



**Konkan Education Society's
Anandibai Pradhan Science College,
Nagothane, District-Raigad (Maharashtra)**



**Certificate Courses by some
academic departments**



Konkan Education Society's
'Bapusaheb Deshpande Educational Complex'
ANANDIBAI PRADHAN SCIENCE COLLEGE,

Nagothane, Tal.Roha, Dist. Raigad, Pin. 402 106

Phone : (02194) 222582

President : Sanjay Datta Patil
Principal: Dr. Sandesh S. Gurav

Tel.Fax : 02194 – 223699
E-mail : principalapsc@yahoo.co.in
Website : <http://www.apcnagothane.edu.in>

Permanently affiliated to the University of Mumbai & Recognized by the Government of Maharashtra
Included Under Section 2(f)&12(B)of the U.G.C. Reaccredited by NAAC with 'B+' Grade

BROCHURE FOR INSTITUTIONAL COURSES

2017-18



Principal

Dr. Sandesh S. Gurav

ANANDIBAI PRADHAN SCIENCE COLLEGE,
Nagothane, Tal. Roha, Dist. Raigad, Pin. 402 106



Konkan Education Society's

ANANDIBAI PRADHAN SCIENCE COLLEGE

Bapusaheb Deshpande Educational Complex
Nagothane, Tal. Roha Dist. Raigad. 402106

2017-18

Department of Chemistry

A Manual For

A Certificate Course in Water Analysis

By

Dr. V. R. Jadhavar

Coordinator,
A certificate Course in Water analysis
Assist.Prof.in Chemistry
KES Anandibai Pradhan Science College,
Nagothane Tal. Roha Dist. Raigad



Objective of the Course

1. To promote understanding of basic facts and concepts in water analysis.
2. To make students capable of studying Chemistry principles in academics and in Industrial courses.
3. To develop problem solving skills in students.
4. To acquaint students with the fundamental knowledge in water pollution studies,
5. To develop analytical skills and critical thinking through application of theory knowledge into practical course.
6. To construct and apply knowledge of chemistry, and appreciate the relationship between Chemistry and other disciplines.
- 7 To enable students to understand Chemistry and its Industrial and Social Context.

Course Outcome

By the end of the course the students should able to

1. To understand, coherently and effectively about various parameters responsible for water pollution.
2. To develop the understanding and interest in the field of Chemistry and Environment.
3. To develop basic skills in practical Chemistry and its industrial applications.



Department of Chemistry

A certificate course in Water Analysis

Syllabus of the Course

Theoretical Aspects: -

15L

1. Introduction
2. Collection and Preservation of samples, General Requirements, General information, Specific information
3. Description of sampling points, Safety Considerations
4. Collection and Types of Samples- Grab samples, Composite samples, Integrated (discharge-weighted) samples
5. Water Quality Assessment, Water Analysis Key Factors, Water bodies, Adverse Effects of Impurities, Constituents Responsible
6. Water Quality Parameters: Potable & Industrial, Physical, Inorganic or Chemical, Toxic Metals, Organic, Nutrient & Demand, Bacteriological, Biological Radioactive Elements
7. Water Quality Standards-BIS, WHO, etc.

15L

Practical's:-

Introduction regarding practical's

1. Temperature

To determine the temperature of the given water sample.

2. Colour

To determine the Colour of the given water sample.

3. pH

To determine the pH of the given water sample.

4. Conductivity

To determine the Conductivity of the given water sample.

5. Total Dissolved Solids

To determine the TDS of the given water sample.

6. Total Hardness

To determine the TH of the given water sample.

7. Alkalinity

To determine the Alkalinity of the given water sample.

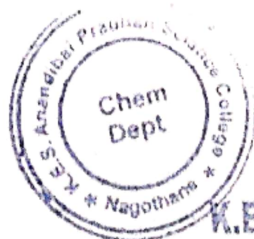
8. Dissolve O₂


To determine the DO of the given water sample.

9. Chemical Oxygen Demand

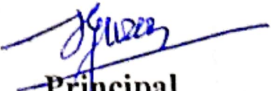
To determine the COD of the given water sample.


Course coordinator




H.O.D. Chemistry
Head

Department of Chemistry
K.E.S.A.P.Sc. College Nagothane


Principal
PRINCIPAL
K.E.S. A. P. Science College
Nagothane, Dist. Raigad (M.S.)



Konkan Education Society's
'Bapusaheb Deshpande Educational Complex'
ANANDIBAI PRADHAN SCIENCE COLLEGE,

Nagothane, Tal.Roha, Dist. Raigad, Pin. 402 106

Phone : (02194) 222582

President : Sanjay Datta Patil
Principal: Dr. Sandesh S. Gurav

Tel.Fax : 02194 – 223699
E-mail : principalapsc@yahoo.co.in
Website : <http://www.apcnagothane.edu.in>

Permanently affiliated to the University of Mumbai & Recognized by the Government of Maharashtra
Included Under Section 2(f) & 12(B) of the U.G.C. Reaccredited by NAAC with 'B+' Grade

BROCHURE FOR INSTITUTIONAL COURSES

2018-19



Principal

Dr. Sandesh S. Gurav

ANANDIBAI PRADHAN SCIENCE COLLEGE

Nagothane, Tal. Roha, Dist. Raigad, Pin. 402 106





Konkan Education Society's

ANANDIBAI PRADHAN SCIENCE COLLEGE

Bapusaheb Deshpande Educational Complex
Nagothane, Tal. Roha Dist. Raigad. 402106

2018-19

Department of Chemistry

A Manual For

A Certificate Course in Water Analysis

By

Dr. V. R. Jadhavar

Coordinator,

A certificate Course in Water analysis

Assist.Prof.in Chemistry

KES Anandibai Pradhan Science College,
Nagothane Tal. Roha Dist. Raigad



Objective of the Course

1. To promote understanding of basic facts and concepts in water analysis.
2. To make students capable of studying Chemistry principles in academics and in Industrial courses.
3. To develop problem solving skills in students.
4. To acquaint students with the fundamental knowledge in water pollution studies,
5. To develop analytical skills and critical thinking through application of theory knowledge into practical course.
6. To construct and apply knowledge of chemistry, and appreciate the relationship between Chemistry and other disciplines.
- 7 To enable students to understand Chemistry and its Industrial and Social Context.

