



SHRI SHIVAJI EDUCATION SOCIETY, AMRAVATI'S
SHRI SHIVAJI COLLEGE OF ARTS, COMMERCE AND SCIENCE, AKOLA (MS)
Affiliated with Sant Gadge Baba Amravati University, Amravati (MS)
UGC Status- College with Potential for Excellence (Phase II Completed)
DST- FIST (Level "00") Support;
Lead College Status by S. G. B. Amravati University, Amravati (MS)
Website: www.shivajiakola.ac.in

7.1.3

Facilities in the Institution for the management of degradable and non-degradable waste

Shri Shivaji Education Society, Amravati's

SHRI SHIVAJI COLLEGE OF ARTS, COMMERCE AND SCIENCE, AKOLA



NAAC Re-Accredited with A grade with CGPA 3.24
UGC Status of 'College with Potential for Excellence', DST-FIST level-0 Support
Lead College status by S.G.B.A.U. Amravati



Near Shivaji Park, Akola - 444 001 (Maharashtra)
Phone & Fax : 0724-2410438/2411039
Website : shivajiakola.ac.in E-mail : principal@shivajiakola.ac.in

Late Dr. Panjabrao Deshmukh
Founder President

Hon. Harshvardhan Deshmukh
President

Dr. Ambadas L. Kulat
Principal

No. SSC/AKL/

Date 15/12/2021

Declaration

This is to declare that the information, reports, true copies and numerical data etc. furnished in this file as supporting documents is verified by IQAC and found correct.

Hence this certificate.

Dr. A. S. Raut
Dr. A. S. Raut
IQAC Co-ordinator
Shri Shivaji College of Arts,
Commerce & Science, AKOLA

Dr. A. L. Kulat
PRINCIPAL
Shri Shivaji College, of Arts
Commerce & Science, AKOLA
A GRADE C.GPA. 3.24., BY NAAC



Scanned with
CamScanner

7.1.3

Facilities in the Institution for the management of degradable and non-degradable waste

Index

Sr. No.	Facilities	Page Number
1.	Solid Waste Management Audit	01 - 08
2.	Rain Water Harvesting	09
3.	Biomedical Waste Management Agreement with Municipal Corporation	10 - 11
4.	E- Waste Agreement	12 - 15
5.	Waste Recycling System	16 - 17

**SHRI SHIVAJI COLLEGE OF ART S, COMMERCE AND SCIENCE,
AKOLA (MS)**

**Report of
*Degradable and non-degradable waste***

Solid Waste Audit was done by external agency- EcoShastra

Solid Waste Audit

EcoShastra

Green Audit Report

1. Solid Waste Audit

Introduction:

Shri Shivaji College of Arts, Commerce and Science, Akola is an environment-friendly educational institute, and for any Environment-friendly institute, Solid Waste Audit is considered as a crucial part. In educational institutes like Shri Shivaji College, Paper, chalk, Polythene, Glass, and Biomass are the major constituents for solid waste production. Although Paper, Chalk, and Biomass wastes are considered Bio-degradable wastes, their production is directly or indirectly depends on the environment and their inappropriate management can raise environmental issues e.g. this waste can alter the water quality of a stream if it goes into the local water stream. Solid waste auditing gives an actual idea about solid waste generations in the campus and management strategies followed by the college. In this report, studies were carried out to analyze the solid waste profile of the college and corresponding waste management techniques.

Aims and objectives:

- i. To calculate total solid waste generation on the campus.
- ii. To classify solid waste according to categories and places.
- iii. To analyze the obtained data and find key solid waste generation places.
- iv. To discuss present-day Waste-Management Strategy of the campus
- v. To issue appropriate recommendations considering different parameters like solid waste generation, management strategies, etc.

Green Audit Report

Methodology:**1. Data collection:**

While collecting data, solid wastes like papers, polythene, glass, chalks, etc. are stored separately in a dustbin for a week for each mentioned place and weighed on a balance at end of the week. Solid waste like kitchen and food waste are weighed each day and disposed of, the data of all seven days are added and represented separately.

