

Shri Sarda Education Society's

Smt. Radhbai Sarda Arts, Commerce and Science college Anjangaon Surji

Department of Chemistry

(Academic session 2015-2016)

To,

The Principal,

Smt. Radhbai Sarda Arts, Commerce and

Science College, Anjangaon Surji

Subject: Permission for conducting **Add on Course** entitled "Soil and Water analysis" for the session 2015-2016

Hon'ble Sir,

With reference to above subject, we request you to kindly grant us permission for conducting the said course in the department of Chemistry. The duration of the course will be 30 hours (2 hours X 15 working days). The syllabus of the course is enclosed herewith this letter for your kind consideration. The course will helpful to our students in view point of their development towards awareness of soil and water pollution. Precaution of health by polluted water.

Date- 16/9/2015

Place- Anjangaon Surji




Head of the Department

Department of Chemistry

Enclosures-

1. Syllabus of Add On Course

Permission granted
16/9/15
Principal
Smt. Radhbai Sarda College Of
Arts, Commerce & Science
Anjangaon Surji

Shri Sarda Education Society's
Smt. Radhbai Sarda Arts, Commerce and Science college Anjangaon Surji
Department of Chemistry
(Academic session 2015-2016)


NOTICE

Date- 10/9/2015

All the faculty members of the Chemistry department are informed that a departmental meeting related to “Add-On” course is arranged on 15/9/2015 at 4.00 pm at the department. You all are requested to present for the meeting with some innovative ideas. The minutes of the meeting are as follows.

1. It was unanimously decided to start Add on course for 30 Hours.
2. To decide the topic and design syllabus.
3. To frame the time table.
4. Student would be taken to field visit, during the course for practical knowledge.
5. Exam will be conducted after completion of the course.




Head of the Department

Shri Sarda Education Society's

Smt. Radhbai Sarda Arts, Commerce and Science college Anjangaon Surji

Department of Chemistry

(Academic session 2015-2016)

NOTICE

Date- 21/9/2015

All the students pursuing degree in science are hereby informed that the Department of Chemistry is going to conduct "Add On" course from 1/10/2015 to 20/10/2015. Students who want to register for the course should contact Shri Pavan Vijay Raut on and before 25/9/2015.



Head of the Department

Department of Chemistry



Principal

Principal

Smt. Radhbai Sarda College of
Arts, Commerce & Science
Anjangaon Surji

Shri Sarda Education Society's

Smt Radhabai Sarda Arts, Commerce and Science College, Anjagaon Surji

Department of Chemistry

Add on Course on "Soil and Water Analysis"

Session: 2015-2016

SYLLABUS

Unit I: (02 Lectures = 04Hours)

- 1.1 Soil and water analysis : Meaning and general introduction
- 1.2 Introduction and Aim of Soil and water analysis.
- 1.3 Scope importance and present status in India

Unit II: (03 Lectures= 06Hours)

- 2.1 Selection of site, collection of sample (Theory)
- 2.2 Different test of water analysis. (Theory)
- 2.3 EC, pH, Calcium Hardness, sulphate. (Theory)
- 2.4 Acidity, Alkalinity, DO, Fecal coliform, Total coliform (Theory).

Unit III: (04 Lectures= 08 Hours)

- 3.1 Collection of water sample from various sites. (Practical)
- 3.2 Different test of water analysis. (Practical)
- 3.3. EC, pH, Calcium Hardness, Sulphate. (Practical)
- 3.4 Acidity, Alkalinity, DO, Fecal coliform, Total coliform (Practical)

Unit IV: (04 Lectures= 08 Hours)

- 4.1 Different test of soil analysis in brief. (Theory)
- 4.2 Porosity, pH, Total organic carbon (Theory)
- 4.3 Nitrogen, Phosphorus Potassium (Theory)

4.4 collection of soil sample from various parts (Practical)

4.5 Different tests of soil analysis (Practical)

4.6 Porosity, pH, Total organic carbon (Practical)

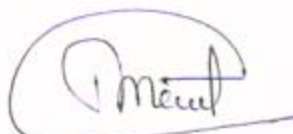
Unit V:(02 Lectures= 04Hours)

5.1 Observation and calculation of water analysis.

5.2 Observation and calculation of soil analysis.

Reference Book:

- 1) APHA VOL-10 (Issue on 2000)
- 2) "Laboratory Manual on Water Analysis" by National Environmental Engineering Research Institute.
- 3) Analysis Report (2005) "A National Assessment of Tap Water Quality" EWG. INVESTIGATION GROUP
- 4) "Water and waste water Engineering " by Metcoff and Eddy


P.V. Raut




Smt. Ra
Arts, Comm.
Anjangaon Surji

Shri Sarda Education Society's

Smt. Radhbai Sarda Arts, Commerce and Science college Anjangaon Surji

Department of Chemistry

Add On Course

(Academic session 2015-2016)

Attendance Sheet

Title- Soil and Water Analysis

Date- 1/10/2015

List of Enrolled students for Add on Course "Soil and Water Analysis"

S.No	Name of students	Class	Signature
1	Rashmi R Awandkar	B Sc II	Rashmi
2	Kalyani V Kurhekar	B Sc II	Kurhekar
3	Vaishnavi P Mahulkar	B Sc II	V.P. Mahulkar
4	Shri Nikhil G Mankar	B Sc II	N. Mankar
5	Shri Ashish A Dahake	B Sc II	A. Dahake
6	Rupali S Thakare	B Sc II	R.S. Thakare
7	Pratiksha S Kale	B Sc II	P.S. Kale
8	Vrushali S Pawar	B Sc II	V.S. Pawar
9	Pallavi D Aathwale	B Sc II	P.D. Aathwale
10	Ashwini P Kale	B Sc II	A.P. Kale
11	Nikita S Pete	B Sc II	N. Pete
12	Tejaswini S Chaukhande	B Sc II	T. Chaukhande
13	Tejal B Harane	B Sc III	Tejal B. Harane
14	Sampatti K Choukhande	B Sc III	S.K. Choukhande
15	Ashwini S Asalmol	B Sc III	Ashwini Asalmol
16	Kiran P Umabarkar	B Sc III	K.P. Umabarkar
17	Neha J Lande	B Sc III	Neha J. Lande
18	Vaishnavi S Bhawe	B Sc III	V. Bhawe
19	Ritesh D Bhagat	B Sc III	R.D. Bhagat
20	Shabnam Aafreen	B Sc III	S. Aafreen
21	Samreen Saba Sajidali	B Sc III	S. Sajidali
22	Vaishnavi S Katore	B Sc I	V.S. Katore
23	Kanchan V Thakare	B Sc I	K.V. Thakare
24	Chandrika V Hore	B Sc I	C. Hore
25	Renuka M Alkari	B Sc I	R. Alkari
26	Apeksha D Patil	B Sc I	A. D. Patil
27	Ashwini S Bhaskar	B Sc I	A. Bhaskar

28	Prajakta D Bhonde	B Sc I	P. D. Bhonde
29	Vaishnavi R Jawanjal	B Sc I	V. Jawanjal
30	Priyanka M Vyavahare	B Sc I	P. M. Vyavahare



Head of the Department


Principal



Principal
Smt. Radhabai Sarda College O.
Arts, Commerce & Science
Anjangaon Surji

Shri Sarda Education Society's
Smt Radhabai Sarda Arts, Commerce and Science College Anjagaon Surji
Department of Chemistry
Add on Course Soil and water analysis


TIME TABLE

Session: 2015-2016

SN	DATE	TIME	TOPIC
1	01 October 2015	11:30 am	Inauguration and Interactive session with Guest.
2	03-05 October 2015	03-05 pm	Unit I
3	06-07 October 2015	03-05 pm	Unit II
4	08-10 October 2015	03-05 pm	Unit III
5	12-15 October 2015	03-05 pm	Unit IV
6	16-18 October 2015	03-05 pm	Unit V
7	20 October 2015	09-10:30 am	Exam


Head of the Department




Principal
Principal
Smt. Radhabai Sarda College of
Arts, Commerce & Science
Anjangaon Surji

Smt. RadhabaiSarda Arts, Commerce & Science College, Anjangaon Surji

Add on Course

Attendance Sheet

Name of the Course: Soil and water analysis

[illegible]

