



H.K.E. SOCIETY'S
**B.V. BHOMARADDI COLLEGE OF ARTS,
SCIENCE AND COMMERCE, BIDAR**



DEPARTMENT OF *CHEMISTRY*

SOIL TESTING

AND

WATER ANALYSIS

VALUE ADDED COURSE

2020-21



H.K.E. SOCIETY'S
**B. V. BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND
COMMERCE, BIDAR**

DEPARTMENT OF CHEMISTRY
Value Added Course 2020-21

Course Name : 'Soil Testing & Water Analysis'
Duration : 30 Hrs.
Course Co-ordinator : Dr. P Vithal Reddy
Event Co-ordinator : Dr Mallikarjun Kote
Time of Course : 9:00am to 10:00am and 10:15am to 11:15am
Theory Classes on Every Sunday and
12:00pm to 2:00pm Practical's on Every Sunday
Number of Students : 25

Teaching Staff Members:

1. Dr. P Vithal Reddy
2. Dr. Mallikarjun Kote.

Non Teaching Staff:

1. Sri Shivanand Swamy
2. Basawaraj



H.K.E. Society's
**B.V. BHOMARADDI COLLEGE OF ARTS, SCIENCE
& COMMERCE BIDAR-3, KARNATAKA**



DEPARTMENT OF CHEMISTRY

Value added course on soil and water Testing

Continuous evaluation marks : 40, theory :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 HOD

Present members of BOS

1. Dr. P V Reddy

2. Dr. Mallikarjun Kote

3. Dr. C V Reddy

**B. V. BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND
COMMERCE, BIDAR**

DEPARTMENT OF CHEMISTRY

Value Added Course in "Soil Testing & Water Analysis" 2020-21

Course Description:

The Testing of Soil and Analysis of Water are the essential tool for the optimization of crops productivity as well as quality of produce. Soil testing for the available nutrient status is prerequisite before the sowing of crops to predict the response of crops to added fertilizer nutrients and to avoid the excess use of nutrients. The soil analysis for the available nutrient reserve of soils alone is not sufficient to guide the nutrient status of plants. So the complimentary soil and plant analysis can give almost true picture of soil nutrient status and factors affecting the nutrient availability to plants. To advise the farmers for optimum crop productivity based on their field's soil tests. In nature it is difficult to get pure water for agricultural as well as for drinking purposes. The conventional agriculture production system added additional problem to pollute water for safe use. Thus water may be saline, alkaline, acidic, turbid, pesticide residues, etc., so analysis of water is very much essential for animals including human being health.

INSTITUTIONAL BOARD OF STUDIES

Sl. No.	Name of the Staff	Designation	Institution
1	Dr. P. Vithal Reddy	Asso. Prof. & HOD Dept. of Chemistry	B. V. Bhoomaraddi College of Arts Science & Commerce, Bidar.
2	Dr. Mallikarjun Kote	Assist. Prof. Dept. of Chemistry	B. V. Bhoomaraddi College of Arts Science & Commerce, Bidar.
3	Dr. C. V. Reddy	Asso. Prof. & HOD Dept. of Chemistry	C.B. College of Arts Science & Commerce, Bhalki, Dist. Bidar.

**B. V. BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND
COMMERCE, BIDAR**

DEPARTMENT OF CHEMISTRY

Value Added Course in "Soil Testing & Water Analysis" 2020-21

DISTRIBUTION OF SYLLABUS IN HOURS (Theory - 20 Hrs and Practical - 10 Hrs)

Sl. No.	Theory Syllabus	Duration
1	<p>Soil Testing: Definition, of Soil, Types of Soils, Types of soil in India Composition of Soil, pH value of Soil, Acidity and Basicity of a soil, Characteristics of Acidic and Basic Soils, Healthy and Unhealthy Soil, Analysis of available NPK & Carbon in Soil, Soil Indicators, Monitoring Soil health (Soil fertility), Soil Testing for Agriculture (Farming) and before construction. Role of earthworms in soil, waste soil testing. Soil pollution: Definition, causes and conservation of soil.</p>	10 Hrs
2	<p>Water Analysis: Definition, Sources of Water (Availability), pH of water, Acidic and Basic water, Quality of water BOD, COD, DO, Salts present in water and Pesticide residue in Drinking water, Industrial water and waste water. Municipal waste-water treatment.</p>	10 Hrs

Course Outcome:

Soil Testing:

- Students get knowledge about Soil of India.
- Students get knowledge about quality of Soil.
Agriculture, Construction.... Etc
- Students get knowledge of Healthy Soil and Unhealthy Soil & Waste Soil.

