#### **Tree plantation Programme**

On 19th August 2015 Department of Botany successfully completed the event of tree plantation at Botanical garden of Shri.Shivaji Arts, Commerce and Science College, Akot. The students of B.Sc.I Biology participated in the activity and planted the trees in the botanical garden and college premises. The purpose of tree plantation is to create awareness and spread the message of saving our planet, protecting our environment is the need of the hour. The importance of trees in contributing to the environment by providing oxygen, improving air quality was explained to the students on the occasion. The 22 students and three faculty members involved in this activity. Students planted as many as 35 plant saplings of flowering plants and medicinal plants in the Botanical garden.



Students of B.Sc.I planted the Aloe vera saplings



Students of B.Sc I planted the saplings

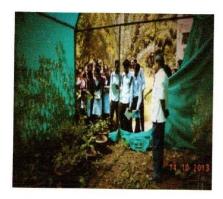
#### Seed Collection (Seed Bank)

The seeds, fruits and seedlings were collected from the college campus, nearby forest areas, roadsides and agricultural fields by the students and faculty members. These plant saplings were documented. The collected seeds, fruits were stored in the botany laboratory. These stored seeds planted in the botanical garden, distributed to students and dispersed in forest area and roadside. All the students of B.sc.II took part in this seed collection activity. The seeds and seedlings of the following plants were collected by the students.

- 1. Seeds of Azadirachta indica
- 2. Seedlings of Azadirachta indica
- 3. Fruits of Melia Azadirach
- 4. Seeds of Polyalthea longifolia
- 5. Seedlings of Terminalia arjuna
- 6. Seeds of Abrus precatorius
- 7. Seedlings of Murraya koenigi
- 8. Fruits of Terminalia cattapa
- 9. Seedlings of Jatropha gossypifolia
- 10. Seedlings of Ficus benghalensis
- 11. Seeds of Withania somnifera
- 12. Seeds of Syzygium cumini
- 13. Seeds of Tamarindus indica



B.Sc.II students documented the plant saplings



B.Sc.II students documented the plant saplings

Head
Department of Botany
Shri ivaji art Commerce
and Science College, Akot

Principal

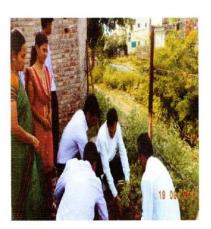
Shri Shivaji Arts, Commande

& Science Collage

Dist Akols (Maharash at

#### **Tree Plantation Programme**

Department of Botany organised Tree Plantation programme on 19<sup>th</sup> September 2014 in college campus of Shri.Shivaji Arts, Commerce and Science College, Akot under the guidance of Hon. Principal Dr.A.L.Kulat .The objective for tree plantation is for awareness about environment safety and nourishment of campus. Twenty five students and six faculty members involved in this activity. On this occasion, Principal Dr.A.L.Kulat mentioned that it is need of the hour to plant trees, people should develop the habit of planting trees and conserve the planted saplings. Dr.M.M.Dhore, Head Department of Botany said plants are the foremost source for producing the oxygen in environment, they helps to reduce the level of Co2.In all 25 saplings had been planted namely *Delonix regia,Pongamia pinnata,Bauhinia,Azadirachta indica,Cassia species,Adhatoda vasica,etc.* 



Hon.Principal Dr.A.L.Kulat planting the plant saplings



B.Sc.I students planting the plant saplings

Head
Department of Botany
Shri Shivaji arts,Commerce
and Scienca College,Akof

SWA.

#### Seed Collection from

#### College Campus and nearby area

Department of Botany carried out the activity of seed collection in the month of July2014 .The seeds, fruits and seedlings were collected from the college campus, nearby forest areas, roadsides and agricultural fields by the students and faculty members. These plant saplings were documented. The collected seeds, fruits were stored in the botany laboratory. These stored seeds planted in the botanical garden, distributed to students and dispersed in forest area and roadside. All the students of B.sc.II took part in this seed collection activity. The seeds and seedlings of the following plants were collected by the students.