22	Vaishnavi S Katore	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
23	Kanchan V Thakare	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
24	Chandrika V Hore	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
25	Renuka M Alkari	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
26	Apeksha D Patil	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
27	Ashwini S Bhaskar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
28	Prajakta D Bhonde	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
29	Vaishnavi R Jawanjal	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
30	Priyanka M Vyavahare	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

ment

Head of the Department

Principal

Principal



Principal
mt. Radhabai Sarda College Of
Arts, Commerce & Science
Anjangaon Surji

Shri Sarda Education Society 's
Smt Radhabai Sarda Arts, Commerce and Science College Anjagaon Surji
Department of Chemistry
(Academic Session: 2015-16)
Question paper
Name of the Course: Soil and water analysis
Date: 20/10/15 Max Marks: 50

Q.1 Answer in one sentences.

10M

- i. Name tests used in soil analysis.
- ii. What is hardness of water.
- iii. Name the different parameter used in water analysis.
- iv. Effects of water pollution on soil.
- v. What is soil pollution?

Q 2 Write a short note on. (Any Two) 10M

- i. Importance of soil and water analysis
- ii. Diseases cause by polluted water.
- iii. Factors affecting on soil quality.

Q.3 Describe the dissolved oxygen. 10M

OR

Q.3 Describe the method of analysis of water in detail.

Q.4 Write a short note on. (Any Two)10M

- i Total coliform and fecal coliform.
- ii Describe various factor cause soil pollution.
- iii Why soil quality decreases.

Q.5 Write a short note on. (Any Two)

10M

- i) Write short note on sampling of soil.
- ii) What is the relation between DO and biological test.
- iii) Why analysis water and soil is necessary.



Shri Sarda Education Society's

Smt Radhabai Sarda Arts, Commerce and Science College Anjagaon Surji

Department of Chemistry

Session: 2015-2016

Examination of Add on Course on Soil and Water Analysis

S no	Name Of The Student	Class	Date	Signature
1	Rashmi R Awandkar	B Sc II	20/9/15	Rashmi A.
2	Kalyani V Kurhekar	B Sc II	20/9/15	Kurhekar
3	Vaishnavi P Mahulkar	B Sc II	20/9/2015	V.P. Mahulkar
4	Shri Nikhil G Mankar	B Sc II	20/9/15	Nmankar
5	Shri Ashish A Dahake	B Sc II	20/9/15	A.A. Dahake
6	Rupali S Thakare	B Sc II	20/9/15	R.S. Thakare
7	Pratiksha S Kale	B Sc II	20/9/15	P.S. Kale
8	Vrushali S Pawar	B Sc II	20/9/15	V.S. Pawar
9	Pallavi D Aathwale	B Sc II	20/9/15	P.D. Aathwale
10	Ashwini P Kale	B Sc II	20/9/15	A.P. Kale
11	Nikita S Pete	B Sc II	20/9/15	N.Pete
12	Tejaswini S Chaukhande	B Sc II	20/9/15	Tejaswini S.
13	Tejal B Harane	B Sc III	20/9/15	Tejal B.
14	Sampatti K Choukhande	B Sc III	20/9/2015	S.K. Choukhande
15	Ashwini S Asalmol	B Sc III	20/9/15	Ashwini S.
16	Kiran P Umabarkar	B Sc III	20/9/15	K.P. Umabarkar
17	Neha J Lande	B Sc III	20/9/15	N.J. Lande
18	Vaishnavi S Bhawe	B Sc III	20/9/15	Bhawe
19	Ritesh D Bhagat	B Sc III	20/9/2015	R.D. Bhagat
20	Shabnam Aafreen	B Sc III	20/9/15	Aafreen
21	Samreen Saba Sajidali	B Sc III	20/9/15	Sajidali
22	Vaishnavi S Katore	B Sc I	20/9/15	V.S. Katore
23	Kanchan V Thakare	B Sc I	20/9/15	K.V. Thakare
24	Chandrika V Hore	B Sc I	20/9/15	C.Hore
25	Renuka M Alkari	B Sc I	20/9/15	R.M. Alkari
26	Apeksha D Patil	B Sc I	20/9/15	A.D. Patil
27	Ashwini S Bhaskar	B Sc I	20/9/15	A.Bhaskar
28	Prajakta D Bhonde	B Sc I	20/9/15	P.D. Bhonde
29	Vaishnavi R Jawanjal	B Sc I	20/9/2015	V.Jawanjal
30	Priyanka M Vyavahare	B Sc I	20/9/15	P.M. Vyavahare