Water Analysis:

- Students get knowledge about Quality of Water.
- Students get knowledge about Safe water, Waste water etc....
- Students get knowledge of purification of waste water.

“SAVE WATER AND SOIL FOR FUTURE GENERATION”

No. HKES/BVBDC/

Date : 03-01-2021

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 2020-21: Reg.

Respected Sir,

We would like to start the add-on course on "Soil Testing and Water Analysis" from the academic year 2020-21: with intake of 25 students. Please permit us to start the add-on course and do the needful.

Thanking You.

permission is granted

S. S. S. S.
PRINCIPAL

B.V.Bhoomaraddi Arts, Science,
Commerce UG & PG College, BIDAR.



H.O.D. OF CHEMISTRY
B.V.Bhoomaraddi College
Arts, Science & Commerce
BIDAR-585 403.

H.K.E. SOCIETY'S
**B. V. BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND
COMMERCE, BIDAR**

DEPARTMENT OF CHEMISTRY
Value Added Course in "Soil Testing & Water Analysis" 2020-21

NOTICE

Date: 02-01-2021

All the Students of B.Sc. V Semester are hereby informed that, Department of Chemistry is offering the Value Added Course on "Soil Testing and Water Analysis", interested students can enroll their names with the course coordinator/event coordinator on or before 5th January, 2020.



HOD/Course Coordinator
H.O.D. OF CHEMISTRY
B.V.Bhoomaraddi College of
Arts, Science & Commerce,
BIDAR-585 403.



Principal
PRINCIPAL
B.V.Bhoomaraddi Arts, Science,
Commerce UG & PG College, BIDAR.

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

List of Candidates taken admission for Value added course in the Year 2020-21

Name of the Course: Soil Testing and Water Analysis

Sl. No.	Roll No.	Name of the Candidate	Mobile No.	Signature of the Candidate
1	4	Gangambika Basawaraj	9108949501	Ganga
2	5	Shivakanth Reddy Kashinath Reddy	7349407390	Shu
3	6	Sai Venkat Reddy	7349407390	Sai
4	8	Vijaykumar Shivaraj	8546965585	Vijay
5	14	Balaji Vamanrao	9591545134	Balaji
6	17	Rahul Ram Reddy	8296130709	Rahul
7	18	Asharani Shamrao	8073262867	Asharani
8	22	Rakesh Gundappa	6302248868	Rakesh
9	26	Bhim Govind Rathod	6363751096	Bhimgunda
10	31	Abhishek Veershetty	8722787276	Abhishek
11	39	Shruti Dasharath	9380031550	Shruti
12	49	Savita Marutirao	9353505720	Savita
13	52	Srihari Ningappa	6361680783	Srihari
14	56	Sheebarani Vaijinath	7829010437	Sheebarani
15	60	Bhuvaneshwari Basawaraj	9731559918	Bhuvaneshwari
16	61	Digvijaysingh Jaganath Shingh	6362943597	Digvijay
17	66	Bhavya Sindhe Basavaraj	8494807945	Bhavya
18	67	Shashikala Akalkot Siddanna	9632553629	Shashikala
19	78	Md. Yaser Arafat Md. Hismuddin	9663751951	Md. Yaser
20	89	Priyanka Prem Singh	9741084436	Priyanka
21	102	Komal Pandurang	8861812402	Komal
22	103	Mahalaxmi Rakesh	9916396527	Mahalaxmi
23	104	Nikhil Shivaraj Katagi	8095288648	Nikhil
24	144	Saleem Sailani	9606363911	Saleem
25	171	Jyoti Shamrao	6363822401	Jyoti



Course Coordinator
H.O.D. OF CHEMISTRY
B.V.Bhoomaraddi College of
Arts, Science & Commerce,
BIDAR-585 403



PRINCIPAL
B.V.Bhoomaraddi Arts, Science
Commerce UG & PG College, BIDAR



H.K.E. SOCIETY'S

**B. V. BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND
COMMERCE, BIDAR**

DEPARTMENT OF CHEMISTRY

Value Added Course in "Soil Testing & Water Analysis" 2020-21

NOTICE

Date: 08-01-2021

All the Students of Value Added Course in "Soil Testing & Water Analysis" 2020-21 are hereby informed that, the course is commencing from 10th January, 2021 in the Department of Chemistry.



