



**H.K.E. SOCIETYS
B.V.BHOOMARADDI ARTS, SCIENCE AND
COMMERCE COLLEGE, BIDAR**



Department of Chemistry

Value added course on Soil

And

Water Testing

2021-22

Course Co-ordinator

Dr. Mallikarjun Kote
Head and Assistant Professor
Department of Chemistry





Value added course on Soil and Water Testing
Institutional BOS Meeting Minutes

The Institutional BOS Meeting of the Department of Chemistry for the Value added course on Soil and Water Testing was held on 01-01-2022 at IQAC Room at 11.30 am.

Institutional BOS

Sr no.	Name	Institute	Designation
1	Dr. P Vithal Reddy	B V B College Bidar	Chairman
2	Dr. Mallikarjun Kote	B V B College Bidar	Member
3	Dr. Mahadev Udayagiri	Govt F G Kalaburgi	External Expert

At the beginning of the meeting chairman Dr. P Vitha Reddy welcomed all the members and briefed them about the progress of the department of chemistry. The members expressed their highly appreciation and satisfaction about the course and activities of the department.

After the discussion following resolutions were made

Item 1. Starting of value added course on soil and water testing

The BOS discussed and resolve that the course should be started from 02-01-2022

Item 2. Approval of the syllabus for value added course

The BOs discussed and approved the syllabus for the value added course on soil and water testing.

Item 3. Criteria for admission, regulation and policies to run the course and examination pattern.

The BOS discussed and approved the criteria for admission and resolved that the student should have enrolled in B Sc. with Chemistry as one of the subject. It in addition to this BOs also finalized the following pattern for the assessment of the course:

Continuous Evaluation Marks:	40	Theories: 20	Practical: 20
Course end examination Marks:	60	Theory: 30	Practical: 30
Total Marks:	100		

Meeting of the BOS was concluded with Vote of thanks by Dr. Mallikarjun Kote

Present Members of BOS

- Member Name**
1. Dr. P Vithal Reddy
 2. Dr. Mallikarjun Kote
 3. Dr. Mahadev Udayagiri

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Signature

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Department of Chemistry

Value added course on Soil and Water Testing

Time-Table

DATE/TIME	8 TO 9	9 TO 10	10 TO 10.30	10.30 to 1.30
Every Sunday	Theory	Theory	Break	Practical
	Theory	Theory		Practical
	Theory	Theory		Practical
	Theory	Theory		Practical
	Theory	Theory		Practical
	Practical	Practical		Practical


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Estd - 1960



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ಬೀದರ-585 403 - ಕರ್ನಾಟಕ

Hyderabad Karnataka Education Society's

B.V. BHOOMARADDI COLLEGE OF ARTS, SCIENCE & COMMERCE

BIDAR-585 403 - Karnataka



No. HKES/BVBDC/

Date : 01-01-2021

Date:

To,

The Principal
B V Bhoomaraddi College of Arts, Science and Commerce,
Bidar

Sub: Request to grant permission to Add-on course on "Soil Testing and Water Analysis" from the academic year 2021-22: Reg.

Respected Sir,

We would like to start the add-on course on "Soil Testing and Water Analysis" from the academic year 2021-22: with intake of 25 students. Please permit us to start the add-on course and do the needful.

Thanking You.

Permission is granted.


PRINCIPAL

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B V Bhoomaraddi College of Arts, Science and Commerce, Bidar
Department of Chemistry

Value added course on Soil and Water Testing

Preamble: Soil and water are one of the most important natural resources for human life. Testing and analyzing soil and water and obtaining some important information about its properties can be used to determine the quality of soil and water. This kind of scientific inquiry tend to the understand the status of soil and water resources which are important for human and agriculture both. Soil analysis is considered as significant tool to understand the nutrient needs of the plants, where as water analysis is important because it identifies contaminants and prevents water-borne diseases. Bidar district consists of large agriculturist population and hence this curse aimed to equip the students with tools and techniques and water and soil quality analysis by means of basic principles and procedures of chemistry, hence they can satisfy the local needs and social problems of farmers.

Learning Outcomes

- 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.

Instructional Design:-

This course is of 30 hours duration which includes theory classes, field Visit, Assignment and Field Project.

Course Structure and Examination Scheme:-

Total contact hours:	
Theory Classes:	10 Hours
Practical Lab Work:	20 Hours
30 Hours	

Continuous Evaluation Marks:	40	Theories: 20	Practical: 20
Course end examination Marks:	60	Theory: 30	Practical: 30
Total Marks:	100		

Eligibility: Students enrolled in B Sc program of this college

No. of Seats: 25



Value added course on Soil and Water Testing

Theory:

Unit I- Introduction to Soil analysis, Types of soil, Soil pollutants, role of soil testing for environment, Uses of soil analysis.

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

Practicals:

Part I – Soil Analysis

- 1) To determine PH of given soil sample.
- 2) To determine nutrient content (NPK) of soil.
- 3) To determine salinity of given soil sample.
- 4) To determine micronutrient content of soil sample.