Head of the Department



Principal

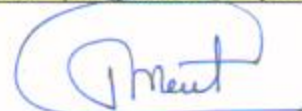
mt. Radhabai Sarda College
Arts, Commerce & Science
Anjagaon Surji

Shri Sarda Education Society's
SmtRadhabaiSarda Arts, Commerce and Science College AnjagaonSurji
Department of Chemistry

Session: 2015-2016

Examination Result of Add on Course "Soil and water analysis"

Sn	Name Of The Student	Max Marks	Marks Obtained	Signature
1	Rashmi R Awandkar	50	49	R.A. Welled
2	Kalyani V Kurhekar	50	37	K.V. Kurhekar
3	Vaishnavi P Mahulkar	50	48	V.P. Mahulkar
4	Shri Nikhil G Mankar	50	38	N.G. Mankar
5	Shri Ashish A Dahake	50	46	A.A. Dahake
6	Rupali S Thakare	50	43	R.S. Thakare
7	Pratiksha S Kale	50	45	P.S. Kale
8	Vrushali S Pawar	50	41	V.S. Pawar
9	Pallavi D Aathwale	50	46	P.D. Aathwale
10	Ashwini P Kale	50	34	A.P. Kale
11	Nikita S Pete	50	39	N.S. Pete
12	Tejaswini S Chaukhande	50	35	T.S. Chaukhande
13	Tejal B Harane	50	41	T.B. Harane
14	Sampatti K Choukhande	50	42	S.K. Choukhande
15	Ashwini S Asalmol	50	37	A.S. Asalmol
16	Kiran P Umabarkar	50	35	K.P. Umabarkar
17	Neha J Lande	50	34	N.J. Lande
18	Vaishnavi S Bhawe	50	37	V.S. Bhawe
19	Ritesh D Bhagat	50	42	R.D. Bhagat
20	Shabnam Aafreen	50	44	S.A. Aafreen
21	Samreen Saba Sajidali	50	45	S.S. Sajidali
22	Vaishnavi S Katore	50	44	V.S. Katore
23	Kanchan V Thakare	50	43	K.V. Thakare
24	Chandrika V Hore	50	39	C.V. Hore
25	Renuka M Alkari	50	44	R.M. Alkari
26	Apeksha D Patil	50	43	A.D. Patil
27	Ashwini S Bhaskar	50	39	A.S. Bhaskar
28	Prajakta D Bhonde	50	39	P.D. Bhonde
29	Vaishnavi R Jawanjal	50	44	V.R. Jawanjal
30	Priyanka M Vyavahare	50	43	P.M. Vyavahare



Coordinator




Principal

Principal
Smt. Radhabai Sarda College Of
Arts, Commerce & Science
Anjagaon Surji

Shri. Sarda Education Society's

Smt. Radhabai Sarda Arts, Commerce & Science College Anjangaon Surji, Dist Amravati

Admission Form for Course Work

Session: 2015-2016

Admission Form No. **000235**

A. Name of Applicant : Rashmi Ruparao Awandkar

B. Class: BSC-2nd year Date of Admission in College: 19/8/2015

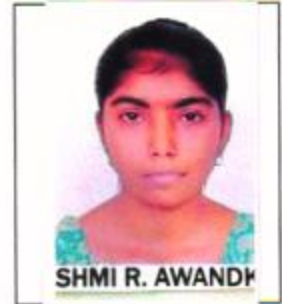
C. ID Number _____

D. Date of Birth: 23/4/1996 Category: OBC

E. Name of the Department: chemistry

F. Name of Course: Soil and water analysis

G. Title of the Course: Soil and water analysis



Note: I certify that the information given above is true and correct. If it is found false, my admission will be cancelled at any moment.



R. P. Awandkar
Signature of the Applicant

Shri. Sarda Education Society's

Smt. Radhabai Sarda Arts, Commerce & Science College Anjangaon Surji, Dist Amravati
Admission Form for Course Work

Session: 2015-2016

Admission Form No. **000198**

A. Name of Applicant : vaishali s. Katore

B. Class: BSc-I Date of Admission in College: 20/6/2015

C. ID Number 3428

D. Date of Birth: 7/7/1997 Category: OBC

E. Name of the Department: Chemistry

F. Name of Course: soil and water analysis

G. Title of the Course: soil and water analysis



Note: I certify that the information given above is true and correct. If it is found false, my admission will be cancelled at any moment.