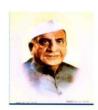
- 1. Seeds of Azadirachta indica
- 2. Seedlings of Azadirachta indica
- 3. Fruits of Melia Azadirach
- 4. Seeds of Polyalthea longifolia
- 5. Seedlings of Terminalia arjuna
- 6. Seeds of Abrus precatorius
- 7. Seedlings of Murraya koenigi
- 8. Fruits of Terminalia cattapa
- 9. Seedlings of Jatropha gossypifolia
- 10. Seedlings of Ficus benghalensis
- 11. Seeds of Withania somnifera
- 12. Seeds of Syzygium cumini
- 13. Seeds of Tamarindus indica
- 14. Seedlings of Ocimum sanctum
- 15. Fruits of Teak





**B.Sc.III students collecting the seedlings from college Campus** 





# Shri Shivaji Art's, Commerce & Science College, Akot Extension Activity Plastic Free Campus



## Report 2015-2016

Title of program conducted

Date of program

Objectives of program

Number of beneficiaries

: Awareness about plastic bags pollution

: 14 Aug 2015 and 6th Sep 2015

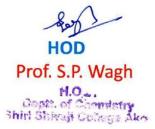
: To aware about plastic bag pollution

: 75 students and People of AKOT

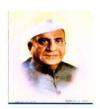
Brief summary of the program: In the academic year 2015-16 clippings on plastic bag pollution shown to students of B.A. I, B.Sc.I and B.Com.I., dated 14 Aug 2015 and aware them about plastic bags pollution. We organized rally in Akot on 6<sup>th</sup> Sep 2015 in Padyatra. Our students aware the people about plastic bag pollution and insist them to use dustbins for garbage's. Students visited to various places, meet the people and told them how harmful the effect of plastic to society and environment.













**Report** 2014-2015

Name of Activity : No Vehicle Day

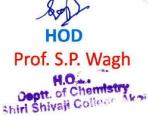
Aim : Pollution Free College Campus

Objectives :To aware the students and staff members

about carbon free campus.

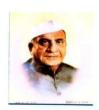
The Department of Chemistry Shri Shivaji Art's, Commerce and Science College, Akot have mandatory follow **Thursday** of each week as no Vehicle Day. This event was mandatory to all faculty members and students in order to save environment and make carbon free campus. Aware the citizen of Akot for such activity.







Principal nri Shivaji Arts,Commerce & Science College,Akot





Report 2015-2016

Name of Activity : No Vehicle Day

Aim : Pollution Free College Campus

Objectives :To aware the students and staff members

about carbon free campus.

The Department of Chemistry Shri Shivaji Art's, Commerce and Science College, Akot have mandatory follow **Thursday** of each week as no Vehicle Day. This event was mandatory to all faculty members and students in order to save environment and make carbon free campus. Aware the citizen of Akot for such activity.



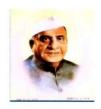


Prof. S.P. Wagh





Principal : Shri Shivaji Aris, Commerce & Science College, Akot





**Report** 2016-2017

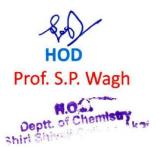
Name of Activity : No Vehicle Day

Aim : Pollution Free College Campus

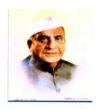
Objectives :To aware the students and staff members

about carbon free campus.

The Department of Chemistry Shri Shivaji Art's, Commerce and Science College, Akot have mandatory follow **Thursday** of each week as no Vehicle Day. This event was mandatory to all faculty members and students in order to save environment and make carbon free campus. Aware the citizen of Akot for such activity.









**Report** 2017-2018

Name of Activity : No Vehicle Day

Aim : Pollution Free College Campus

Objectives :To aware the students and staff members

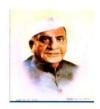
about carbon free campus.

The Department of Chemistry Shri Shivaji Art's, Commerce and Science College, Akot have mandatory follow **Thursday** of each week as no Vehicle Day. This event was mandatory to all faculty members and students in order to save environment and make carbon free campus. Aware the citizen of Akot for such activity.











**Report** 2018-2019

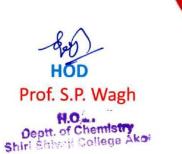
Name of Activity : No Vehicle Day

Aim : Pollution Free College Campus

Objectives :To aware the students and staff members

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The Department of Chemistry Shri Shivaji Art's, Commerce and Science College, Akot have mandatory follow **Thursday** of each week as no Vehicle Day. This event was mandatory to all faculty members and students in order to save environment and make carbon free campus. Aware the citizen of Akot for such activity.