Course Outcome

By the end of the course the students should able to

1. To understand, coherently and effectively about various parameters responsible for water pollution.
2. To develop the understanding and interest in the field of Chemistry and Environment.
3. To develop basic skills in practical Chemistry and its industrial applications.



K. E. S.
ANANDIBAI PRADHAN SCIENCE COLLEGE
Nagothane, Tal. Roha, Dist. Raigad, Pin.402106



Department of Chemistry

A certificate course in Water Analysis

Syllabus of the Course

Theoretical Aspects: -

15L

1. Introduction
2. Collection and Preservation of samples, General Requirements, General information, Specific information
3. Description of sampling points, Safety Considerations
4. Collection and Types of Samples- Grab samples, Composite samples, Integrated (discharge-weighted) samples
5. Water Quality Assessment, Water Analysis Key Factors, Water bodies, Adverse Effects of Impurities, Constituents Responsible
6. Water Quality Parameters: Potable & Industrial, Physical, Inorganic or Chemical, Toxic Metals, Organic, Nutrient & Demand, Bacteriological, Biological Radioactive Elements
7. Water Quality Standards-BIS, WHO, etc.


Practical's:-


15L

Introduction regarding practical's

1. Temperature
To determine the temperature of the given water sample.
2. Colour
To determine the Colour of the given water sample.
3. pH
To determine the pH of the given water sample.
4. Conductivity
To determine the Conductivity of the given water sample.
5. Total Dissolved Solids
To determine the TDS of the given water sample.
6. Total Hardness
To determine the TH of the given water sample.
7. Alkalinity
To determine the Alkalinity of the given water sample.
8. Dissolve O₂
To determine the DO of the given water sample.
9. Chemical Oxygen Demand
To determine the COD of the given water sample.


Course coordinator


H.O.D. Chemistry
Head
Department of Chemistry
K.E.S.A.P.Sc.College Nagathane

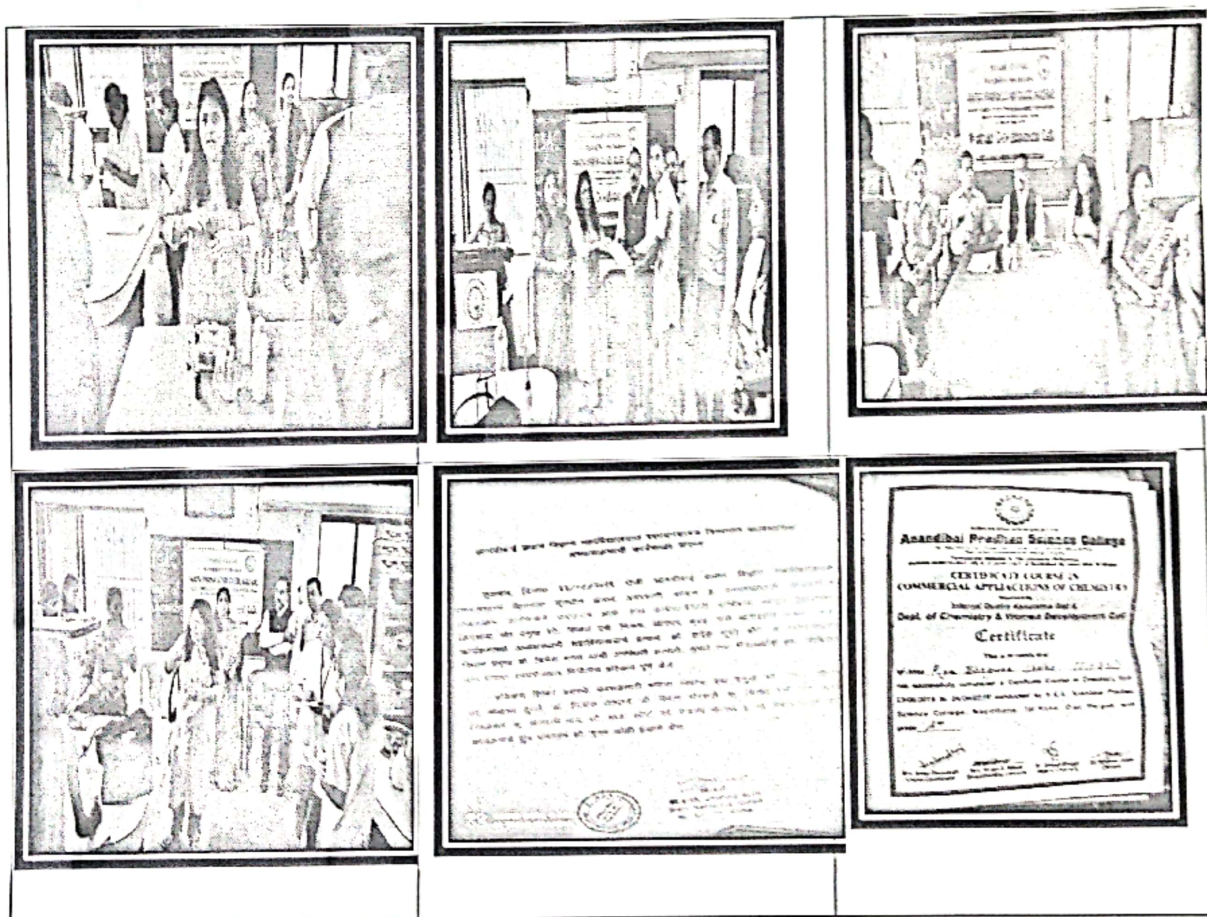

Principal
PRINCIPAL
K.E.S.A.P. Science College
Nagathane, Dist. Raigad (M.S.)