V.S. Katore.
Signature of the Applicant


SHRI SARDA EDUCATION SOCIETY'S

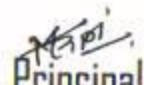
(SMT RADHABAI SARDA ARTS, COMMERCE AND SCIENCE COLLEGE
ANJANGOAN SURJI, DIST. AMRAVATI)



Certificate

This is to certify that Ku. Rashmi R. Awandkar of B.Sc II has successfully completed Add on Course entitled "SOIL AND WATER ANALYSIS" conducted by the Department of Chemistry from 01/10/2015 to 20/10/2015 at Smt. Radhabai Sarda Arts, Commerce and Science College, Anjangoan Surji, Dist. Amravati .


Head of the Department

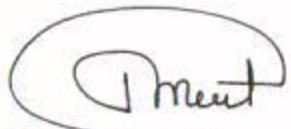

Principal
mt. Radhabai Sarda College Of
Arts, Commerce & Science
Anjangoan Surji

SHRI SARDA EDUCATION SOCIETY'S
(SMT RADHABAI SARDA ARTS, COMMERCE AND SCIENCE COLLEGE
ANJANGOAN SURJI, DIST. AMRAVATI



Certificate

This is to certify that Ku Vaishali S. Katore of B.Sc.I has successfully completed Add on Course entitled "SOIL AND WATER ANALYSIS" conducted by the Department of Chemistry from 01/10/2015 to 20/10/2015 at Smt. Radhabai Sarda Arts, Commerce and Science College, Anjangoan Surji, Dist. Amravati.


Head of the Department


Principal
mt. Radhabai Sarda College Of
Arts, Commerce & Science
Anjangoan Surji

Shri Sarda Education Society's

**SMT RADHABAI SARDA ARTS, COMMERCE & SCIENCE COLLEGE,
ANJANGAON SURJI**

Course Outcome of Add on course entitled "Soil and water analysis"

Academic Session 2015-2016

The Add on course in "Soil and water analysis" has been undertaken by the department of Chemistry during the academic session 2015-16. The duration of the course was 30 hours (15 days). Total 30 students were enrolled for the course. All the students have completed the course successfully.

- To provide a knowledge about the commercially important soil and water analysis.
- To provide a basic information about performance of analysis.
- To aware students about the different diseases cause by pollution.
- To give a detailed idea of starting own water and soil testing laboratory in less investment.
- To aware students about what precaution should taken to avoid pollution.
- To give detailed knowledge about soil and water analysis are important in the national and international level.


Head of the Department




Principal
Principal
Smt. Radhabai Sarda College,
Arts, Commerce & Sci.
Anjangaon Surji

Shri Sarda Education Society's
**SMT RADHABAI SARDA ARTS, COMMERCE & SCIENCE COLLEGE,
ANJANGAON SURJI**

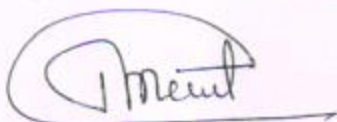
Department of Chemistry

Academic Session: 2015-16

SUMMARY REPORT OF ADD ON COURSE- "SOIL AND WATER ANALYSIS"

The certificate course in "Soil and water analysis" has been undertaken by the department of Chemistry during the academic session 2015-16. The duration of the course was 30 hours (15 days). Total 30 students were enrolled for the course. All the students have completed the course successfully. The attainment of the course is as follows:

- Course provided a basic information about analysis of soil and water.
- Students aware about the health problem created by water and soil pollution.
- Students get thorough knowledge why soil and water analysis is necessary for life.
- Students get detailed knowledge about the what precaution should taken to avoid pollution.
- Students get detailed idea of analysis water and soil so they can start their laboratory or work in other institute.
- Students learnt important of soil and water analysis in life.



Coordinator & Head



Principal

Principal
Smt. Radhabai Sarda College of
Arts, Commerce & Science
Anjangaon Surji