### **Workshop on Making Paper Bags for Plastic Free campus**

### श्री शिवाजी कला, वाणिज्य व विज्ञान महाविद्यालय, आकोट गृहअर्थशास्त्र विभाग

#### विद्यार्थीनींना बॅग बनवीने व हस्तकला शिकवीने

Workshop on Making Paper Bags 2.01.2018

गृहअर्थशास्त्र विभागाने विदयार्थीनीं करीता पर्यावरण पुरक अशा पेपर बॅग बनविण्याची कार्यशाळा आयोजीत करण्यात आली.

उददेश:— विद्यार्थीनी मध्ये कला कुशलता निर्माण व्हावी. व त्याचा उपयोग त्यांना स्वयंरोजगार म्हणून करता यावा तसेच पर्यावरणास पुरक अशी जागरूकता निर्माण व्हावी या उददेशाने ही कार्यशाळा घेण्यात आली. तसेच पेपर बॅग बनविण्याच्या कलाकौशल्यची माहीती होण्याच्या दृष्टीने ही कार्यशाळा घेतली.

प्रा. स्वाती वैद्य व डॉ. प्रशांत कोठे यांनी या कार्यशाळेला पॉलिथीन बॅगचे तोटे व घातक परिणामाची माहीती सांगून मार्गदर्शन केले. विविध बॅग बनविण्याचे प्रात्यक्षिक करून दाखितले. या कार्यशाळेत ४० विदयार्थीनींनी सहभाग घेतला. कार्यशाळेमुळे सहभागी विदयार्थीनींना वर्तमानपत्र तसेच निमंत्रण पित्रका या पासून हया बॅग तयार करण्या बाबत माहीती मिळाली. प्रात्याक्षिक विदयार्थीनींना करून पाहता आले.



