3:00pm 07/10/2024 12/10/2024	Lab No.1	Batch-A (LMB)	Batch-A (LMB)	Batch-A (LMB)	Batch-A (LMB)	Batch-A (LMB)	Batch-A (LMB)
6.		Lab No.2	Batch-B (WNB)	Batch-B (WNB)	Batch-B (WNB)	Batch-B (WNB)	Batch-B (WNB)	Batch-B (WNB)

1)Prof. Lande M.B. (LMB) 2) Prof. Wagh N. B. (WNB)

Coordinator

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Department of Chemistry
Arts, Commerce and Science College
Sonai, Tal. Newasa, Dist Ahmednagar



Mula Education Society's
Arts, Commerce & Science College, Sonai.

Department of Chemistry

ADM - R-25

Rev : 00

Date: 15.06.2018

Notice And Circular

Academic Year: 2024-25

Annual/ Semester: I /II

Ref: MES/ACSC/ /

Date:03/01/2025

Value Added Certificate Course of Soil and Water Analysis
Theory and Practical Examination Time Table

Students of Value added certificate course in soil and water analysis are informed that their Theory and practical examination will be conducted from 06/01/2025 to 07/01/2025.

Instructions to the Students:

- Students should be present half an hour before the exam.
- Students will not be allowed for exam without identity card and dress code.
- No Rexam will be conducted for the absent students.
- Theory Examination will be 30 marks (10M for MCQ+20 Marks for Short Question); Time 1hr
- Practical Examination will be 50 marks (30 Marks to perform One experiment +10 Marks Journal + 10 Marks Oral); Time:3hrs
- Theory Exam seating arrangement:

Date & Time	Block No.	Roll No.	Room No.
06/01/2025 11:30am to 12:30pm	1	01 to 20	19
	2	21 to 40	19

➤ Practical Exam Batches:

Date & Time	Batch	Roll No.	No. of students	Lab. No.
07/01/2025 12:00pm to 3:00pm	A	01 to 20	20	01
	B	21 to 40	20	02


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Department of Chemistry
Arts, Commerce and Science College
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Mula Education Society's
Arts, Commerce & Science College, Sonai.

Department of Chemistry

Certificate course in Soil and Water Analysis 2024-25 (Term-I)

Result Analysis

(Note: Grade Point: A=75-100, B=65-74, C=55-64, D=45-54, E=40-44, F=below 40)

S. N.	Name Of The Student	Theory Exam (30M)	Assignment (10)	Oral (10M)	Practical Exam (50M)	Total (100M)	Grade
1.	Adherao Diksha Ajinath	24	08	09	38	79	A
2.	Bankar Bhakti Shivaji	25	08	09	43	85	A
3.	Bansode Ashvini Balasaheb	24	08	09	43	84	A
4.	Dahatonde Jyoti Sanjay	26	10	09	41	86	A
5.	Dahatonde Sakshi Rajendra	26	10	09	42	87	A
6.	Dahatonde Sandhya Sanjay	22	09	09	46	86	A
7.	Dahatonde Sonali Machindra	28	09	09	45	91	A
8.	Darandale Harshad Balasaheb	26	08	09	39	82	A
9.	Darandale Tushar Somnath	26	08	09	40	83	A
10.	Dushing Pranali Anil	23	08	08	36	75	A
11.	Gavhane Nikhil Sunil	--	--	--	--	--	AB
12.	Gawali Nikita Sopan	27	08	09	44	88	A
13.	Ghawate Saurabh Dilip	23	08	08	35	74	B
14.	Hapase Komal Sambhaji	--	--	--	--	--	AB
15.	Jangale Mayur Vilas	24	08	09	44	85	A
16.	Jangale Narendra Bhausaheb	23	08	09	41	81	A
17.	Jangale Nilesh Kailas	23	08	09	45	85	A
18.	Jangale Pratik Gorakshanath	26	09	09	40	84	A
19.	Jangale Sanket Navnath	23	08	08	41	80	A
20.	Jangale siddharth Satish	27	08	09	35	79	A
21.	Karjule Akshay Balasaheb	23	08	09	40	80	A
22.	Katore Vitthal Mhatardev	26	08	08	43	85	A
23.	Khatik Sourabh Ramesh	22	08	09	37	76	A
24.	Lahore Mayuri Sunil	25	08	09	38	80	A

