

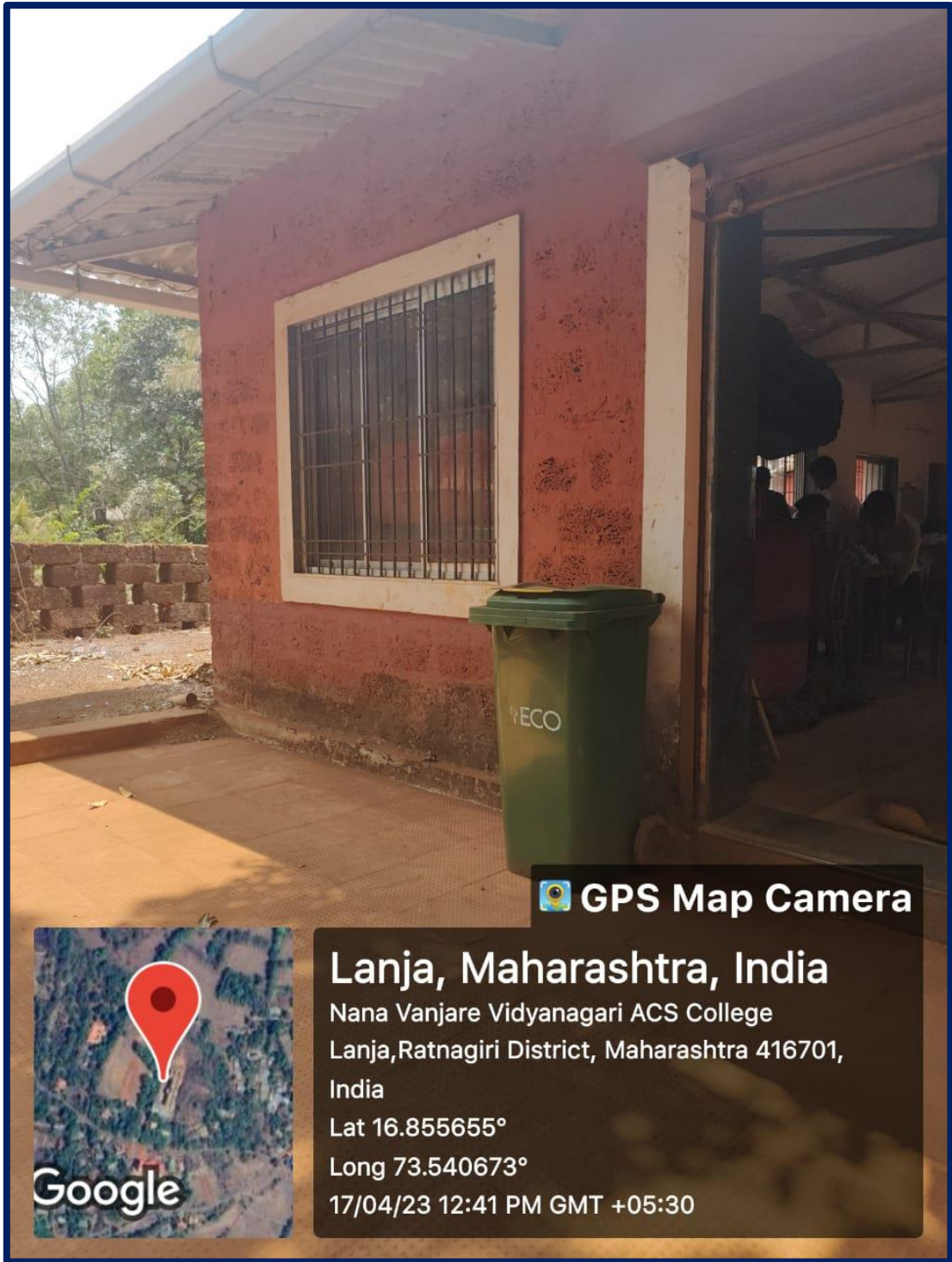
7.1 - Institutional Values and Social Responsibilities