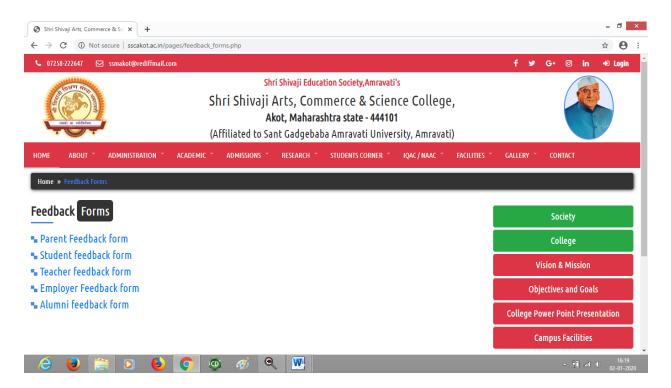
बनविलेल्या पेपर बॅग

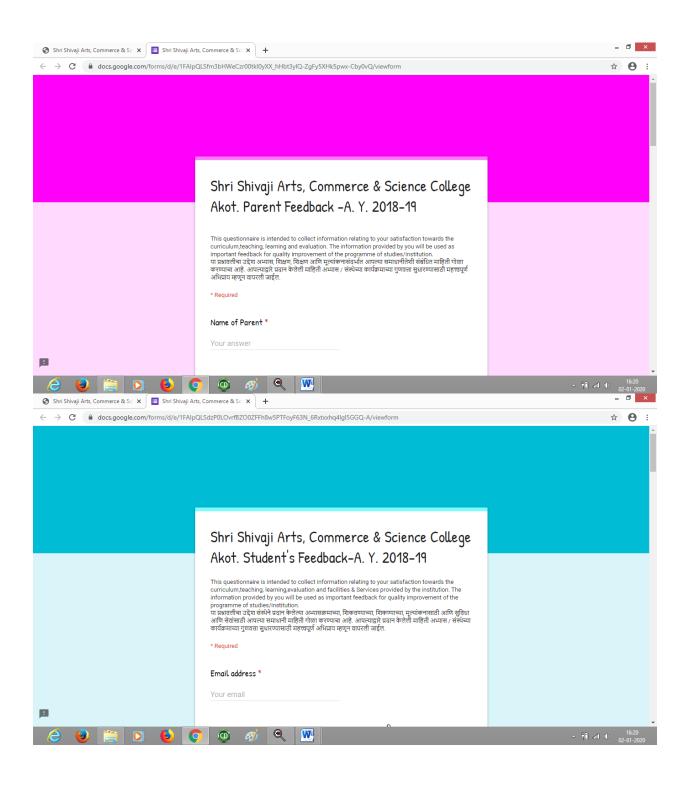


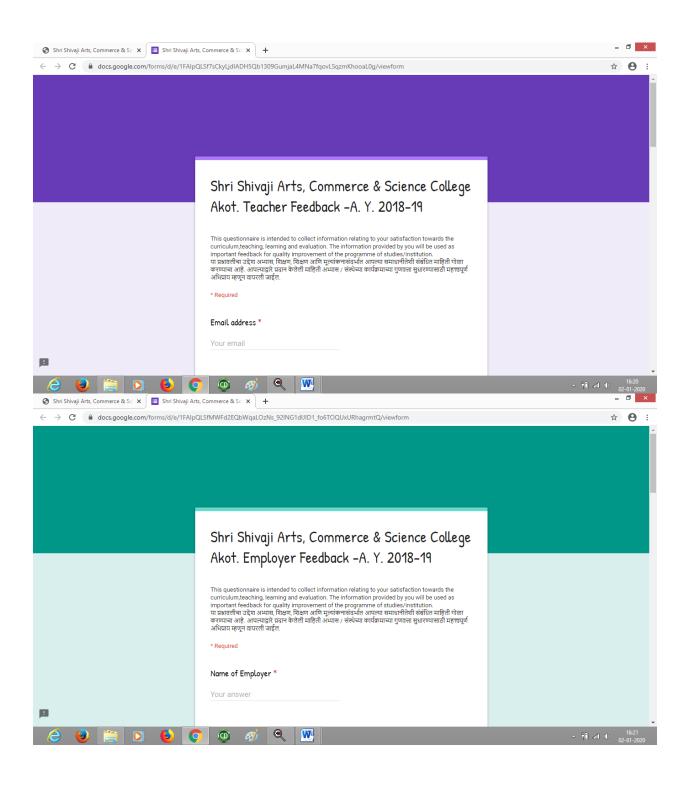


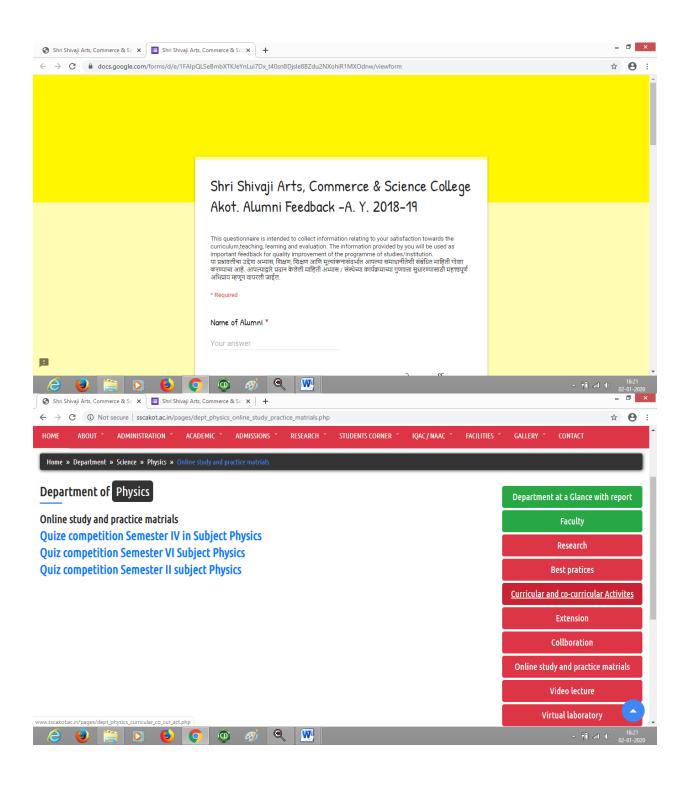
## **Initiative for the paperless work**