HOD/Course Coordinator

H.O.D. OF CHEMISTRY

**B.V.Bhoomaraddi College of
Arts, Science & Commerce,
BIDAR-585 403.**



PRINCIPAL

**B.V.Bhoomaraddi Arts, Science,
Commerce UG & PG College, BIDAR.**

H.K.E. SOCIETY'S

**B. V. BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND
COMMERCE, BIDAR**

DEPARTMENT OF CHEMISTRY
Value Added Course in "Soil Testing & Water Analysis" 2020-21

NOTICE

Date: **18-02-2021**

All the Students of Value Added Course in "Soil Testing & Water Analysis" 2020-21 are hereby informed to attend Continuous Internal Evaluation (CIE) which is conducted by the course coordinator on 21st February, 2021 in the department of Chemistry.



HOD/Course Coordinator
H.O.D. OF CHEMISTRY
B.V.Bhoomaraddi College of
Arts, Science & Commerce,
BIDAR-585 403.



PRINCIPAL
B.V.Bhoomaraddi Arts, Science,
Commerce UG & PG College, BIDAR.

H.K.E. SOCIETY'S
**B. V. BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND
COMMERCE, BIDAR**

DEPARTMENT OF CHEMISTRY

Internal Assessment Yest (Theory)
Value Added Course 2020-21

Title of the Paper: **Soil Testing & Water Analysis**

Time: 1/2 Hrs.

Max. Marks: 10

Note: Answer all the Questions.

Q. No. I. Answer two of the following.

5 x 2 = 10

1. Write a note on Soil Testing.
2. Explain Water Pollution.
3. What are the Types of soils in India?

H.K.E. SOCIETY'S

**B. V. BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND
COMMERCE, BIDAR**

DEPARTMENT OF CHEMISTRY

Value Added Course in "Soil Testing & Water Analysis" 2020-21

Theory Time Table:

Every Sunday from 10th January 2021 to 11th April, 2021 9 to 11 am. 20 Hrs

Practical Time Table:

Every Sunday from 7th February, 2021 to 14th March, 2021 12 to 2 pm. 10 Hrs



HOD
H.O.D. OF CHEMISTRY
B.V.Bhoomaraddi College of
Arts, Science & Commerce,
BIDAR-585 403.



PRINCIPAL
B.V.Bhoomaraddi Arts, Science,
Commerce UG & PG College, BIDAR.

H.K.E. SOCIETY'S

**B. V. BHOOMARADDI COLLEGE OF ARTS, SCIENCE AND
COMMERCE, BIDAR**

DEPARTMENT OF CHEMISTRY

Main Question Paper (Theory)

Value Added Course 2020-21

Title of the Paper: **Soil Testing & Water Analysis**

Time: **2 Hrs.**

Max. Marks: **40**

Note: Answer all the Questions.

Q. No. I. Answer in Brief any five of the following.

2 x 5 = 10

1. Define Soil.
2. Mention the Types of soils.
3. What is pH value
4. Write the Molecular formula & Mass of Water.
5. What are the sources of Water?
6. What is the pH of Acidic and Basic Water?

Q. No. II. Answer any two of the following.

5 x 2 = 10

7. Write a note on N P K in healthy soil.
8. Mention the Types of soils in India.
9. How do you determine BOD & COD in Water?

Q. No. III. Answer any Two of the following.

10 x 2 = 20

10. Explain Soil Pollution. With suitable examples.
11. Explain Municipal waste – water treatment.
12. Explain Water Pollution. With suitable examples.





H.K.E. SOCIETY'S

ESTD : 1960

ಬಿ.ವಿ. ಭೂಮರಡ್ಡಿ ಕಲಾ, ವಿಜ್ಞಾನ ಹಾಗೂ ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ, ಬೀದರ
B.V. BHOOMARADDI 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