2. Data analysis:

The obtained data is represented in tables and analyzed in excel by pie diagrams and bar diagrams.

3. Comment on Recommendations:

The comments have been made considering the number of stakeholders, the amount of total waste generation, the present-day waste disposal method, and research has been done to recommend more efficient methods of solid waste management.

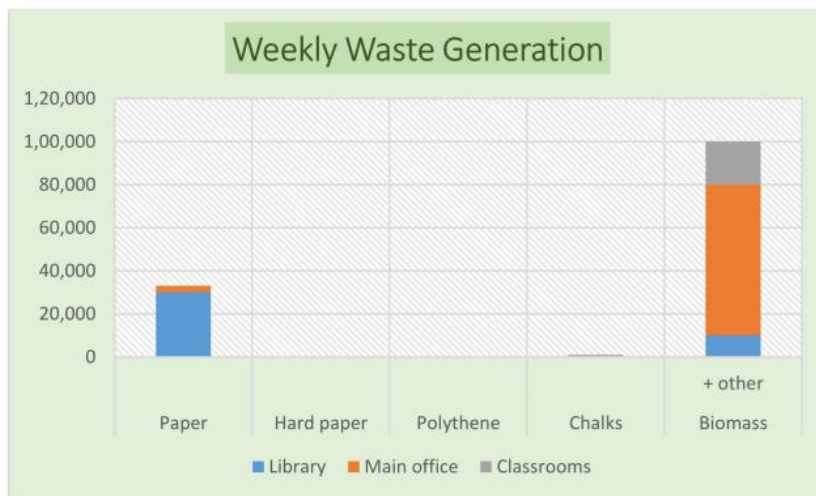
Green Audit Report

Observations:

Solid Waste Accounting by Weight

Place	Paper	Hard paper	Polythene	Chalks	Biomass + other
Library	30,000	-	100	-	10,000
Main office	3,000	100	150	-	70,000
Classrooms	-	-	100	1,000	20,000
Total	33,000	100	350	1,000	1,00,000

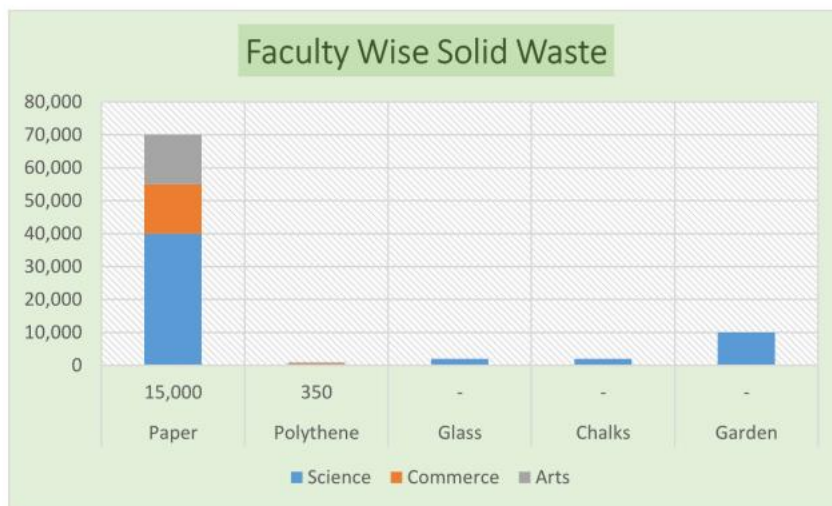
TABLE 1 Weekly Waste of Offices, Classrooms & Library in Grams. (Apx.)