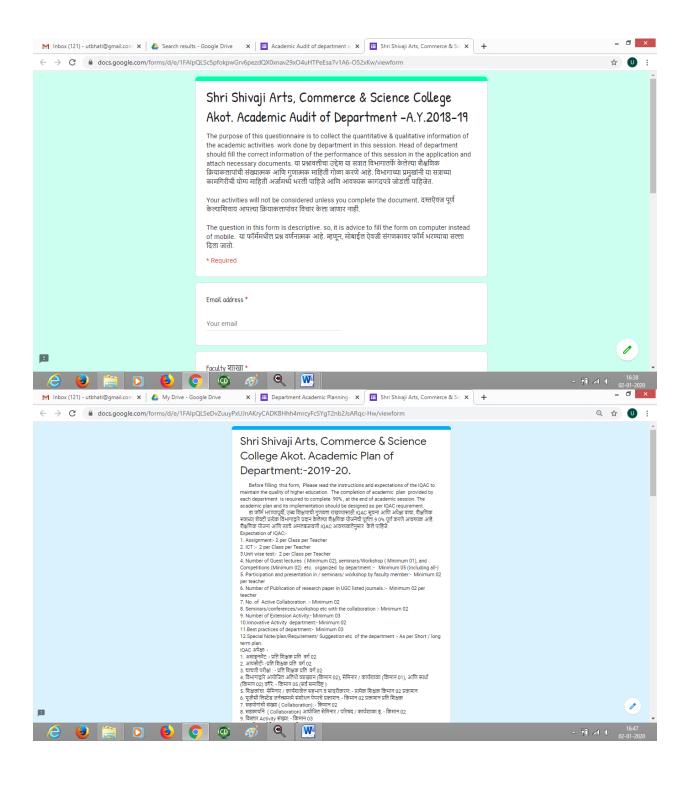
### Online Feedback and Quiz Competition













**COLLEGE PREMISES LAWN** 



STATUE OF FOUNDER PRESIDENT BHAUSAHEB alias PANJABRAO DESHMUKH



CENTRAL ADMINISTRATIVE BLOCK



COLLEGE TRACK



**COLLEGE VIEW** 



**BOTANICAL GARDEN** 



PEDESTRIAN FRIENDLY ROAD



PEDESTRIAN FRIENDLY ROAD AND GREEN LANDSCAPING



PEDESTRIAN FRIENDLY ROAD



COLLEGE CAMPUS WITH GREEN LANDSCAPING AND PEDESTRIAN FRIENDLY ROAD



COLLEGE CAMPUS WITH GREEN LANDSCAPING AND PEDESTRIAN FRIENDLY ROAD



VEHICLE RESTRICTED ZONE



VEHICLE RESTRICTED ZONE

# SHRI SHIVAJI ARTS, COMMERCE & SCIENCE COLLEGE, AKOT DEPARTMENT OF BOTANY

**INNOVATIVE ACTIVITY** 

### REPORT

ON

#### TREE PLANTATION AUDIT OF THE COLLEGE CAMPUS

The term "Green" means eco-friendly or not damaging the environment. This can acronymic ally is called as "Global Readiness in Ensuring Ecological Neutrality" (GREEN). "Green Accounting" can be defined as, systematic identification quantification, recording, reporting & analysis of components of ecological diversity & expressing the same in financial or social terms. "Green Auditing", an umbrella term, is known by another name "Environmental Auditing". In auditing literature both the terms are being used interchangeably. To implement the green audit other important aspects such as objective of green audit. Drivers of green audit, future scope, benefits, and advantages are necessary to understand. The green audit practically involves energy conservation, use of renewable sources, rain water harvesting, and efforts of carbon neutrality, plantation, hazardous waste management & E-waste management.

The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crises. On this background it becomes essential to adopt the system of the Green Campus for the institute which will lead for sustainable development. Shri Shivaji Arts, Commerce & Science College, Akot Dist. Akola, Maharashtra is deeply concerned and unconditionally believes that there is an urgent need to address these fundamental problems. Being a premier institution of higher learning at Tahsil place, the college has initiated 'The Green Campus' program through the **Tree Plantation** Audit. The Tree plantation of is carried out every year from July to December. The purpose of the audit was to ensure that the practices followed in the campus are in accordance with the Green Policy adopted by the institution.

The methodology includes physical inspection of the campus for counting the plant species and identification of the plants, observation and preparation of the document. It works on the several facets of 'Green Campus' including Water Conservation, Tree

Plantation, Waste Management, Paperless Work, Alternative Energy and Mapping of Biodiversity. With this in mind, the specific objectives of the audit are to evaluate the adequacy of the management control framework of environment sustainability as well as the degree to which the Departments are in compliance with the applicable regulations, policies and standards. It can make a tremendous impact on student health and learning, college operational costs and the environment.

#### Recommendations:

- 1. Reviews periodically the list of trees planted in the garden, allot numbers to the trees and keep records. Give scientific names to the trees.
- Promote environmental awareness as a part of course work in various curricular areas, independent student projects work, and community service.
- Create awareness of environmental sustainability and takes actions to ensure environmental sustainability.

