



!! सिद्धिनेकान्तात् !!
Anekant Education Society's



Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati

- Affiliated to Savitribai Phule Pune University, Pune (M.S.) India •
 - Empowered Autonomous •
 - Jain Minority Institution •
- NAAC REACCREDITED 'A+' Grade (CGPA 3.55) •
- Website : www.tccollege.org •

Handbook of Waste Management



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Important Note

This handbook is published for the college purpose / private circulation only.

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Anekant Education Society

Anekant Education Society established in 1961 with the inspiration and blessings of the late Saint Samantbhadra Maharaj and, under the guidance of late Hon. Shri. Fulchand Gandhi, Former Education Minister of Hyderabad state. The Jain philosophy 'Siddhiranekantant' is the motto and 'Anekantwad' is a preamble of society. Anekant Education Society started a college named as *Baramati College*, Baramati in June 1962, with 112 students and 12 teachers. Later, it was renamed as *Tuljaram Chaturchand College*, presently boasts over 10,000 students from different disciplines. Moreover, the society runs another degree college named *Jaysingpur College* in Jaysingpur, Dist. Kolhapur M.S. Furthermore, it extended its endeavors by establishing *Anekant Institute of Management Studies (AIMS)*, *Anekant English Medium School*, Baramati and *College of Pharmacy* from the academic year 2024-2025.

Anekant Education Society is run by Jain community and has been catering to the educational needs of students belonging to different strata of society. It has been awarded 'Jain Religious Minority Institute' status from the Government of Maharashtra. Since its inception, A.E. Society has been providing quality education and has been contributing to academic, social and cultural development of society.

Institutions of A. E. Society:

- Tuljaram Chaturchand College, Baramati, Dist-Pune
- Tuljaram Chaturchand Junior College, Baramati, Dist-Pune
- Jaysingpur College, Jaysingpur, Tal. Shirol, Dist - Kolhapur
- Anekant Institute of Management Studies(AIMS), Baramati, Dist-Pune
- Anekant English Medium School, Baramati, Dist-Pune
- Anekant Education Society's College of Pharmacy, Baramati, Dist.-Pune

About College

Anekant Education Society's Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati, Pune is one of the leading and prestigious colleges in Maharashtra established in 1962. Our motto, 'We for Students' is at the heart of everything we do at the college. The college celebrated its Golden Jubilee in 2012. Keeping pace with modern trends in higher education, the college has full fledged UG programmes in Arts, Science and Commerce along with PG programmes almost in all subjects of different streams as well as Ph. D. Research centers. Beside traditional courses we seek to develop and introduce need based, value added, skill based and career oriented new courses. However, the College has been reaccredited for the third cycle with 'A+' grade (CGPA 3.55) by NAAC, Bangalore in 2017.

It has been awarded the status of 'College with Potential for Excellence' by UGC, and has been selected for STAR College scheme by DBT & DST-FIST scheme by DST, New Delhi. The college received several awards from Savitribai Phule Pune University, Pune including Best College Award, Best Principal Award, Best Student Welfare Officer Award, Best NSS Coordinator Award, Best NSS Unit Award, Best NSS volunteer award and also the recipient of awards from the Maharashtra Government.

The college under UGC scheme of skill development based higher education, started the new generation Bachelor of Vocational degree programmes from June 2014-2015 such as 1) Food Technology and Research and 2) Journalism and Mass Communication 3) Retail Management 4) E - Commerce and Digital Marketing 5) Dairy Technology 6) Networking and System Administration based on the National Skills Qualification Framework, (NSQF) to create employable graduates and skilled young entrepreneurs. Considering the overall academic progress of the college, UGC, New Delhi conferred the an Autonomous status to the college from December 2018 to December 2029 and in 2024 Savitribai Phule Pune University conferred the Empowered Autonomous Status.

Vision

Our vision is to impart career oriented quality education at par with national and international standards in various fields of knowledge including Humanities, Social Sciences, Basic Sciences, Commerce and research by developing moral values in the youth with a view to make them responsible citizens of India.

Mission Statement

Tuljaram Chaturchand College of Arts, Science and Commerce, run by Anekant Education Society, the Religious Minority Institute with the preamble, *Siddhiranekantat* means *Anekantwad* (Multidimensionalism), seeks to build nation by empowering the youth through skill and career oriented educational and vocational programmes.