Green Audit Report

Departments	Paper	Polythene	Glass	Chalks	Garden
Arts	15,000	350	-	-	-
Science	40,000	300	2,000	2,000	10,000
Commerce	15,000	200	-	-	-
Total	70,000	850	2,000	2,000	10,000

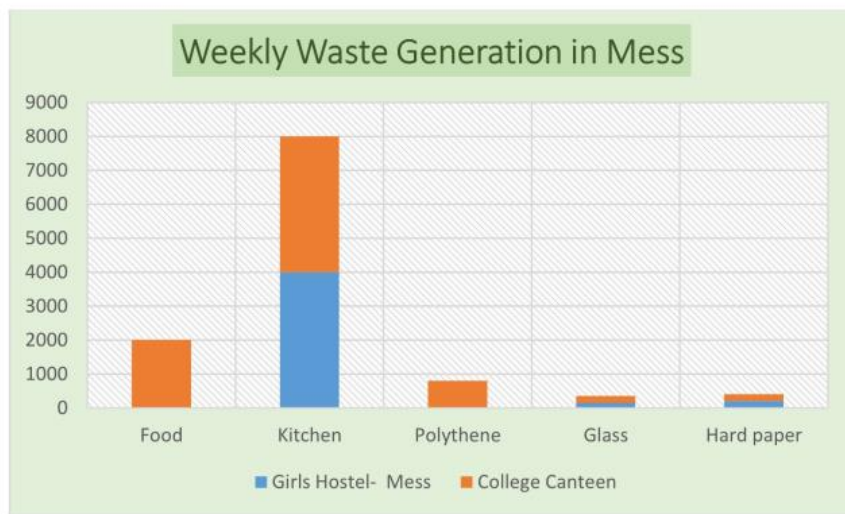
TABLE 2 Weekly Faculty Wise Solid Waste Generation of College in Grams (Apx.)



Green Audit Report

Place	Food	Kitchen	Polythene	Glass	Hard paper
Girls Hostel- Mess	-	4,000	-	150	200
College Canteen	2,000	4,000	800	200	200
Total	2,000	4,000	800	350	400

TABLE 3 Hostels and Staff Quarters – Weekly Solid Waste Generation in Grams (Apx.)



Green Audit Report

Place	Paper	Polythene
Girls Hostel	100	500
Total	100	500



Green Audit Report

Conclusion:

Paper, Kitchen waste, and Garden waste (biomass) are the major constituents of solid waste generation on the campus. Hard Paper, Hard Plastic, and Chalk waste are the minor components of solid waste generation. After detailed studies, we can conclude that the campus has a negligible amount of polythene generation.

Discussion:

Shri Shivaji College of Arts, Commerce and Science, Akola a well-known institute in Akola. The institute is famous for conducting curriculum-based activities and delivering social, moral, and ethical values to its stakeholders. As an environment concerned institute, college knows Solid waste, the most common type of waste in an educational institute, should be managed properly. So college has built the Biogas Plant and Compost Manure Plant. The organic waste including food waste and kitchen waste generated in Girls hostel and College canteen are collected, segregated, and transferred to a biogas plant, where it is further processed and decomposed. As garden waste is the major component of solid waste generation, the proper management of the garden waste is done in Compost Manure Plant.

The less polythene generation in the campus is a result of timely awareness programs conducted on the campus.

Paper waste ranks second in the total solid waste generation index of the campus. Key sources for paper waste generation are the library, office, and science departments.



Shri Shivaji Education Society, Amravati's

SHRI SHIVAJI COLLEGE OF ARTS, COMMERCE & SCIENCE, AKOLA

NAAC Re-accredited with 'A' grade with CGPA -3.24 | UGC Status of college with Potential for Excellence | DST FIST Sponsored, Lead College Status by Parent University



RAINWATER HARVESTING IN THE CAMPUS

Project by Department of Geology & Geo-informatics with NSS

Total catchment area : 11461 sq. meter

Total volume of rainwater collected :
246275.225 cubic metres (m³) or
24,62,75,225 litres.

About 70 percent of the total rainwater harvesting potential to the harvesting recharge structure.