7.1.3

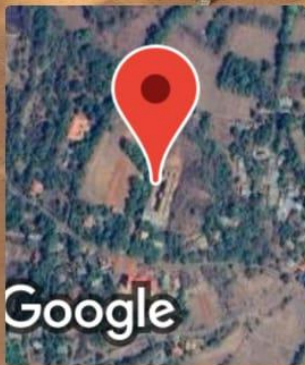
- **Solid Waste Management**
- **Liquid Waste Management**
- **Waste Recycling System Hazardous Chemicals**
- **E- Waste Management**



Dustbin



 **GPS Map Camera**



Lanja, Maharashtra, India

Nana Vanjare Vidyanagari ACS College
Lanja, Ratnagiri District, Maharashtra 416701,
India

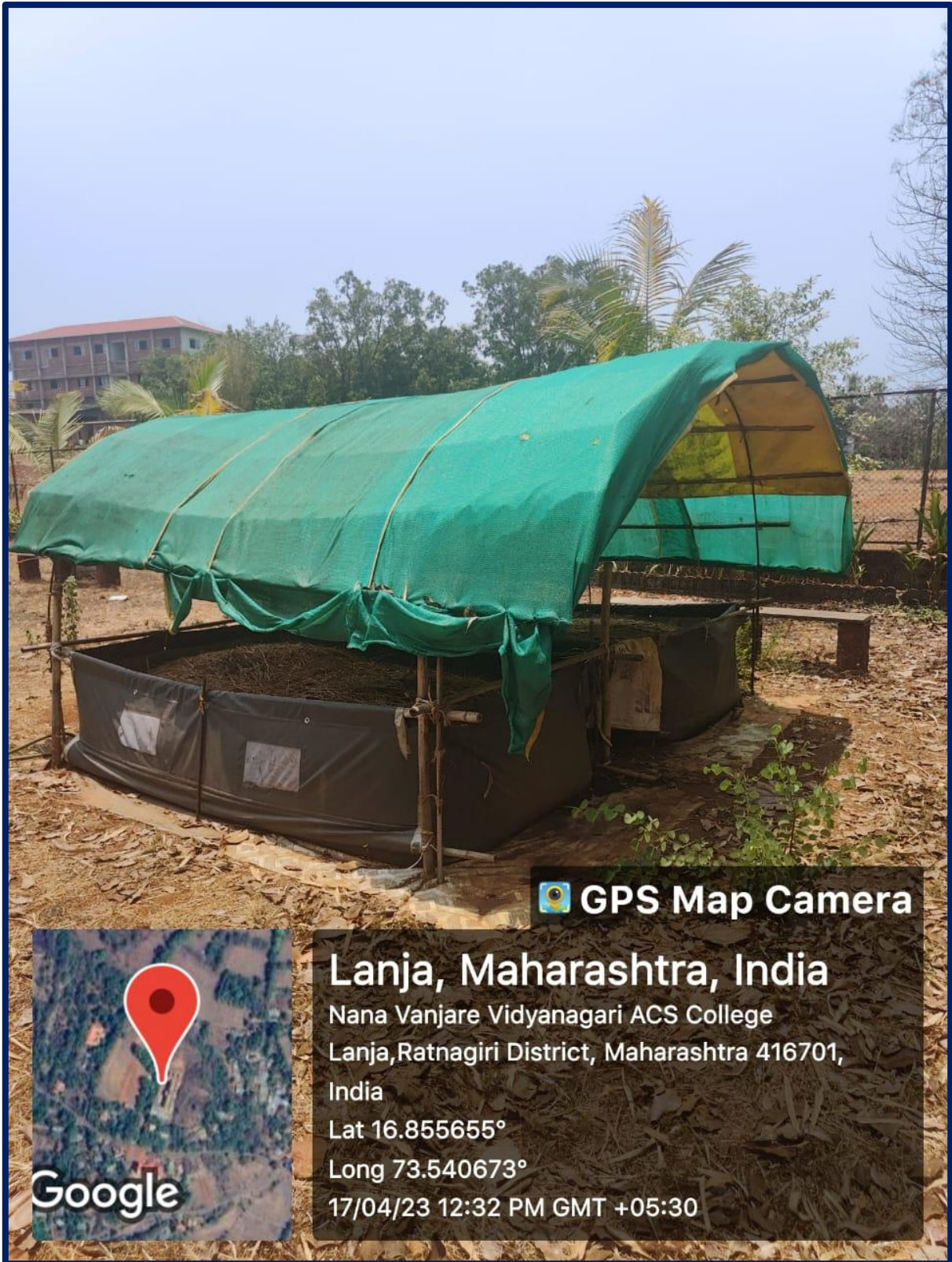