Objectives

- 1) To empower the student especially from the rural area through curricular, co-curricular, extra-curricular and extension activities.
- 2) To empower the student through modern learning resources.
- 3) To impart value based career oriented programmes and to nurture various skills.
- 4) To provide the girl students equal opportunities and empower in different fields of knowledge.
- 5) To develop research culture among the students and faculty and carry out community oriented eco-friendly research for the development of society.
- 6) To undertake collaborative programmes and to carry out consultancy services through interaction with academia, industries and society at large.
- 7) To undertake faculty development programmes to improve academic quality of the institute.
- 8) To enhance students access to learning materials by means of central and departmental libraries and effective use of ICT.
- 9) To create awareness in the society to conserve natural resources and wild life.
- 10) To provide need based vocational training to the students.

INTRODUCTION

Bio-waste management is a critical aspect of environmental sustainability and public health. Bio-waste, comprising organic material such as food waste, garden waste, and agricultural residues, is a significant component of municipal solid waste. If left unmanaged, it can lead to environmental degradation, greenhouse gas emissions, and health hazards.

The effective management of bio-waste begins with its segregation at the source. By separating organic waste from other waste streams, it becomes easier to process and convert it into valuable products such as compost, biogas, or renewable energy. This not only minimizes the volume of waste sent to landfills but also promotes a circular economy where waste is transformed into resources.

Innovative technologies and practices, including composting, anaerobic digestion, and vermiculture, are being increasingly adopted to address bio-waste challenges. These methods help in reducing methane emissions from landfills, improving soil fertility, and generating clean energy.

Public awareness and participation are vital to the success of bio-waste management programs. Communities, industries, and governments must collaborate to implement effective policies, provide education, and encourage sustainable practices to reduce bio-waste and its impact on the environment.

By embracing responsible bio-waste management, we contribute to a healthier planet, mitigate climate change, and promote the sustainable use of resources.

1) Biogas Plant:

Biogas plant at Girls Hostel- Biogas plant placed near to girl's hostel canteen with feeding of 40 kg/day kitchen waste. The main goal of this practice is to progressively enhance the use of non-conventional energy resources on college property. Among the difficulties encountered in putting it into practice are: encouraging the disposal of biodegradable and non-biodegradable waste in different dustbins. Separating garbage from garden, canteen and other sources to produce biodegradable waste can be the starting point for the production of biogas.



Biogas plant at Girls Hostel with gas generation capacity=45 kg/month

2) Waste Water Recycling:

- The college has set up an effluent treatment plant (ETP) for the management of waste water. Effluent from Chemistry, Botany, Zoology, Microbiology, Environmental Science department is collected for processing in the Effluent collecting tank. The collected effluent is stirred with overhead electric motor and mixing with a solution of potash alum for coagulation. Then a solution of calcium hydroxide is added to adjust the pH in the range of 6-7. After adjusting the pH, effluent is lifted in an overhead tank for coagulation and sedimentation for 4 - 5 hours.
- After 5 hours settlement, the sludge settled down at the bottom is taken in a separating tank and supernatant liquid is collected in another tank and mixed with the solution of sodium-oxy-chloride as germicide. This liquid is allowed to pass through two filters having activated charcoal as molecular sieves. Resultant clean water is collected in another tank and used for gardening.



Effluent Treatment Plant



Effluent Treatment Plant

3) E-waste management:

The college has undertaken a number of E-waste Management initiatives with the objective of creating an eco-friendly environment in the campus. E-waste such as computers and its peripherals are upgraded regularly to continue usage and to avoid its wastage. And our retail management department collaborates with CROMA, Yearly this department arranging the E-Waste collection camp.



E-Waste Collection Camp

सकाळ



बारामती : इलेक्ट्रॉनिक्स वेस्ट संकलनप्रसंगी विद्यार्थ्यांसह प्राचार्य डॉ. चंद्रशेखर मुरुमकर व मान्यवर.

इलेक्ट्रॉनिक वेस्टचे संकलन

बारामतीत टी. सी. महाविद्यालयाचा पुढाकार

बारामती शहर, ता. ३ : ई-कचऱ्याच्या समस्येवर मात करण्यासाठी येथील तुळजाराम चवुरचंद (टी. सी.) महाविद्यालयाने ई-वेस्ट मॅनेजमेंटसाठी पुढाकार घेतला आहे. महाविद्यालयात बी. व्होक रिटेल मॅनेजमेंट व टाटा क्रोमा यांच्या वतीने दोन दिवस इलेक्ट्रॉनिक वेस्ट गोळा करण्याचा कार्यक्रम आयोजित केला गेला.