So that, **Total volume of rainwater harvested about :172392.65** cubic metres (m³) or **172392657.5** liters .

The College has developed its own rainwater harvesting model by constructing rainwater recharge trench having size 100ft x 4.5ft x 10 ft located at North- West part of the College campus. The recharge trench site was selected by using GIS, Geophysical and Geological survey of the college campus. The main water bearing formation i.e. Basalt (Deccan Traps) fractured, jointed under phreatic conditions whereas, Alluvium- Sand, silt and clay column, under semiconfined to confined conditions were reported.


All the runoff of surface water and rooftop rainwater outlets collected with PVC Pipes and drains into the groundwater recharge pits. To increase groundwater recharge, two recharge borewells were taken along recharge trench for artificial opening to basement sand, silt and clay column to avoid confined condition and drilled up to a weathered and highly jointed basalt sections which having a good groundwater holding and yielding capacity. The rainwater harvesting structures enhanced groundwater table in and around the college campus. The college borewells continuously yielding groundwater also in summer seasons.

Biomedical waste Management

Shri Shivaji Education Society, Amravati's


SHRI SHIVAJI COLLEGE OF ARTS, COMMERCE AND SCIENCE, AKOLA

NAAC Re-Accredited with A grade with CGPA 3.24
UGC Status of 'College with Potential for Excellence', DST-FIST level- 0 Support
Lead College status by S.G.B.A.U. Amravati
Near Shivaji Park, Akola - 444 001 (Maharashtra)
Phone & Fax : 0724-2410438/2411039 Cell : 09970151348
Website : shivajiakola.ac.in E-mail : principal@shivajiakola.ac.in



Late Dr. Panjabrao Deshmukh
Founder President

Hon. Harshvardhan Deshmukh
President



Dr. Rameshwar. M. Bhise
Principal

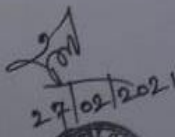

Ref. No. SSC\AKL\	\ 20121-22	Index No. Sr. College : 205, Jr.01.01.004, HSVC : 01.01.903	Date : 26/02/2021
-------------------	------------	---	-------------------

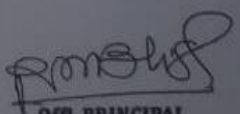
To,
District Health Officer
Akola Municipal Officer, Akola

Subject: Regarding registration for disposal of Biomedical waste.

Sir,
With reference to above subject we would like to inform you that some of the practicals from the Life science department including Biochemistry, Microbiology, Zoology and Home Science generate Biomedical Waste like Syringes, cotton waste, Microbiological Culture medias, etc. Being responsible educational institute we believe that this biomedical waste has to be properly disposed. Therefore we request you to kindly give permission for the registration of our institute under your waste disposal project.

Thanking you.

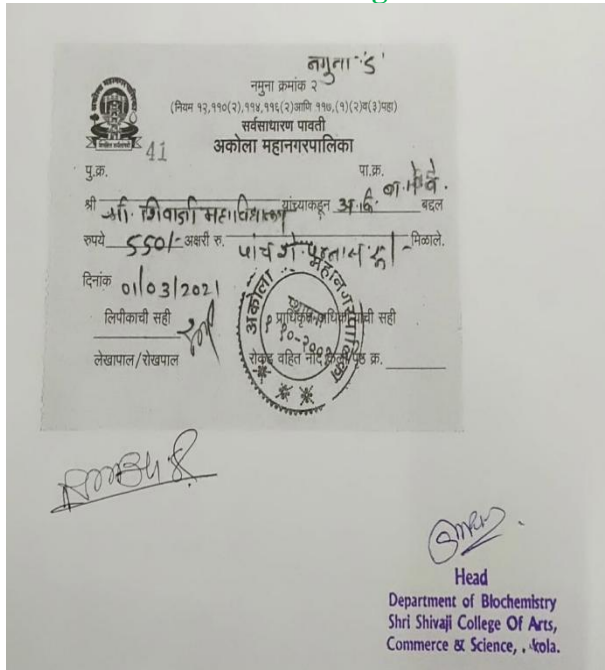


OFF. PRINCIPAL
Shri Shivaji College of Arts,
Commerce & Science, AKOLA
A Grade C. GPA. 3.24 by NAAC