## SHRI SHIVAJI ARTS, COMMERCE & SCIENCE COLLEGE, AKOT DEPARTMENT OF BOTANY

**INNOVATIVE ACTIVITY** 

#### TREE PLANTATION AUDIT OF THE COLLEGE CAMPUS



Ailanthus excelsa



Albizia lebbeck

Principal
Shri Shivaji Arts, Commerce
& Science College, Akot
Dist. Akola (Maharashtra)



Calistemon lanceolatus



Mimusops elengi



Dalbergia sisso



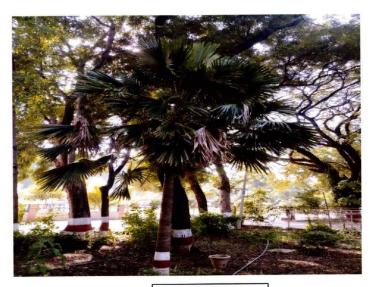
Delonix regia



Commiphora mukul



Murraya paniculata



Borassus flabelifer

Principal
Shri Shivaji Arta, Commerce
& Science College, Attol
Dist.Akola (Maharashtra)

## SHRI SHIVAJI ARTS, COMMERCE & SCIENCE COLLEGE, AKOT DEPARTMENT OF BOTANY

#### **INNOVATIVE ACTIVITY**

### TREE PLANTATION AUDIT OF THE COLLEGE CAMPUS

S.N.	BOTANICAL NAME OF PLANT	VERNACULAR NAME	Common English Name	FAMILY	INDIVIDUAL NUMBER OF PLANT
1	<i>Delonix regia</i> (Boj. ex Hook. ) Raf.	Gulmohor	Gold Mohor	Caesalpiniaceae	10
2	Tectona grandis L.f.	Sagwan	Teak Plant	Verbenaceae	33
3	Azadirachta indica A. Juss.	Neem tree	Margosa	Meliaceae	77
4	Bamboosa arundnacea (Retz.) Willd.	Bamboo	Spiny bamboo	Poaceae	60
5	Holoptelea integrifolia (Roxb.) Planch.	Palaspapdi	Indian Elm, Jangle cork tree	Ulmaceae	11
6	Albizia lebbeck (L.) Benth.	Siris	Women's tongue tree	Mimosaceae	10
7	Butea monosperma (Lam.) Taub.	Palas	Flame of the forest	Fabaceae	03
8	Gmelina arborea Roxb.	Shivan	White teak	Verbenaceae	04
9	Polyalthea longifolia Sonn.	Ashoka	Indian Mast tree, The Buddha tree	Annonaceae	69
10	Murraya paniculata (L.) Jack	Madhumalti	Orange Jasmine	Rutaceae	08
11	Plumeria alba L.	Chafa	White champa	Apocynaceae	06
12	Aegle mormelos (L.) Correa	Bel	Golden apple	Rutaceae	04
13	Morinda citrifolia L.	Noni	Indian mulberry	Rubiaceae	03
14	Syzygium cumini (L.) Skeels	Jambhul	Indian blackberry	Myrtaceae	04
15	Tecoma stans (L.) Juss. ex kunth	Ghanti phul	Yellow bells	Bignoniaceae	04
16	Zizyphus mauritiana Lam.	Bor	Indian plum	Rhamnaceae	03
17	Casuarina equisetifolia L.	Saru	Australian pine tree	Casuarinaceae	01
18	Callistemon lanceolatus		Bottle brush	Myrtaceae	11

S.N.	BOTANICAL NAME OF PLANT	VERNACULAR NAME	Common English Name	FAMILY	INDIVIDUAL NUMBER OF PLANT
19	Tamarindus indica L.	Chinch	Tamarind	Caesalpiniaceae	02
20	Murraya koenigii (L.) Spreng.	Kadhi Patta	Curry leaf tree	Rutaceae	03
21	Terminalia arjuna (Roxb.) Wight & Arn.	Arjuna	Arjun Tree	Combretaceae	03
22	Phoenix sylvestris (L.) Roxb.	Shindi	Wild date plam	Arecaceae	01
23	Vitex negundo L.	Nirgudi	Common Chaste Tree	Verbenaceae	02
21	Commiphora mukul (Arn.) Bhandari	Guggul	Indian Bdellium Tree	Burseraceae	02
25	Nyctanthes arbor-tristis L.	Parijatak	Tree of Sorrow	Oleaceae	01
26	Borassus flbellifer L.	Tad	Fan palm Toddy palm	Arecaceae	02
27	Ixora coccinea L.	Ixora, Rugmini	Jangle Geranium	Rubiaceae	32
28	Alstonia scholaris (L.) R.Br.	Saptaparni	Blackboard Tree Devil tree	Apocynaceae	24
29	Cocos nucifera L.	Naral	Coconut tree	Arecaceae	15
30	Nerium indicum L.	Kaner	Oleander	Apocynaceae	03
31	Nerium oleander L.	Kaner	Oleander	Apocynaceae	15
32	Hamelia patens Jacq.	Hamelia	Hummingbird bush	Rubiaceae	11
33	Millettia pinnata ( L.) Panigrahi	Karanj	Indian beech tree, Pongam oil tree	Fabaceae	57
34	Melia azedirach L.	Bakain Nimb	Bead Tree	Meliaceae	01
35	Ficus benghalensis L.	Vad	Indian banyan tree	Moraceae	01
36	Ficus religiosa L.	Pimpal, bodhi tree, Ashwatha tree	Sacred fig tree	Moraceae	07