25.	Lande Pooja Kkrushna	--	--	--	--	--	AB
26.	Mote Prathamesh Sunil	26	08	09	40	83	A
27.	Mote Yash Sambhaji	22	08	08	38	76	A
28.	Nimase Gayarti Appasaheb	21	08	09	42	80	A
29.	Nimase Sidharth Digambar	29	09	09	35	82	A
30.	Phatake Tejas Ramnath	29	09	09	46	93	A
31.	Pondhe Abhishek Sarjerao	17	08	09	36	70	B
32.	Pund Kalyani Vijay	24	08	09	38	79	A
33.	Raut Rutuja Shamprasad	--	--	--	--	--	AB
34.	Sawant Amol Bhaurao	24	09	08	37	78	A
35.	Shaikh Anwar Shakir	23	08	08	41	80	A
36.	Shelake Ajay Nagesh	23	08	09	44	84	A
37.	Tambe Mayuri Balasaheb	23	09	09	34	75	A
38.	Tarawade Komal Jalindar	25	08	09	41	83	A
39.	Thorat Samir Popat	23	08	08	38	77	A
40.	Yelwande Vaishanvi Gorakshnath	25	09	09	42	85	A


Coordinator


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Tal. Newasa, Dist. Ahilyanagar-414105



Mula Education Society's
Arts, Commerce & Science College, Sonai

Academic Year: 2024-25

VALUE ADDED COURSES

Soil and Water Analysis

REMUNERATION BILL FOR EXAMINATION & EVALUATION

S.R. No.	Name Of Faculty	Designation	Rate of Remuneration to Paper-Setting (A)	Rate of Sr./Jr. Supervision (B)	No. of Paper-Setting (C)	No. of Supervision or Session (No. of Students per Block=30) (D)	Total No. of Students (E)	Rate of Remuneration to Examinin g per Theory Paper (F)	Total Remunera tion to Examinin g per Theory Paper (E*F)	Rate of Remunera tion to Examinin g Per Candidate , per Practical	Total Remunera tion to Examinin g Per Candidate , per Practical	Result Preparation on (H)	Total Amount	Sign
1	Mr. B. L. Shinde	Convener	0	150	0		36	-	-	-	-	-	300	<i>Shinde</i>
2	Mrs. M. B. Lande	Coordinator	535	0	2	1	36	12	432	30	1080	200	2932	<i>Lande</i>
3	Mr. N. B. Wagh	Faculty				1							150	
												TOTAL	3382	

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Tal. Newasa, Dist. Ahilyanagar-414105



Mula Education Society's
Arts, Commerce & Science College, Sonai
Academic Year: 2024-25
Soil and Water Analysis
VALUE ADDED COURSES

REMUNERATION BILL FOR NON-TEACHING STAFF & OTHER EXPENDITURE

S.R.No	Name Of Faculty	Designation	Total No. of Students (A)	Rate of Remuneration per Student (B)	Others (C)	Total Amount (D)	Sgin	Remark
1	Dr. S.L. Laware	Principal	-	-	1000	1000		
2	Dr. D.E. Zine	CEO			1000	1000		
3	Mr. Sandip Zine	ACCOUNTANT			500	500		
4	Mr. R.K.Kusalkar	CLERK	-	-	500	500		
5	Mr. Darandale V.S.	Subject Expert				130		
6	Mr.Shirsath S.R.	Lab.Assistant				105		
7	Mr.Gadakh V.S.	Lab.Attendant				85		
8	Mr. Barde R.N.	Lab.Attendant				85		
9	Other Expenditure	CERTIFICATE PRINTING	36	20	-	720		
10	Other Expenditure	MISCELLANEOUS	-	-	2000	2000		
					TOTAL	6125		

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Mula Education Society's
Arts, Commerce & Science College, Sonai
Academic Year: 2024-25
VALUE ADDED COURSES
Soil and Water Analysis
REMUNERATION BILL FOR THEORY

S.R.No	Name Of Faculty	Designation	Rate of. Rem. per Lecture (A)	Rate of Rem. Per Batch [20	No.of Lectures (C)	Total No. of Students (D)	No. of Batches [20 students per Batch](E)	Others (F)	Total Amount (G)	Sgin
1	Mr. B.L.Shinde	Convener	-	-	-	36	-	5	180	<i>Shinde</i>
2	Mrs. M. B. Lande	Coordinator	-	-	-	36	-	20	720	
3	Mrs. M. B. Lande	Faculty	250		14		6		5000	
5	Mr. N.B. Wagh	Faculty	250		4		6		2500	
								TOTAL	8400	

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