Letter to Municipal Corporation



Agreement with Municipal Corporation



Receipt

Shri Shivaji Education Society, Amravati's

SHRI SHIVAJI COLLEGE OF ARTS, COMMERCE AND SCIENCE, AKOLA

NAAC Re-Accredited with A grade with CGPA 3.24
UGC Status of 'College with Potential for Excellence', DST-FIST level- 0 Support
Lead College status by S.G.B.A.U. Amravati
Near Shivaji Park, Akola - 444 001 (Maharashtra)
Phone & Fax : 0724-2410438/2411039
Website : shivajiakola.ac.in E-mail : principal@shivajiakola.ac.in



Late Dr. Panjabrao Deshmukh Founder President	Hon. Harshvardhan Deshmukh President	Dr. Rameshwar. M. Bhise I/C Principal
---	--	---

To, SSC/AKL/ Date 10.6.2021

To,

M/s Lilashana Sales,
Ramdoot Complex, Nandura road,
Khamgaon, Dist-Buldana-444303

Subject- Regarding e-waste management

Respected Sir,

With reference to the subject cited above, we are hereby requesting you for management of e-waste produced by our college. As an academic institution, we are having huge setup of various laboratories including Computer Science lab, Electronics lab, Physics lab etc. Rest of the departments and administrative offices are also using computers, Printers etc. In this regard some e-waste is generated every year of which we try our best to reuse these all. At last few of these materials are wasted and needed to be sent for scientific procedure of recycling, for which we are requesting you for assistance in recycling of these materials.

Thanking you in anticipation.


Dr. G. S. Wajire
 Incharge
 e-waste management

Yours Sincerely


Dr. R.M. Bhise
 Principal,
 Shri Shivaji College of Arts, Commerce and Science,
 Akola

Request letter regarding E-Waste agreement

LILASHANA SALE

(Super speciality in E-waste)

Mob.9850349580

7709324489

Ramdut Complex, Khamgaon, Dist Buldana (Maharashtra)

Date: 03/10/201

पति,
 मा.प्राचार्य साहेब,
 श्री. शिवाजी कॉलेज ऑफ आर्ट,कॉमर्स व सायन्स
 अकोला

दि.21/12/2021.

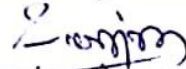
विषय : E-Waste स्कॅप मटेरीयल संदर्भात

महोदय,

आपण दि.१०/०६/२०२१ रोजी आपल्या कडे असलेल्या E-Waste मटेरीयल संदर्भात पत्र पाठविले होते. त्या संदर्भात आमच्या कंपनीच्या थोड्या व्यस्त कामामुळे दखल घेतल्या गेली नाही. त्याबद्दल क्षमस्व.

महोदय आपल्या अकोला स्थित श्री शिवाजी कॉलेज ऑफ आर्ट,कॉमर्स व सायन्स मधिल तसेच आपल्या संस्थेच्या असलेल्या इतर शिक्षण संस्थामध्ये निरुपयोगी / निकामी झालेले इलेक्ट्रीकल व इलेक्ट्रॉनिक वस्तु आपण कळविल्यानंतर आम्ही आपल्याकडून घेवून जावु आपणासोबत पर्यावरणाचे समतोल राखण्यासाठी शासनाने नियुक्त केलेल्या आमच्या फर्मला आपल्या सोबत मिळून काम केल्याचा आनंद होईल. तरी आपण वरील E-Waste मटेरीयल जमा झाल्यास कळवावे आपणास आमच्या कंपनीकडून ग्रीन सर्टिफिकेट सुध्दा मिळेल धन्यवाद !