S.N.	BOTANICAL NAME OF PLANT	VERNACULAR NAME	Common English Name	FAMILY	NUMBER OF PLANT
37	Manilkara zapota (L.) P. Royen	Chiku	Sapodila plum	Sapotaceae	01
38	Annona squamosa L.	Sitaphal,	Custurd apple, Sugar apple	Annonaceae	06
39	Tabernaemontana divericata R.Br.ex Roem & Schult.	Tagar, Chandani	Moonbeam	Apocynaceae	08
40	Terminalia catappa L.	Jangli badam, desi badam	Indian almond tree	Combretaceae	01
41	Bauhinia purpurea L.	Rakta kanchan	Hawainian Orchid tree, Butterfly tree	Caesalpiniaceae	04
42	Sapindus emarginatus Vahl	Ritha	Soapnut tree	Sapindaceae	03
43	Spathodea campanulata P. Beauv.	Akash Shevga, Rugtura	African tulip tree	Bignoniaceae	09
44	Dalbergia sissoo Roxb.	Shisav, Kalarukh	Indian rosewood	Fabaceae	03
45	Lawsonia inermis L.	Mendi	Egyptian trivet	Lythraceae	03
46	Caryota urens L.	Bherli maad, Surmaad	Fishtail palm	Arecaceae	15
47	Lagerostroemia parviflora Roxb.	Bakli, bondga, lendiya	Crepe flower	Lythraceae	02
48	Mimusops elengi L.	Bakul, Maulshree	Spanish cherry, Bullet wood	Sapotaceae	08
49	Hibiscus rosa-sinensis L.	Jaswand	China rose	Malvaceae	22
50	Limonia acidissima L.	kauth	Wood apple	Rutaceae	01
51	Capparis grandis L.	Vaghati	Ceylon Caper	Capparaceae	01
52	Pithecoelobium dulce (Roxb.) Benth.	Vilayati chinch	Madras thorn	Mimosaceae	02
53	Ailanthus excelsa Roxb.	Maharukh	Indian tree of Heven	Simaroubaceae	03
54	Annona reticulata L.	Ramphal	Bull's heart	Annonaceae	01

S.N.	BOTANICAL NAME OF PLANT	VERNACULAR NAME	Common English Name	FAMILY	NUMBER OF PLANT
55	Psidium guajava L.	Peru, Jam	Guava	Myrtaceae	01
56	Ficus hispida L.f.	Karvati	Rough leaved fig	Moraceae	02
57	Peltophorum pterocarpum (DC.) K. Hyene	Sonmohor	Copperpod	Caesalpiniaceae	01
58	Ceiba speciosa (A.St- Hil.)Ravenna	Kapok	Sheltering tree	Bombacaceae	01
59	Cycas revoluta Thunb.	Cycas plant	Japanes Sago	Cycadaceae	02
60	Juniperus chinensis L.	Juniper plant	Chinese Juniper	Cuppressaceae	10
	Total				613

Dr. Manik. M. Dhore

Head
Department of Botany
Shri Shivaji arts, Commerce
and Science College, Akot

Dr. Santosa N. Patole

Dr. A. L. Kulat

Principal
Shri Shivaji Arts, Commerce
& Science College, Akot
Dist. Akola (Maharashtra)

Verified and Certified

Dr. Prashant A. Gawande

Associate Professor Department of Botany S. G. B. Amravati University Amravati.