Lat 16.855655°


Long 73.540673°

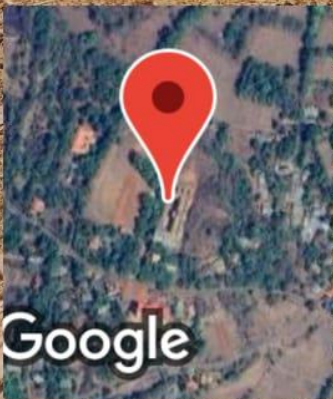
17/04/23 12:41 PM GMT +05:30



Vermicompost Unit



 **GPS Map Camera**



Lanja, Maharashtra, India

Nana Vanjare Vidyanagari ACS College
Lanja, Ratnagiri District, Maharashtra 416701,
India

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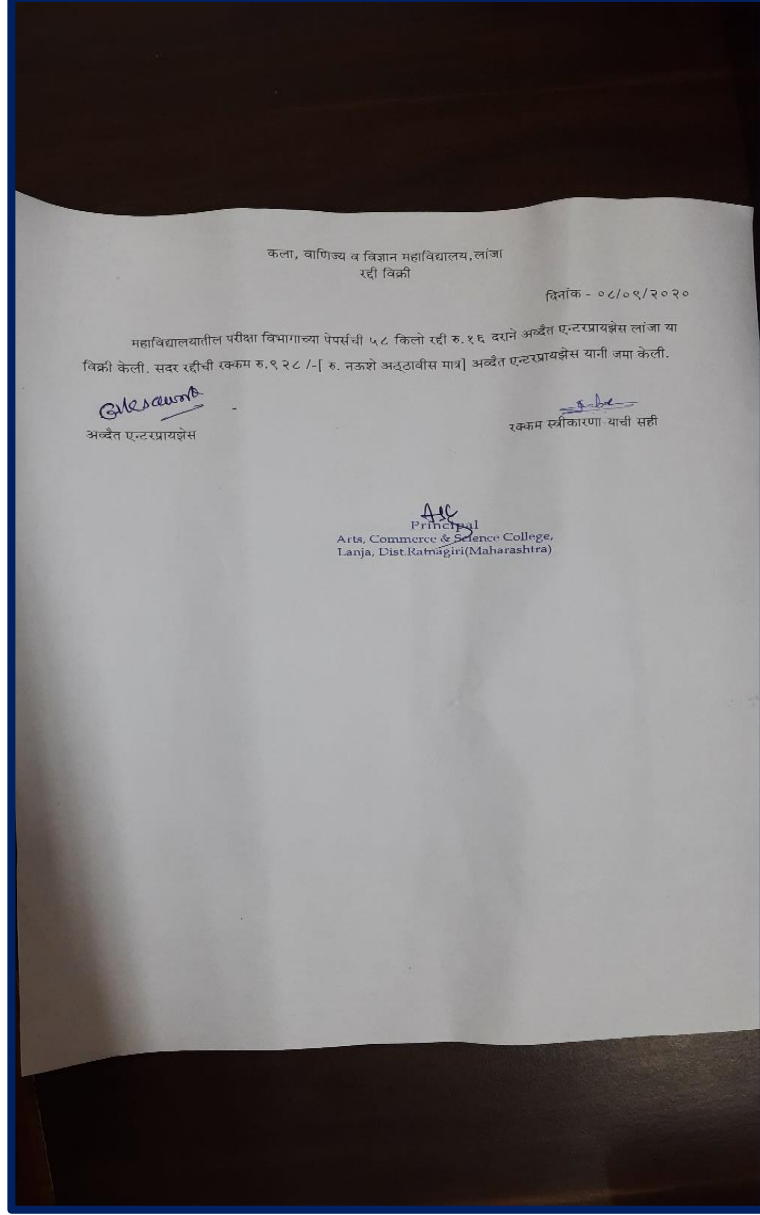
17/04/23 12:32 PM GMT +05:30