इलेक्ट्रॉनिक वेस्ट कलेक्शनमध्ये खराब झालेले

चार्जर, हेडफोन, रेडिओ, मोबाईल, स्क्रीन, की-बोर्ड, माऊस अशा अनेक प्रकारच्या इलेक्ट्रॉनिक वस्तू जमा करून टाटा क्रोमा स्टोअर्सला देण्यात येणार आहेत. या सर्व वस्तूंचे रिसायकलिंग करून पुनर्वापर करण्यात येणार आहे.

या उपक्रमाचे उद्घाटन महाविद्यालयाचे प्राचार्य डॉ. चंद्रशेखर मुरुमकर यांनी केले. या वेळी क्रोमा स्टोअरचे व्यवस्थापक समीर दिवरे उपस्थित होते. इलेक्ट्रॉनिक्स वेस्ट

गोळा करून त्याचे रिसायकलिंग करणे, ही काळाची गरज आहे. याने पर्यावरणाचा समतोल कायम राखण्यास मदत होईल, असे प्राचार्य डॉ. चंद्रशेखर मुरुमकर म्हणाले. महाविद्यालयाचे उपप्राचार्य डॉ. अविनाश जगताप, डॉ. अजित तेलवे यांच्या मार्गदर्शनाखाली रिटेल मॅनेजमेंट विभागाचे प्रमुख महेश फुले, सुधीर तावरे आणि अमृता बापट यांनी हा उपक्रम आयोजित केला.

Pune, District-Today
04/12/2019 Page No. 4

E-Waste Collection Camp News

4) Compost Plant:

Compost Plant at College Garden- Compost plant placed at College Campus Botanical Garden with feeding of 7-8 kg/day garden waste. The main goal of this practice is to progressively enhance the use of non-conventional energy resources on college. Stakeholders are encouraged to disposal of biodegradable waste in different areas in college campus. Compost is made from rotted waste materials such as plant foliage and stem, vegetable and fruits waste, grass cutting. Separating garbage from gardens and other sources to produce biodegradable waste that can be the starting point for the production of compost also mix some quantity of water, Inora compost culture. After 25-30 days our compost is ready to use for garden trees.



Compost Plant in College Garden



HIGHLIGHTS

- NAAC recredited ('A+' Grade) for third cycle.
- Qualified and experienced teachers, eminent scientists and scholar academicians are visiting faculty State-of-Arts, sophisticatedly furnished, air conditioned computer laboratories.
- Campus Networking, Internet cafe, Wi-Fi compability.
- Well equipped science laboratories, English language laboratory, Commerce laboratory, Central Facility Centre for research.
- A Unique library with collection over 1,19,976 books, N/I Journals, AV materials and specious reading rooms.
- A play ground, 400 m. running track, separate courts for indoor and outdoor games and well equipped gymnasium hall.
- Separate hostel with high class residential facilities.
- Digital office administration.
- A host of most prestigious and famous 'Moropant elocution and debate competition.'
- Earn and Learn Scheme.
- Competitive examination guidance.
- Placement cell.
- Student's Co-operative Consumer Store.
- Centre for Innovative and Applied Research (CIAR).
- Eco friendly college campus with Botanical Garden, Cafeteria.
- Auditorium and Advanced A / V Seminar Hall.
- Govt., University and other scholarship and freeships for meritorious and deserving students.
- Karmveer Bhaurao Patil Elocution Competition.
- National Cadet Corp (N.C.C.), National Service Scheme (N.S.S.).
- Personality development workshops.
- MoU with national & international institutions.
- Centre for Oriental Studies.
- 'Anekant' Miscellany.
- TCC Chronicle, a quarterly newsletter.
- Research centers for Ph. D. programme.
- Centre for Foreign Language Studies.
- COC / COP / Add-on Courses.
- Anekant: Journal of Humanities & Social Sciences.
- Largest Acoustic Television studio.
- Semester system pattern.
- Credit system evaluation.
- Certificate courses for skill development.
- Police outpost in the campus.

Anekant Education Society's

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Empowered Autonomous

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