Self employment Courses offered by Women development cell (2018-19)

- 1) Soap making 2) Perfume making

Women development Cell organized following courses for girl students for self-employment skills-1) Soap making 2) Perfume making. In this girls were demonstrated with different practical demonstrations of Soap making, Perfume making by Mrs Shilpa Nikam, from Swayamsidha Creations, Kharghar, Navi Mumbai. Total 62 participants has benefited by completed the course.



Pictures of Self-employment Course

Juchanathan
Co-ordinator



[Signature]
Head
Department of Chemistry
K.E.S.A.P.Sc.College Nagothane

[Signature]
PRINCIPAL
K.E.S. A. P. Science College
Nagothane, Dist. Raigad (M.S.)



Konkan Education Society's
'Bapusaheb Deshpande Educational Complex'
ANANDIBAI PRADHAN SCIENCE COLLEGE,

Nagothane, Tal.Roha, Dist. Raigad, Pin. 402 106

Phone : (02194) 222582

President : Sanjay Datta Patil
Principal: Dr. Sandesh S. Gurav

Tel.Fax : 02194 – 223699
E-mail : principalapsc@yahoo.co.in
Website : <http://www.apcnagothane.edu.in>

Permanently affiliated to the University of Mumbai & Recognized by the Government of Maharashtra
Included Under Section 2(f) &12(B)of the U.G.C. Reaccredited by NAAC with 'B+' Grade

BROCHURE FOR INSTITUTIONAL COURSES

2019-20



Principal

Dr. Sandesh S. Gurav

ANANDIBAI PRADHAN SCIENCE COLLEGE

Nagothane, Tal. Roha, Dist. Raigad, Pin. 402 106





Konkan Education Society's

ANANDIBAI PRADHAN SCIENCE COLLEGE

Bapusaheb Deshpande Educational Complex
Nagothane, Tal. Roha Dist. Raigad. 402106

2019-20

Department of Chemistry

A Manual For

A Certificate Course in Water Analysis

By

Dr. V. R. Jadhavar

Coordinator,

A certificate Course in Water analysis

Assist.Prof.in Chemistry

KES Anandibai Pradhan Science College,

Nagothane Tal. Roha Dist. Raigad



Objective of the Course

1. To promote understanding of basic facts and concepts in water analysis.
2. To make students capable of studying Chemistry principles in academics and in Industrial courses.
3. To develop problem solving skills in students.
4. To acquaint students with the fundamental knowledge in water pollution studies,
5. To develop analytical skills and critical thinking through application of theory knowledge into practical course.
6. To construct and apply knowledge of chemistry, and appreciate the relationship between Chemistry and other disciplines.
- 7 To enable students to understand Chemistry and its Industrial and Social Context.

Course Outcome

By the end of the course the students should able to

1. To understand, coherently and effectively about various parameters responsible for water pollution.
2. To develop the understanding and interest in the field of Chemistry and Environment.
3. To develop basic skills in practical Chemistry and its industrial applications.





Department of Chemistry

A certificate course in Water Analysis

Syllabus of the Course

Theoretical Aspects: -

15L

1. Introduction
2. Collection and Preservation of samples, General Requirements, General information, Specific information
3. Description of sampling points, Safety Considerations
4. Collection and Types of Samples- Grab samples, Composite samples, Integrated (discharge-weighted) samples
5. Water Quality Assessment, Water Analysis Key Factors, Water bodies, Adverse Effects of Impurities, Constituents Responsible
6. Water Quality Parameters: Potable & Industrial, Physical, Inorganic or Chemical, Toxic Metals, Organic, Nutrient & Demand, Bacteriological, Biological Radioactive Elements
7. Water Quality Standards-BIS, WHO, etc.


Practical's:-


15L

Introduction regarding practical's

1. Temperature
To determine the temperature of the given water sample.
2. Colour
To determine the Colour of the given water sample.
3. pH
To determine the pH of the given water sample.
4. Conductivity
To determine the Conductivity of the given water sample.
5. Total Dissolved Solids
To determine the TDS of the given water sample.
6. Total Hardness
To determine the TH of the given water sample.
7. Alkalinity
To determine the Alkalinity of the given water sample.
8. Dissolve O₂
To determine the DO of the given water sample.
9. Chemical Oxygen Demand
To determine the COD of the given water sample.