Garbage Car of Municipal Corporation



Letter for Recycling Scrap Papers



Dr. Arvind S. Kulkarni
Principal
M.Sc. Ph.D.
F.I.A.E.S., F.Z.S.I. D.Litt.

Nana Vanjare Vidyanagari
New Education Society's

ARTS, COMMERCE AND SCIENCE COLLEGE, LANJA



Re-accredited by NAAC (India) ('A' Grade - 3.02 CGPA)

ISO 9001:20015 Certified Institution

"Best College" University of Mumbai 2012-13

Date -

Certificate

This is to certify that our institute Arts, Commerce and Science College, Lanja collects organic solid waste in appropriate bins available in the college campus by students and staff and from there it is hand over to garbage vehicle of Nagar Panchayat Lanja. All waste containers in the college get emptied regularly and never allows to overflow.

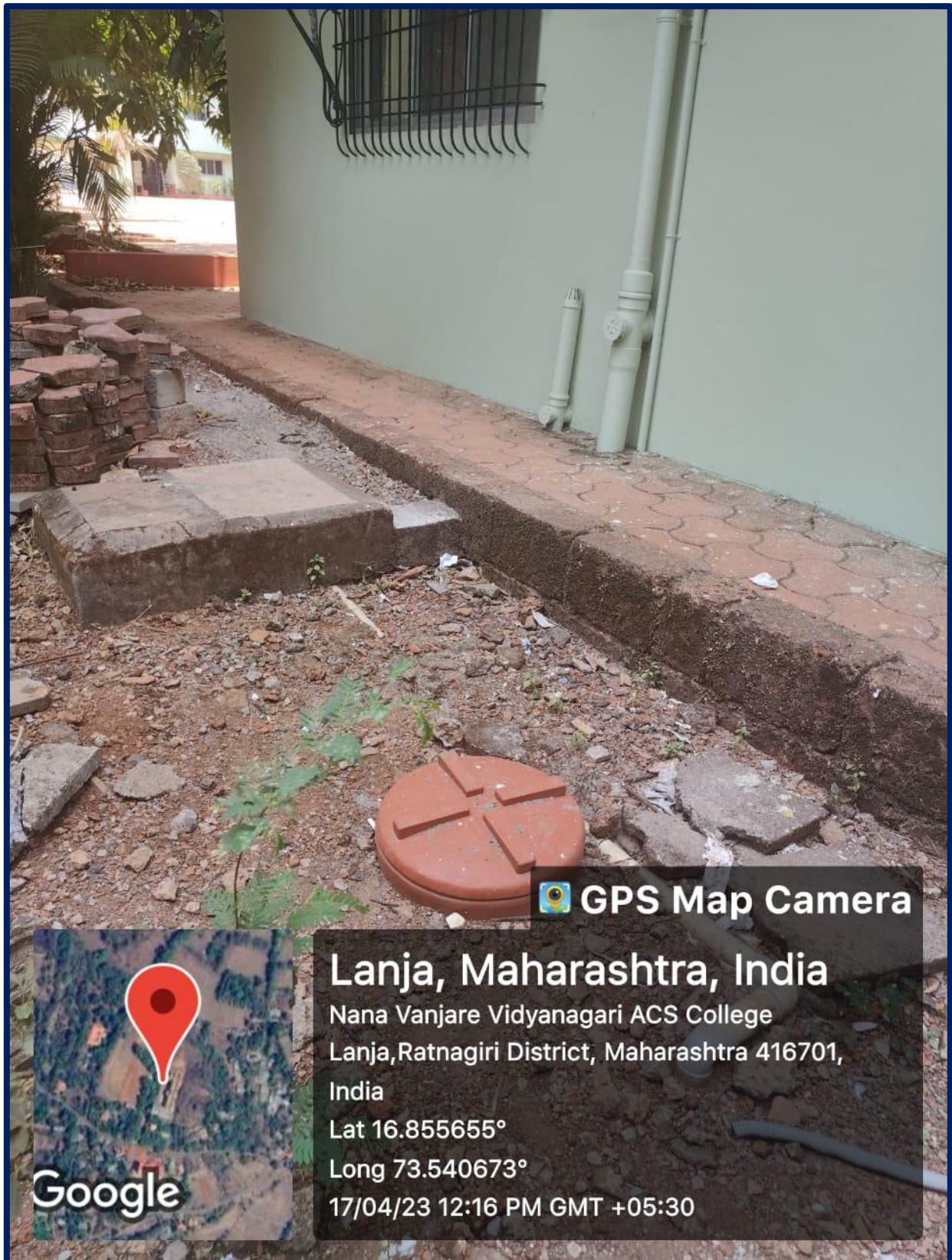



Principal
Arts, Commerce & Science College,
Lanja, Dist. Ratnagiri (Maharashtra)