Part II – Water Analysis

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

References:

1. **Manual On Soil, Plant And Water Analysis – 1 Jan 2007, by Dhyan Singh (Author), A1 Publisher**
2. **Manual for Soil and Water Analysis, P Buurman et al. Backhuys Publishers Leiden, 1996**



**Department of Chemistry
WORK-DONE**

TOPICS COVERED	
Theory	Practical
Role of Water Testing for environment and uses of water analysis	1) To determine the PH of given soil sample 2) To determine salinity of given sample of water
Water Pollutants	3) To determine nutrients content (NPK) of soil 4) To determine micronutrients content of soil sample
Introduction to soil analysis, types of soil and soil pollutants	5) To determine hardness of water 6) To determine PH of given water sample
Role of soil testing for environment , uses of soil analysis	7) To determine Alkalinity of water
Introduction to water analysis , types of water	8) to determine TDs of given sample of water

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Department of Chemistry

NOTICE

All the students are hereby informed that Department of Chemistry is offering the value added course on **Soil and Water Analysis** interested students can enroll their names with any faculty of department of chemistry on or before 02-01-2022

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B.V. BHOOMARADDI COLLEGE OF ARTS, SCIENCE & COMMERCE, BIDAR

List of Candidates taken admission for Value added course in the Year 2021-22
Name of the Course: Soil Testing and Water Analysis

Sl. No.	Roll No.	Name of the Candidate	Mobile No.	Signature of the Candidate
1	3	Aishwarya Ambanna	7760585311	
2	4	Asha Tukaram	7899422001	
3	7	Johnson Sundar Raj	9513086904	
4	11	Manisha Suryakanth	8296766951	
5	12	Rajkumar Eshwar	9108790179	
6	14	Ambika Manikrao	9916208222	
7	21	Chandrakanth Kashinath	8088158560	
8	22	Kavya Kupendra	6366127721	
9	25	Usharani Nelwade Shamrao	9242524652	
10	30	Akash Peerappa	9972944288	
11	36	Priyadarshini Vithal	7349671181	
12	41	Priyanka Mallikarjun Hosamani	9980963219	
13	48	Mamta Shivakumar	9611553045	Mamata
14	52	Geeta Shiddareddy	9606307040	Geeta
15	68	Yallaling Nenkath	9972618805	
16	69	Kavya Hanumanthappa	9241089403	Kavya
17	75	Savita Shivaraj	8088715203	Savita
18	78	Venkateshprasad Giridhar	8088701339	
19	87	Md. Mateen Md. Maqsood Patel	7406770740	
20	88	Shridhar Reddy Nag Reddy	7259514700	
21	109	Kote Nandini Kashinath	8431747421	K Nandini
22	117	Vishnu Reddy Gopal Reddy	9606349176	
23	139	Tanjum Begum Abdul Waheed	8123069185	Tanjum
24	147	Bhagyashree Veerappa	8792202182	
25	148	Jyoti Basawaraj	9164780934	

Course Coordinator
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Principal
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16	69	Kavya Hanumanthappa	9241089403	
17	75	Savita Shivaraj	8088715203	
18	78	Venkateshprasad Giridhar	8088701339	
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Department of Chemistry

NOTICE

All the students enrolled in **Soil and Water Analysis course** are informed that Examination for this course is going to be held on 15-03-2022 at Department of Chemistry. The time table for internal exam will be as follows :

Time Table

Theory time table: Sunday 20-03-2022

Practical Time table: 27-02-2022


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DEPARTMENT OF CHEMISTRY

Value added course on soil and water Testing

Internal Assessment Test

Title of the paper: Soil Testing & Water Analysis

Time: 30min

Max. Marks: 10

Note: Instructions to the candidates

Answers all the following questions.

Q No. I answer any two of the followings.

5 x 2 = 10

1. write a note on soil testing
2. explain water pollution
3. what are the types of soils in India



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Department of Chemistry

NOTICE

All the students enrolled in **Soil and Water Analysis** course are informed that Course End Examination for this course is going to be held on 30-05-2022 at Department of Chemistry. The time table for internal exam will be as follows:

Time Table

Theory time table: Sunday 30-05-2022

Practical Time table: 01-06-2022

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DEPARTMENT OF CHEMISTRY

Value added course on soil and water Testing

Title of the paper: Soil Testing & Water Analysis

Time: 2hrs

Max. Marks: 40

Note: Instructions to the candidates

Answers all the following questions.

Q No. I answer any five of the followings.

2 x 5 = 10

1. Classify the soil.
2. What is pH value of the soil?
3. Write the molecular formula and mass of the water.
4. What are the sources of waters?
5. What is meant by soil?

Q No. II Answer any two of the followings.

5 x 2 = 10

1. Define soil and role of the NPK in soil
2. Mention the types of soil in India
3. How do you determine BOD & COD in water analysis?

Q No. III Answer any two of the followings.

10 x 2 = 20

1. Write a note on soil pollution with an example
2. Explain the waste water treatment
3. Explain water pollution with an examples



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B.V. BHOMARADDI COLLEGE OF ARTS, SCIENCE & COMMERCE, BIDAR

(Affiliated to Gulbarga University, Kalaburagi)

Accredited with 'A' Grade by NAAC

Department of _____

CERTIFICATE

This is to certify that Kum./Kumari _____ of

_____ *Bearing Register No. / Roll No. _____ has*

Successfully completed add-on Course/Certificate course in _____

_____ *during the academic year 20.....-20.....*

Head of the Dept.

IQAC Co-ordinator

Principal