आपला कृपाभिलाषी



लिलाशाना सेल्स,खामगांव

9511244475

Agreement

श्री शिवाजी शिक्षण संस्था अमरावती द्वारा संचालित,
श्री शिवाजी विद्यालय व कनिष्ठ महाविद्यालय, कटासा

प्रति,
 प्राचार्य,
 श्री शिवाजी महाविद्यालय, अकोला.

विषय :- जुना संगणक मिहणेबाबत.

महोदय,

विनंतीपूर्वक अर्ज सादर करतो की - माझ्याकडे असलेला जुना संगणक दुरुवर्तीपणेही संगणक विभागाकडे देला होना परंतु तो संगणक दुरुवर्ती होण्यासारखा नाही. अर्ज ११ वी व १२ वी विद्यार्थ्यांचे वर्ग जुळवता येऊन त्यांना Video Clips दाखवण्यासाठी संगणक आवश्यक आहे. तरी कृपया आपणांचे निर्णय ही संगणक विभागात एकदा जुना (मुक्तीत) असतानाच देण्याची कृपा करावी.

दिनांक- 23/8/2018.

आपला विश्वासू
 Orghw
 (जी.एस. जवंजळ)
 HSC Vde. विभागात.

Also installed the Antivirus
 23/8/18

डा. पारुषी शिंदे
 सहायक प्राचार्य
 23/8/18

Received the system (CPU) from Biorchem dept through Computer Sc (Bhikay sir) don't to MCVL (Javayal sir) on 23/8/18

Received: PC (CPU)
 Orghw
 23/8/2018

Computer donation on Request from sister institute

श्री शिवाजी शिक्षण संस्था अमरावती व्द्वारा संचालित,
श्री शिवाजी विद्यालय व कनिष्ठ महाविद्यालय, कुटासा
 ता.आकोट जि. आकोला फोन नं.-(09246)221036

✽ अध्यक्ष ✽

मा.श्री. हर्षवर्धन प्र.देशमुख

ईमेल:Shivajividyalayakutasa@gmail.com

✽ मुख्याध्यापक ✽

श्री. एस.एन.धाडवे

✽ संस्थानक अध्यक्ष ✽

शिक्षण महर्षी डॉ. फंजावराव उपाध्याय भाऊसाहेब देवमूमन
(एन.ए.टी.फील, एल.एन.टी., बार-ऑट-ली)

वेतन पथक क्र.८८ शाळा संकेतांक : 09.02.020 क.म.वि.संकेतांक : जे 09.02.092

वेतन पथक क्र. Shalarth ID 05820100245 शाळा U-DISE 27050211003
 जा. क्र. 22319096... जा. क्र. 2310312096

Shri Shivaji College of Arts,
 Commerce & Science, AKOLA
 Inward No. 1477
 Date: 12/3/18

प्रति,
 मा. श्री. भिसे साहेब,
 प्राचार्य, श्री शिवाजी महाविद्यालय,
 आकोला.

विषय : श्री शिवाजी विद्यालय, कुटासा या शाळेसाठी ६ संगणक मिळण्याबाबत

महोदय,

मा.श्री. नरेशचंद्रजी ठाकरे, उपाध्यक्ष, श्री शिवाजी शिक्षण संस्था, अमरावती तथा अध्यक्ष, शाळा समिती श्री शिवाजी विद्यालय, कुटासा आणि मा.श्री. केशवरावजी मेलकर, कार्यकारिणी सदस्य, तथा सदस्य, शाळा समिती श्री शिवाजी विद्यालय, कुटासा यांनी आमचे विद्यालयास दिनांक १/०३/२०१८ रोजी भेट दिली असता आम्ही त्यांचेकडे ६ संगणकांची मागणी केली. त्यानुसार त्यांनी श्री शिवाजी महाविद्यालय, आकोलाचे प्राचार्य यांचेकडे अर्ज करून ६ संगणकांची मागणी करण्याचे सुचविले.