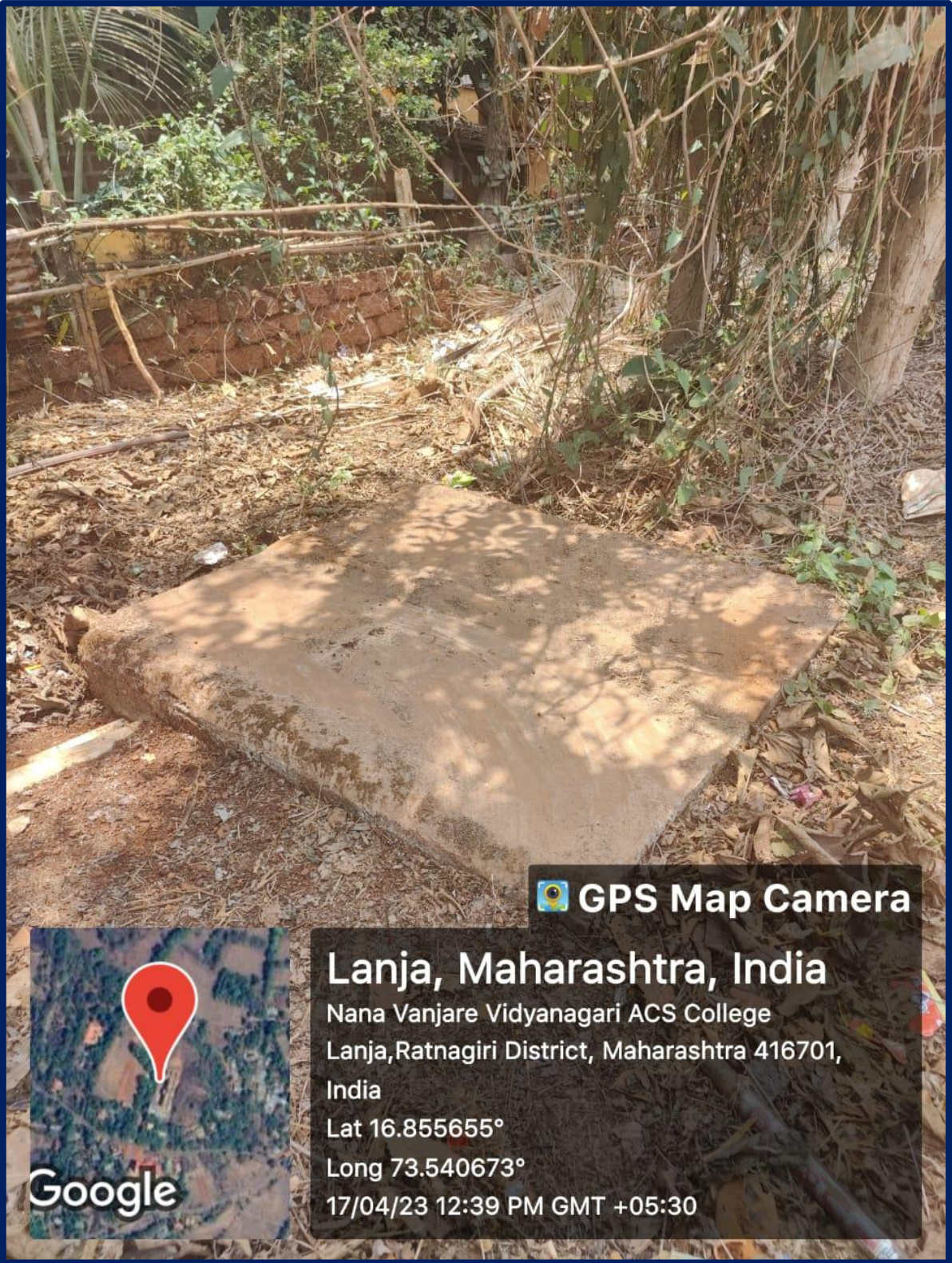
Lanja- Zapade Kante Road, Dist. Ratnagiri. Pin 416701, (Maharashtra)

Phone No.: Office 02351-230558, 231085, 230758. Email: lanjacollege@gmail.com, Website: www.acslanja.com

Drainage Facility for Liquid Waste




Soak Pit behind Canteen



Chemical Waste Management Unit



 **GPS Map Camera**

Lanja, Maharashtra, India

Nana Vanjare Vidyanagari ACS College

Lanja, Ratnagiri District, Maharashtra 416701, India

Lat 16.855655°

Long 73.540673°

17/04/23 12:08 PM GMT +05:30

Google



UNIVERSITY OF MUMBAI
No. UG/166 of 2016-17

CIRCULAR:-

A reference is invited to the Syllabi relating to the B.Sc. degree course, vide this office Circular No. UG/128 of 2011, dated 13th June, 2011 and the Principals of affiliated Colleges in Science are hereby informed that the recommendation made by the Ad-hoc Board of Studies in Chemistry at its meeting held on 7th July, 2016 has been accepted by the Academic Council meeting held on 14th July, 2016 vide item No. 4.12 and that in accordance therewith, the revised syllabus as per the Choice Based Credit System for F.Y. B.Sc. programme in Chemistry (Sem. I & II), which are available on the University's web site (www.mu.ac.in) and that the same has been brought into force with effect from the academic year 2016-17.

MUMBAI - 400 032

19 November, 2016

To,

The Principals of the affiliated Colleges in Science.

A.C/4.12/14.07.2016

No. UG/166 -A of 2016

MUMBAI-400 032

19 November, 2016

Copy forwarded with Compliments for information to:-

- 1) The Co-ordinator, Faculties of Science,
- 2) The Chairman, Board of Studies in Chemistry,
- 3) The Professor-cum-Director, Institute of Distance & Open Learning (IDOL)
- 4) The Director, Board of College and University Development,
- 5) The Co-Ordinator, University Computerization Centre,
- 6) The Controller of Examinations.