Course coordinator


H.O.D. Chemistry
Department of Chemistry
K.E.S.A.P.Sc.College Nagothane

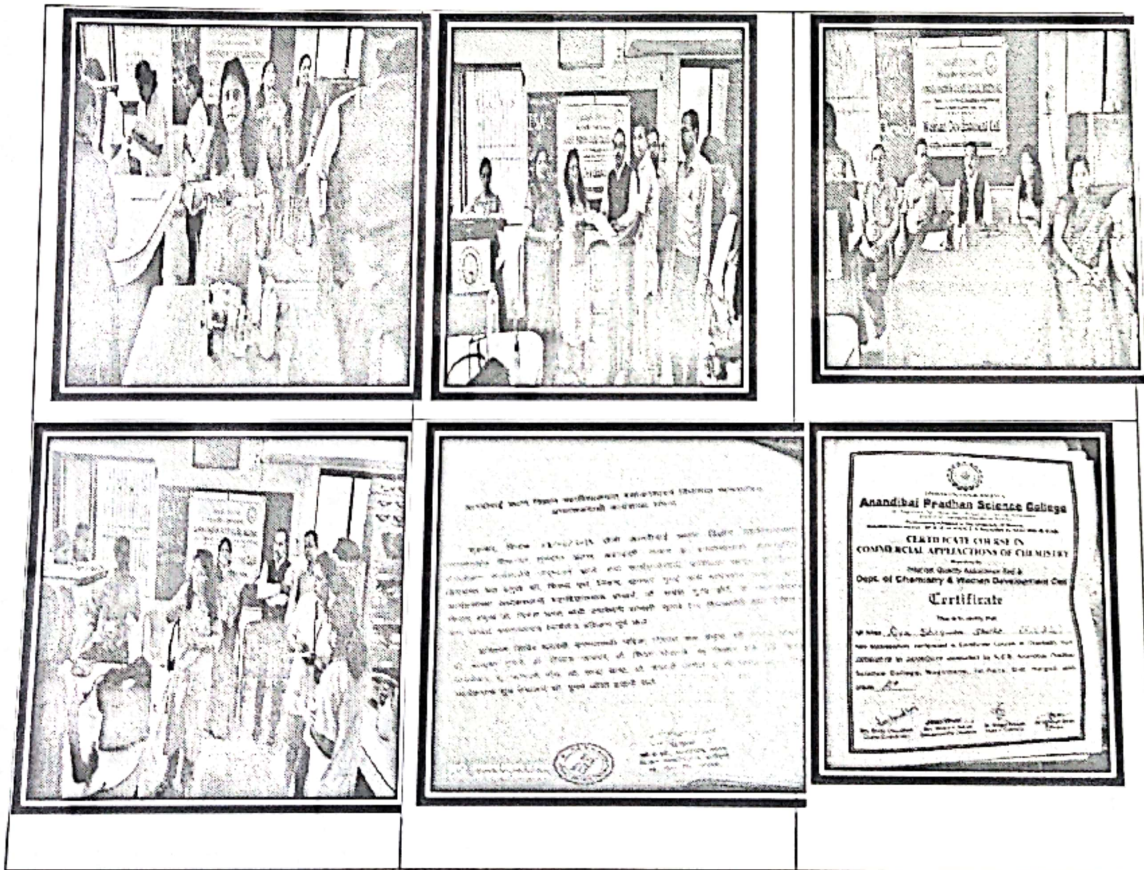

Principal
PRINCIPAL
K.E.S. A. P. Science College
Nagothane, Dist. Raigad (M.S.)



Self employment Courses offered by Women development cell -23/08/2019 (2019-20)

1) Agarbatti making 2) Phenyl making.

Women development Cell organized following courses for girl students for self-employment skills-1) Agarbatti making 2) Phenyl making. In this girls were demonstrated with different practical demonstrations of Agarbatti making and Phenyl Making by Mrs Shilpa Nikam, from Swayamsidha Creations, Kharghar, Navi Mumbai .Total 62 participants were present for this course



Pictures of Self-employment Course

Subhadhanj
Co-ordinator

Shilpa Nikam
Department of Chemistry
K.E.S.A.P.Sc.College Nagothane

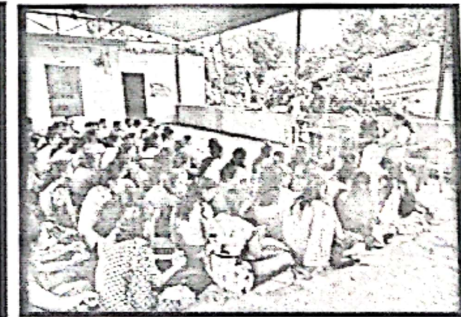
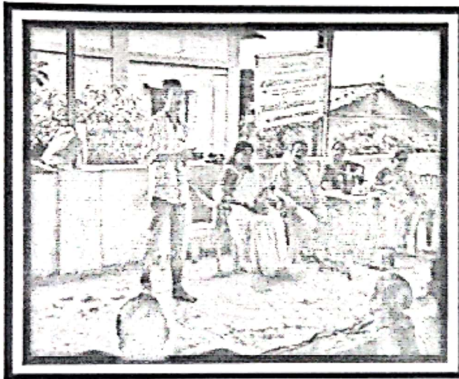


J. G. Kulkarni
PRINCIPAL
K.E.S. A. P. Science College
Nagothane, Dist. Raigad (M.S.)





Course on Tailoring and Dress designing -

The course on tailoring and dress designing was organized in the college for the students. *Mrs. Ashwini Apte* was resource person to give them training for the same. Dr. Sandesh Gurav was chief guest of the function. Total 48 students were benefited through the course.



Shechondhasi
Co-ordinator


Department of Chemistry
K.E.S.A.P.Sc.College Nagthane


PRINCIPAL
K.E.S. A. R Science College
Nagthane, Dist. Raigad (M.S.)