आपणास विनंती की, आमचे शाळेसाठी ६ संगणक देण्याची कृपा करावी.

प्रतिलिपी :

- मा.श्री. नरेशचंद्रजी ठाकरे, उपाध्यक्ष, श्री शिवाजी शिक्षण संस्था, अमरावती तथा अध्यक्ष, शाळा समिती, श्री शिवाजी विद्यालय, कुटासा
- मा.श्री. केशवरावजी मेलकर, कार्यकारिणी सदस्य, श्री शिवाजी शिक्षण संस्था, अमरावती तथा सदस्य, शाळा समिती, श्री शिवाजी विद्यालय, कुटासा यांना माहितीस्तव सादर

आपला विरह
 Sunil
 मुख्याध्यापक
 श्री शिवाजी विद्यालय व कनिष्ठ महाविद्यालय, आकोला

81221036
 5 कोणाच्या
 21/3/18

Computer donation on Request from sister institute

• **Waste recycling system**

TO WHOM SO EVER IT MAY CONCERN

This is to certify that the used and damaged desks, benches, stools, cupboards and other similar class room and office items and materials used at Shri Shivaji College of Arts, Commerce & Science, Akola are repaired and refurbished in our workshop.

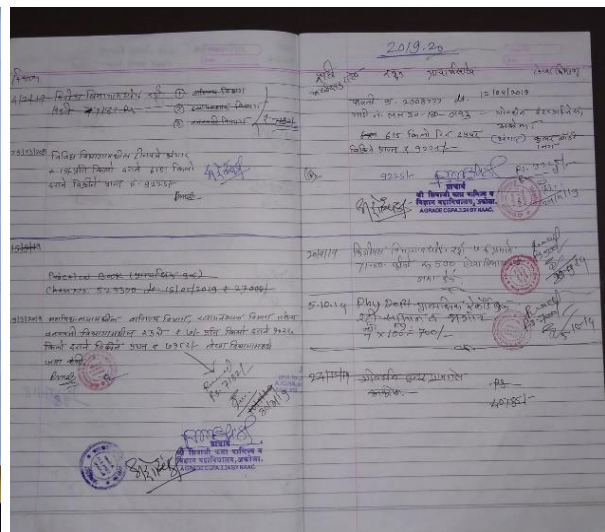
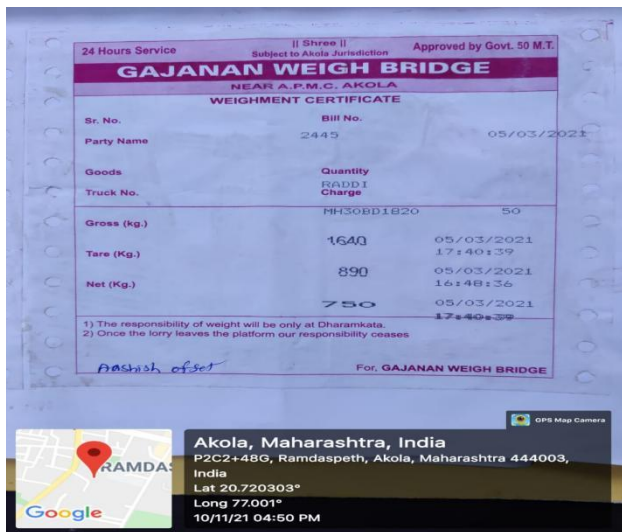
This is to further certify that the so refurbished materials/ items can be used again for their intended purposes without much quality compromise.