(Dr.M.A.Khan)
REGISTRAR

PTO..

AC _____

Item No. _____

UNIVERSITY OF MUMBAI

Syllabus for Approval

Sr. No.	Heading	Particulars
1	Title of Course	Chemistry
2	Eligibility for Admission	12th of all recognised Board
3	Passing marks	
4	Ordinances/Regulations (if any)	
5	No. of Semesters	Two
6	Level	U.G.
7	Pattern	Semester
8	Status	New
9	To be implemented from Academic year	2016-2017

Date:

Signature:

Name of BOS Chairperson:

Professor A.V.Karnik



Semester II Chemistry Lab



Unit I: Physical Chemistry

1. To determine the rate constant for the saponification reaction between ethyl acetate and NaOH
2. To determine dissociation constant of weak acid (K_a) using Henderson's equation and the method of incomplete titration pHmetrically.
3. To verify Beer-Lambert's law, using $KMnO_4$ solution by colorimetric method.
4. To standardize commercial sample of HCl using borax and to write material safety data of the chemicals involved.

Unit II: Inorganic Chemistry

1. **Qualitative analysis: (at least 4 mixtures to be analyzed)**
Semi-micro inorganic qualitative analysis of a sample containing two cations and two anions.
Cations (from amongst):
 Pb^{2+} , Ba^{2+} , Ca^{2+} , Si^{2+} , Cu^{2+} , Cd^{2+} , Fe^{2+} , Ni^{2+} , Mn^{2+} , Mg^{2+} , Al^{3+} , Cr^{3+} , K^+ , NH_4^+
Anions (From amongst):
 CO_3^{2-} , S^{2-} , SO_3^{2-} , NO_2^- , NO_3^- , Cl^- , Br^- , I^- , SO_4^{2-} , PO_4^{3-}
(Scheme of analysis should avoid use of sulphide ion in any form for precipitation / separation of cations.)
2. **Redox Titration:** To determine the percentage of copper(II) present in a given sample by titration against a standard aqueous solution of sodium thiosulfate (iodometry titration)

Unit III: Organic Chemistry

Characterization of organic compound containing C, H, (O), N, S, X elements.
(minimum 6 compounds)

UNIVERSITY OF MUMBAI**Syllabus for Approval**

Sr. No.	Heading	Particulars
1	Title of Course	M.Sc. Chemistry Semester I and II
2	Eligibility for Admission	The B.Sc. degree examination of this university with chemistry 6 units or 3 units or degree of any other university recognized as equivalent thereto .
3	Passing marks	Minimum D Grade or equivalent minimum marks for passing at the Graduation level.
4	Ordinances/Regulations (if any)	
5	No. of Years/Semesters	One year/Two semester
6	Level	P.G. part-I
7	Pattern	Semester
8	Status	Revised
9	To be implemented from Academic year	2017-2018

Date: 05-5-2017

BoS Chairperson:

Signature:

Dr. Anil V. Karnik



17. Organic Spectroscopy, V.R. Dani, Tata McGraw Hill Publishing Co.
18. Spectroscopy of Organic Compounds, P.S. Kalsi, New Age International Ltd.
19. Organic Reaction Mechanisms, V.K. Ahluwalia, R.K. Parasher, Alpha Science International, 2011.
20. Reactions, Rearrangements and Reagents by S. N. Sanyal
21. Name Reactions, Jie Jack Li, Springer
22. Name Reactions and Reagents in Organic Synthesis, Bradford P. Mundy, M.G. Ellerd, and F.G. Favalaro, John Wiley & Sons.