Konkan Education Society's
'Bapusaheb Deshpande Educational Complex'
ANANDIBAI PRADHAN SCIENCE COLLEGE,

Nagothane, Tal.Roha, Dist. Raigad, Pin. 402 106
Phone : (02194) 222582

President : Sanjay Datta Patil
Principal: Dr. Sandesh S. Gurav

Tel.Fax : 02194 – 223699
E-mail : principalapsc@yahoo.co.in
Website : <http://www.apcnagothane.edu.in>

Permanently affiliated to the University of Mumbai & Recognized by the Government of Maharashtra
Included Under Section 2(f) & 12(B) of the U.G.C. Reaccredited by NAAC with 'B+' Grade

BROCHURE FOR INSTITUTIONAL COURSES

2020-21



Principal

Dr. Sandesh S. Gurav

ANANDIBAI PRADHAN SCIENCE COLLEGE

Nagothane, Tal. Roha, Dist. Raigad, Pin. 402 106



Konkan Education Society's
'Bapusaheb Deshpande Educational Complex'
ANANDIBAI PRADHAN SCIENCE COLLEGE,

Nagothane, Tal.Roha, Dist. Raigad, Pin. 402 106
Phone : (02194) 222582

President : Sanjay Datta Patil
Principal: Dr. Sandesh S. Gurav

Tel.Fax : 02194 – 223699
E-mail : principalapsc@yahoo.co.in
Website : <http://www.apenagothane.edu.in>

Permanently affiliated to the University of Mumbai & Recognized by the Government of Maharashtra
Included Under Section 2(f) & 12(B) of the U.G.C. Reaccredited by NAAC with 'B+' Grade

BROCHURE FOR INSTITUTIONAL COURSES

2021-22



Principal

Dr. Sandesh S. Gurav

ANANDIBAI PRADHAN SCIENCE COLLEGE
Nagothane, Tal. Roha, Dist. Raigad, Pin. 402 106

Objective of the Course

1. To promote understanding of basic facts and concepts in water analysis.
2. To make students capable of studying Chemistry principles in academics and in Industrial courses.
3. To develop problem solving skills in students.
4. To acquaint students with the fundamental knowledge in water pollution studies,
5. To develop analytical skills and critical thinking through application of theory knowledge into practical course.
6. To construct and apply knowledge of chemistry, and appreciate the relationship between Chemistry and other disciplines.
- 7 To enable students to understand Chemistry and its Industrial and Social Context.

Course Outcome

By the end of the course the students should able to

1. To understand, coherently and effectively about various parameters responsible for water pollution.
2. To develop the understanding and interest in the field of Chemistry and Environment.
3. To develop basic skills in practical Chemistry and its industrial applications.



K. E. S.
ANANDIBAI PRADHAN SCIENCE COLLEGE
Nagothane, Tal. Roha, Dist. Raigad, Pin.402106



Department of Chemistry

A certificate course in Water Analysis

Syllabus of the Course

Theoretical Aspects: -

15L

1. Introduction
2. Collection and Preservation of samples, General Requirements, General information, Specific information
3. Description of sampling points, Safety Considerations
4. Collection and Types of Samples- Grab samples, Composite samples, Integrated (discharge-weighted) samples
5. Water Quality Assessment, Water Analysis Key Factors, Water bodies, Adverse Effects of Impurities, Constituents Responsible
6. Water Quality Parameters: Potable & Industrial, Physical, Inorganic or Chemical, Toxic Metals, Organic, Nutrient & Demand, Bacteriological, Biological Radioactive Elements
7. Water Quality Standards-BIS, WHO, etc.


15L


Practical's:-

Introduction regarding practical's

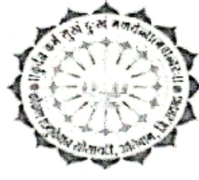
1. Temperature
To determine the temperature of the given water sample.
2. Colour
To determine the Colour of the given water sample.
3. pH
To determine the pH of the given water sample.
4. Conductivity
To determine the Conductivity of the given water sample.
5. Total Dissolved Solids
To determine the TDS of the given water sample.
6. Total Hardness
To determine the TH of the given water sample.
7. Alkalinity
To determine the Alkalinity of the given water sample.
8. Dissolve O₂
To determine the DO of the given water sample.
9. Chemical Oxygen Demand
To determine the COD of the given water sample.


Course coordinator


H.O.D. Chemistry
Head
Department of Chemistry
K.E.S.A.P.Sc.College Nagothane


Principal
PRINCIPAL
K.E.S. A. P. Science College
Nagothane, Dist. Raigad (M.S.)





Konkan Education Society's
Anandibai Pradhan Science College,
Nagothane, District-Raigad (Maharashtra)

Department of Chemistry

Certificate course in making Soap, phenyl & Agarbatti

1. Syllabus of the Course- Attached
2. List of participants- participant list is attached
3. Total Number of batches - (02)(40 students)
4. Total no of beneficiaries- 40 students from A.P. Science college, Nagothane
5. Revenue/Outcome- Self-employment skills are developed in students



Objectives of the Course

1. To promote self-employment among students.
2. To make students capable of studying chemistry principles in academics and industrial course.
3. To introduce students practical skills for business whereby students can be self-employed and can generate income for their family.
4. To give students necessary knowledge, skills, and attitudes to make various products using locally available tools and materials.