Hence, this certificate



(In-charge)
H.S.C. Vocational Department

Certificate about Reuse and repair of waste material



Bill of paper waste for recycling

दिनांक	विषय	विवरण	वर्ग	वर्ग	वर्ग
22-3-18	सकलपत्रिका	सकलपत्रिका 2018 ₹ 1000 पत्रिका ₹ 8400 ₹ 1000-2018/2019 7450/प्रमाणित	अ	अ	अ
24/07/18	मार्गदर्शक प्रिण्टिंग	मार्गदर्शक प्रिण्टिंग 2018 ₹ 1000 पत्रिका ₹ 8400 ₹ 1000-2018/2019 7450/प्रमाणित	अ	अ	अ
25/07/18	सर्वेक्षण	सर्वेक्षण 100 पत्रिका ₹ 1000 पत्रिका ₹ 8400 ₹ 1000-2018/2019 7450/प्रमाणित	अ	अ	अ
31/07/18	सर्वेक्षण	सर्वेक्षण 100 पत्रिका ₹ 1000 पत्रिका ₹ 8400 ₹ 1000-2018/2019 7450/प्रमाणित	अ	अ	अ

दिनांक	विषय	विवरण	वर्ग	वर्ग	वर्ग
22-3-18	सकलपत्रिका	सकलपत्रिका 2018 ₹ 1000 पत्रिका ₹ 8400 ₹ 1000-2018/2019 7450/प्रमाणित	अ	अ	अ
24/07/18	मार्गदर्शक प्रिण्टिंग	मार्गदर्शक प्रिण्टिंग 2018 ₹ 1000 पत्रिका ₹ 8400 ₹ 1000-2018/2019 7450/प्रमाणित	अ	अ	अ
25/07/18	सर्वेक्षण	सर्वेक्षण 100 पत्रिका ₹ 1000 पत्रिका ₹ 8400 ₹ 1000-2018/2019 7450/प्रमाणित	अ	अ	अ
31/07/18	सर्वेक्षण	सर्वेक्षण 100 पत्रिका ₹ 1000 पत्रिका ₹ 8400 ₹ 1000-2018/2019 7450/प्रमाणित	अ	अ	अ

दिनांक	विषय	विवरण	वर्ग	वर्ग	वर्ग
31/07/18	सर्वेक्षण	सर्वेक्षण 100 पत्रिका ₹ 1000 पत्रिका ₹ 8400 ₹ 1000-2018/2019 7450/प्रमाणित	अ	अ	अ
10/08/18	सर्वेक्षण	सर्वेक्षण 100 पत्रिका ₹ 1000 पत्रिका ₹ 8400 ₹ 1000-2018/2019 7450/प्रमाणित	अ	अ	अ
24/08/18	सर्वेक्षण	सर्वेक्षण 100 पत्रिका ₹ 1000 पत्रिका ₹ 8400 ₹ 1000-2018/2019 7450/प्रमाणित	अ	अ	अ
31/08/18	सर्वेक्षण	सर्वेक्षण 100 पत्रिका ₹ 1000 पत्रिका ₹ 8400 ₹ 1000-2018/2019 7450/प्रमाणित	अ	अ	अ

दिनांक	विषय	विवरण	वर्ग	वर्ग	वर्ग
31/07/18	सर्वेक्षण	सर्वेक्षण 100 पत्रिका ₹ 1000 पत्रिका ₹ 8400 ₹ 1000-2018/2019 7450/प्रमाणित	अ	अ	अ
10/08/18	सर्वेक्षण	सर्वेक्षण 100 पत्रिका ₹ 1000 पत्रिका ₹ 8400 ₹ 1000-2018/2019 7450/प्रमाणित	अ	अ	अ
24/08/18	सर्वेक्षण	सर्वेक्षण 100 पत्रिका ₹ 1000 पत्रिका ₹ 8400 ₹ 1000-2018/2019 7450/प्रमाणित	अ	अ	अ
31/08/18	सर्वेक्षण	सर्वेक्षण 100 पत्रिका ₹ 1000 पत्रिका ₹ 8400 ₹ 1000-2018/2019 7450/प्रमाणित	अ	अ	अ

Updates of paper waste recycling