Organic Chemistry Practical

Paper III

Course Code: PSCHP 203

Separation of Binary mixture using micro-scale technique

1. Separation of binary mixture using physical and chemical methods.
2. Characterization of one of the components with the help of chemical analysis and confirmation of the structure with the help of derivative preparation and its physical constant.
3. Purification and determination of mass and physical constant of the second component.
The following types are expected:
 - (i) Water soluble/water insoluble solid and water insoluble solid,
 - (ii) Non-volatile liquid-Non-volatile liquid (chemical separation)
 - (iii) Water-insoluble solid-Non-volatile liquid.

Minimum three mixtures from each type and a total of ten mixtures are expected.

Reference:

1. Systematic Qualitative organic analysis, H. Middleton (Orient Longman)
2. A Handbook of Organic Analysis, H.T. Clark (Orient Longman)
3. Systematic Identification of organic compounds, R.L. Shriner (John Wiley, New York)
4. Practical Organic Chemistry by Mann and Saunders.
5. Advance Practical Organic Chemistry, N.K. Vishnoi, Vikas Publication





AC - 14/06/2018

Item No. 4.71

UNIVERSITY OF MUMBAI



Program : M.Sc.

(Choice Based Credit System)

Course : M.Sc. Organic Chemistry

Part - I

Syllabus for Semester III & IV

(To be implemented from the Academic year 2018-2019)

40. NATURAL PRODUCT CHEMISTRY VOLUME 1 AND 2, K. NAKAMISHI, J. GOTO, S. ITO Majori and S. Nozoo, Academic Press, 1974.
41. Chemistry of natural products, V.K. Ahluwalia, Vishal Publishing Co.
42. Green Chemistry: An Introductory Text, 2nd Edition, Published by Royal Society of Chemistry, Authored by Mike Lancater.
43. Organic synthesis in water. By Paul A. Grieco, Blackie.
44. Green chemistry, Theory and Practical, Paul T. Anastas and John C. Warner.
45. New trends in green chemistry By V. K. Ahulwalia and M. Kidwai, 2nd edition, Anamaya Publishers, New Delhi.
46. An introduction to green chemistry, V. Kumar, Vishal Publishing Co.
47. Organic synthesis: Special techniques. V.K.Ahulwalia and Renu Aggarwal.

Semester III: Practicals
Course code: PSCHO3P1

Separation of a ternary mixture of organic compounds and identification including derivative preparations using micro-scale technique

1. Separation of a ternary mixture (S-S-S, S-S-L, S-L-L and L-L-L) (for solid mixture: water insoluble/ soluble including carbohydrates) based upon differences in the physical and the chemical properties of the components.
 2. Identification of the two components (indicated by the examiner) using micro-scale technique.
 3. Preparation of derivatives (any one of separated compound).
- (Minimum 8 experiments)**

Course code: PSCHO3P2

Single step organic preparation(1.0 g scale) involving purification by Steam distillation / Vacuum distillation or Column chromatography.

1. Preparation of acetanilide from aniline and acetic acid using Zn dust. (Purification by column chromatography)
2. Preparation of 1-nitronaphthalene from naphthalene. (Purification by steam distillation)
3. .Preparation of acetyl ferrocene from ferrocene. (Purification by column chromatography)



Use of Micro Scale Techniques



Use of Micro scale Kit for Synthesis



Use of Micro Test Tubes and Dropper for Analysis



Dr. K. Kulkarni
Principal

Arts, Commerce & Science College,
Lanja, Dist. Ratnagiri (Maharashtra)

SAI COMPUTERS & TECHNICAL INSTITUTE

Vishnu Plaza Ground floor ,Kurup Patangan ,At-Post Tal-Lanja Dis-Ratnagiri

Email-prasannakurup@ymail.com

Mob.no- 9860676126/02351-230169

Date: 31/03/2022

To Whom It May Concern

This letter is giving to ensure that, The Sai Computer and Technical Institute, Lanja has been collecting e-waste material from New Education Society's, Arts, Commerce and Science College, Lanja since 2017. We send the waste material to safe disposal and reuse the working components/ parts in other devices.

Sai Computers & Technical Institute

Prasanna