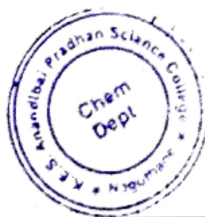
Course Outcome-

Course is focused on understanding and making the art of soap making, students are able to-

1. To develop self-employment skill of making products like soap, agarbatti etc
2. To develop interest in application of chemistry in commercial production of daily products.
3. This course enables us to learn and understand how to make soaps Phenyl in simple easy way

Advantages of course

1. Age & Gender-Anyone can do this course
2. This skill is convertible in business
3. It is scalable and profitable
4. Graduation in chemistry can be good base for such business
5. Use of such soaps is herbal, commercial and pure
6. One can singly handle his business



K. E. S.
ANANDIBAI PRADHAN SCIENCE COLLEGE
Nagothane, Tal. Roha, Dist. Raigad, Pin.402106

Department of Chemistry

Skills and Calibration of instruments in Chemistry

1. Syllabus of the Course:-**Attached**
2. List of Participants:-**List is attached**
3. Total Number of Batches:-**01 (30 Students)**
4. Total Number of Beneficiaries:- **30**
5. Revenue/Outcome: - **Knowledge of instruments**



K. E. S.
ANANDIBAI PRADHAN SCIENCE COLLEGE
Nagothane, Tal. Roha, Dist. Raigad, Pin.402106

Department of Chemistry

Skills and Calibration of instruments in Chemistry

Syllabus of the Course

Theoretical Aspects: -

15L

1. Introduction
2. Importance of chemical analysis
3. Classifications of analyte
4. Selecting a analytical techniques
5. Preparation of sample
6. Chemical separations
7. Classification of Analytical methods.


Practical's:-


15L

Introduction regarding practical's

1. Conductometry
2. Potentiometry
3. pH-metry
4. Microwave Oven
5. Magnetic Stirrer
6. Colorimetry


Course coordinator


H.O.D. Chemistry
Head
Department of Chemistry
K.E.S.A.P.Sc.College Nagothane


Principal
PRINCIPAL
K.E.S. A. P. Science College
Nagothane, Dist. Raigad (M.S.)



Konkan Education Society's

ANANDIBAI PRADHAN SCIENCE COLLEGE

Bapusaheb Deshpande Educational Complex
Nagothane, Tal. Roha Dist. Raigad. 402106

Department of Chemistry

A Manual For

**“Skill and Calibration of instruments in
Chemistry”**

By

Mrs. Poonam D. Joshi

Coordinator,

A certificate Course in skill and Calibration of instrument in Chemistry

Assist. Prof. in Chemistry

KES Anandibai Pradhan Science College,
Nagothane Tal. Roha Dist. Raigad



5

K. E. S.
ANANDIBAI PRADHAN SCIENCE COLLEGE
Nagothane, Tal. Roha, Dist. Raigad, Pin.402106

Department of Chemistry

A certificate course in
Use of Technology to learn Chemistry

1. Syllabus of the Course: -Attached
2. List of Participants: -List is attached
3. Total Number of Batches: - 01 (25 Students)
4. Total Number of Beneficiaries: - Enrolled students (25)
5. Outcome: - Students are now aware of software and apps that needed for to study chemistry in smart way. This course will help them for further studies.



Objective of the Course

1. To promote understanding of basic facts and concepts in Technology for studies.
2. To make students capable of studying Chemistry principles in academics and in Industrial courses.
3. To develop problem solving skills in students using right technology.
4. To acquaint students with the fundamental knowledge in world of Google in right way.
5. To develop technical skills and critical thinking through application of theory knowledge into practical course.
6. To construct and apply knowledge of chemistry, and appreciate the relationship between Chemistry and Technology.
7. To enable students to understand Chemistry and Technology in Industrial field.

Course Outcome

By the end of the course the students should able to

1. To understand, coherently and effectively about various software, apps , websites that helps them to enhance the experience of studying chemistry.
2. To develop the understanding and interest in the field of Chemistry and Technology.
3. To develop basic skills in practical way to use tools of software to study Chemistry and its industrial applications.





K. E. S.
ANANDIBAI PRADHAN SCIENCE COLLEGE
Nagothane, Tal. Roha, Dist. Raigad, Pin.402106

Department of Chemistry

A certificate course in
Use of Technology to learn Chemistry

Syllabus of the Course

Theoretical Aspects: -

15L

1. Introduction
2. General Requirements, General information, Specific information
3. Description of software, websites, apps.
4. List and Types of Software – On phone and on computer system.
5. Description of most needed app, websites, and software.
6. Detailed description with How to use?
7. Limitations
8. Precaution while using tech.
9. Why we should use tech in order to study chemistry?
10. References.

Practical's:-

15L

1. Introduction
2. How to use tools in software
3. How to use of virtual lab
4. How to use online library
5. Further Reading

Alikam
Course coordinator

Alikam


H.O.D. Chemistry

Department of Chemistry
K.E.S.A.P.Sc. College Nagthane


Principal

PRINCIPAL
K.E.S. A. P Science College
Nagothane, Dist. Raigad (M.S.)





Bapusaheb Deshpande Educational Complex
Nagothane, Tal. Roha Dist. Raigad. 402106

**Konkan Education Society's
Anandibai Pradhan Science College**

Department of Chemistry

A Manual For
**A Certificate Course in
Use of Technology to learn Chemistry**

By
Prof. R.D.Nikam
Coordinator,
A certificate Course in
Use of Technology to learn Chemistry
Assist.Prof.in Chemistry
KES Anandibai Pradhan Science College,
Nagothane Tal. Roha Dist. Raigad



Konkan Education Society's
ANANDIBAI PRADHAN SCIENCE COLLEGE
Nagothane, Tal. Roha, Dist. Raigad, Pin.402106

Department of Chemistry

**A certificate course in Exploring Chemistry in
Everyday Life**

1. Syllabus of the Course:-Attached
2. List of Participants:-List is attached
3. Total Number of Batches:- 01 (26 Students)
4. Total Number of Beneficiaries:-1000 People from Nagothane, Warvathane and Nidi Grampanchayat area are benefited through this Course as a Consultancy Service under the Department of chemistry.
5. Revenue/Outcome: - We are providing this facility as a social service to the Society in free of cost.



Objective of the Course

1. To promote understanding of basic facts and concepts in water analysis.
2. To make students capable of studying Chemistry principles in academics and in Industrial courses.
3. To develop problem solving skills in students.
4. To acquaint students with the fundamental knowledge in water pollution studies,
5. To develop analytical skills and critical thinking through application of theory knowledge into practical course.
6. To construct and apply knowledge of chemistry, and appreciate the relationship between Chemistry and other disciplines.
- 7 To enable students to understand Chemistry and its Industrial and Social Context.

Course Outcome

By the end of the course the students should able to

1. To understand, coherently and effectively about various parameters responsible for water pollution.
2. To develop the understanding and interest in the field of Chemistry and Environment.
3. To develop basic skills in practical Chemistry and its industrial applications.



Konkan-Education Society's
ANANDIBAI PRADHAN SCIENCE COLLEGE
Nagothane, Tal. Roha, Dist. Raigad, Pin.402106

Department of Chemistry

A certificate course in exploring chemistry in everyday life

Syllabus of the Course

- Understanding Brewing
- Chemical attraction – perfumes and pheromones
- The race for new antibiotics
- Chemistry in sport – innovations that are changing the game





Konkan Education Society's

ANANDIBAI PRADHAN SCIENCE COLLEGE

Bapusaheb Deshpande Educational Complex
Nagothane, Tal. Roha Dist. Raigad. 402106

Department of Chemistry

A Manual For

**A Certificate Course in Exploring
chemistry in everyday life**

By

Ms. Nivedita V. Mhatre

Coordinator,

A certificate Course in Exploring Chemistry in Everyday Life

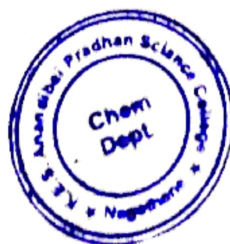
Assist.Prof.in Chemistry

KES Anandibai Pradhan Science College,
Nagothane Tal. Roha Dist. Raigad



Inde
x

Sr. No.	Particulars	Page No.s
Theoretical Aspects		
1	Introduction	1-7
2	Understanding Brewing	7-9
3	Chemical Attraction – Perfumes & Pheromones	10
4	Chemistry in Sports – Innovations that are changing the game.	11-13
Practical's		
5	Immersion To brew the given coffee sample by immersion method.	14
6	Percolation To brew the given coffee sample by percolation method.	15
7	Total Dissolved Solids To determine the TDS of the given coffee sample.	16-18
8	References	19



K. E. S.
ANANDIBAI PRADHAN SCIENCE COLLEGE
Nagothane, Tal. Roha, Dist. Raigad, Pin.402106

Department of Computer Science & Information Technology

A certificate course in Digital Marketing

1. Syllabus of the Course:-Attached
2. List of Participants:-List is attached
3. Total Number of Batches:- 01 (20 Students)
4. Revenue/Outcome: - We are providing this facility as a social service to the Student in free of cost.


K. E. S.
ANANDIBAI PRADHAN SCIENCE COLLEGE
Nagothane, Tal. Roha, Dist. Raigad, Pin.402106

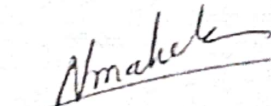
Department of Computer Science & Information Technology

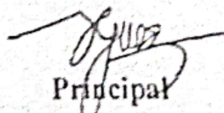
A certificate course in Digital Marketing

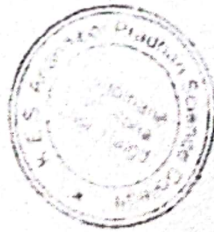
Syllabus of the Course

1. SEO
2. Search Engine marketing
3. Content marketing
4. Influencer marketing
5. Content automation
6. Campaign marketing
7. E – Commerce Marketing
8. Social media marketing
9. E mail direct marketing
10. Mobile phones(SMS &MMS)


Course Coordinator
Mrs. Sonal Patil


H.O.D.CS/IT
Mrs. Nilam Mahale


Principal
Dr. Sandesh S. Gurav
PRINCIPAL
K.E.S. A. P. Science College
Nagothane, Dist. Raigad (M.S.)

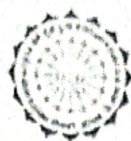


Objective of the Course

- Every business has some goals which it wants to achieve within a limited time period. No business puts their money to get themselves in any kind of loss. In order to achieve these goals & missions, specific digital marketing objectives are set so that they can lead in meeting your targets
- Digital marketing is used as the major key tool nowadays to turn the impact of any small size business into a measurable & huge one. Its impact is so much high that even small scale business are growing their shares in a very large market. And why wouldn't it be? digital marketing provides you with various tools which make a business to grow & compete in the market

Course Outcome

A result is a smaller piece of what you may review after a marketing campaign, such as a metric. An outcome, on the other hand, is a larger, more meaningful development – the full story of how a campaign affects your business and your bottom line.



Konkan Education Society's

ANANDIBAI PRADHAN SCIENCE COLLEGE

Bapusaheb Deshpande Educational Complex
Nagothane, Tal. Roha Dist. Raigad. 402106

**Department of Computer Science &
Information Technology**

A Manual For

A Certificate Course in Digital Marketing

By

Mrs. Sonal Patil

Coordinator,

A certificate Course in Digital Marketing

Assist. Prof. in CS/IT

KES Anandibai Pradhan Science College,

Nagothane Tal. Roha Dist. Raigad



Index		
Sr. No.	Particulars	Page Nos
1	SEO	3
2	Search Engine marketing	10
3	Content marketing	15
4	Influencer marketing	20
5	Content automation	21
6	Campaign marketing	26
7	E - Commerce Marketing	28
8	Social media marketing	33
9	E mail direct marketing	34
10	Mobile phones(SMS &MMS)	38

K. E. S.
ANANDIBAI PRADHAN SCIENCE COLLEGE
Nagothane, Tal. Roha, Dist. Raigad, Pin.402106

Department of Chemistry

A certificate course soil analysis

1. Syllabus of the Course: -Attached
2. List of Participants: -List is attached
3. Total Number of Batches: - 01 (24 Students)
4. Total Number of Beneficiaries: -200 People from Nagothane, Warvathane, Aamadoshi, Ambeghar Gram panchayat area is benefited through this Course as a Consultancy Service under the Department of chemistry.
5. Revenue/Outcome: - We are providing this facility as a social service to the Society in free of cost.

K. E. S.
ANANDIBAI PRADHAN SCIENCE COLLEGE
Nagothane, Tal. Roha, Dist. Raigad, Pin.402106

Department of Chemistry

A certificate course in soil Analysis

Syllabus of the Course

Theoretical Aspects: -

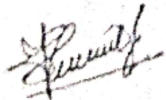
15L


1. Introduction
2. Collection and Preservation of samples, General Requirements, General information, Specific information
3. Description of sampling points, Safety Considerations
4. Collection and Types of Samples- Universe, sampling units, increments, gross sample, sub sample, analysis sample
5. Soil Quality Assessment, Soil Analysis for, Water identification and estimation of the metal contents, Adverse Effects of excess alt contents on soil fertility.
6. Use of flame photometer for soil sample analysis

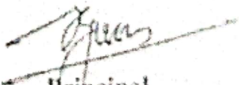
Practical's: -

15L

- Introduction regarding practical's
1. To check solubility of soil sample.
 2. To determine the temperature of the given sample of aqueous solution of soil sample.
 3. To determine the Color of the given soil sample, pH
 4. To determine the pH of the given soil sample.
 5. Preparation of standard solution of soil sample various concentration in ppm.
 6. Measurement of emission and absorption of each sample.
 7. Identification of elements present in soil sample using their emission as well as absorption intensity.
 8. Estimation of each element by plotting the graph- calibration curve method. Standard addition method, internal standard method.


Course coordinator


H.O.D. Chemistry


Principal
PRINCIPAL
K.E.S.A.P Science College
Nagothane, Dist. Raigad (M.S.)

**K. E. S.
ANANDIBAI PRADHAN SCIENCE COLLEGE
Nagothane, Tal. Roha, Dist. Raigad, Pin.402106**

Department of Physics

A certificate course in Energy Conservation

1. Syllabus of the Course: -Attached

2. List of Participants: -List is attached

3. Total Number of Batches: - 01 (20 Students)

4. Total No. of Beneficiaries:- 200 peoples aware by this batch in the vicinity of the college.

5. Revenue/Outcome: - We are providing this facility as a social service to the Student in free of cost.



K. E. S.
ANANDIBAI PRADHAN SCIENCE COLLEGE
Nagothane, Tal. Roha, Dist. Raigad, Pin.402106

Department of Physics

A certificate course in Energy Conservation

Objective of the Course

1. To Explain the energy & power scenario of world
2. To tell why capacitors are important from an energy conservation standpoint
3. To evaluate the value of energy-saving devices.
4. To explain the importance of a good lighting system.
5. To define uniform lighting and selective task lighting and tell how they affect energy consumption.
6. To determine recommended and actual lighting levels
7. To give examples of ways in which switching modifications can be used to reduce energy consumption.
8. To describe several ways to use natural lighting more efficiently.

Course Outcome

1. A clear conceptual understanding of technical and commercial aspects of energy conservation
2. To enable the students to develop managerial skills to assess feasibility of alternative approaches and drive strategies regarding energy conservation
3. Evaluation of energy economics.
4. Identify opportunities for rational use of energy.
5. Analyze electrical systems for energy conservation.
6. Analyze the thermal systems for energy efficiency
7. Understand the working principles of different household domestic appliances



K. E. S.
ANANDIBAI PRADHAN SCIENCE COLLEGE
Nagothane, Tal. Roha, Dist. Raigad, Pin.402106

Department of Physics

A certificate course in Energy Conservation

Syllabus

- 1) **Energy Scenario: -**
Classification of Energy Sources, Energy resources (Conventional and nonconventional), Energy needs of India, and energy consumption patterns. Worldwide Potentials of these sources. Energy efficiency and energy security. Energy and its environmental impacts, Distributed generation.
- 2) **Renewable energy resources: -** Solar Energy, wind energy, geothermal energy.
- 3) **Energy Conservation in Electrical Utilities: -**Components of EB billing, HT and LT supply, transformers, cable sizing; Concept of capacitors, power factor improvement, harmonics; Electric motors motor efficiency computation, energy efficient motors; Illumination- Lux, Lumens, types of lighting, LED lighting and scope of energy conservation in lighting.
- 4) **Energy Efficiency in electrical appliances: -**
Principles of working, parts and servicing of Electric fan, Electric Iron box, Water heater; Induction heater, Microwave oven; Refrigerator, Concept of illumination, Electric bulbs, CFL, LED lights, Energy efficiency in electrical appliances, IS codes & IE codes.
- 5) **Conducting a Lighting Survey**
Lighting levels; Lighting survey; Improved switching; Reducing lamp size; Improved lighting controls; Task lighting; Using natural light

