# GREEN AUDIT REPORT And ENVIRONMENT AUDIT



2020-21
M/s P.E.S COLLEGE OF SCIENCE, ARTS & COMMERCE
M.C.ROAD, MANDYA – 571 401
KARNATAKA STATE.





Prepared By,

M/s. ENVIRO ENGINEERING SOLUTIONS

ThrupthiNilaya, 8<sup>th</sup> Cross, Leelavathi Extension, Maddur, Karnataka - 571428.

# **CERTIFICATE**

M/s. Enviro Engineering Solutions, ThrupthiNilaya, 8<sup>th</sup> Cross, Leelavathi Extension, Maddur, Karnataka – 571428, has carried out Green Audit and Environment Audit for P.E.S. College of Science, Arts & Commerce, M.C. Road, Mandya-571401, Karnataka State during March, 2021.

Date: 12.03.2021

Place: Maddur

For Enviro Engineering Solution

Authorized Signatory

**Proprietor** 

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# **EXECUTIVE SUMMARY**

Rapid urbanization, industrialization has led to several environmental and ecological crises. Now people have realized the need for Environment protection. Several legislations were enacted by various countries for the protection of the environment. Before initiating action to mitigate the problems, there is a necessity to identify the problem issues. Hence the concept of Green audit has emerged.

The management of P.E.S College of Science, Arts & Commerce, Mandya, is environmentally concerned and has the intention to make the campus eco-friendly. In order to achieve 'The Green Campus', the auditing work was taken up. Before taking up the work a lot of preparatory work was carried out and methodologies developed.

After discussions with the management, stakeholders in the college, field verification of site, regulatory requirement, the report is prepared and also suggestions are made to achieve Green Campus.

# 1. INTRODUCTION

M/s. P.E.S. College of Science, Arts & Commerce is a reputed Institution in the district of Mandya. The college imparts value based quality education to students belonging to all sections of society and to make higher education an effective instrument for socio-economic transformation in and around Mandya district. The College was established in the year 1966 by People's Education Society currently known as People's Education Trust (R), with the help of philanthropic farmers of Mandya District.

The sole objective of the college was to promote Quality Education among the students of Rural Areas. The Society was founded by the late Sri K.V. Shankaragowda, former Education Minister of Government of Karnataka., an educationist, politician, artist, entrepreneur and a social worker. Later Dr. H.D.Chowdaiah, former Member of Legislative Assembly and council, a well-known educationist and a pioneer in the field of Co-operative, headed Trust. At present the

Trust is headed by Sri. K.S. Vijay Anand, former ZP member, Young & energetic youth leader. The college is housed at present in an area of 2.18 acres of land in the heart of the city. Besides the undergraduate college, the People's Education Trust (PET) has the following colleges -

- 1. P.E.S. College of Engineering.
- 2. P.E.S. Law College.
- 3. Shankaregowda College of Education.
- 4. P.E.S. Pre-University College and
- 5. P.E.S. High School.

Other Infrastructure facilities provided to the students of our Institution are

- 1. Swami Vivekananda Auditorium.
- 2. V.S.V.M. Boys Hostel.
- 3. P.E.T. Indoor Badminton stadium.
- 4. P.E.T. Multi-Gym.
- 5. P.E.T. Aquatic Centre.

- 6. P.E.T. Cricket Stadium.
- 7. P.E.T. Synthetic Tennis Stadium.
- 8. Multipurpose Athletic stadium.
- 9. P.E.S.C.E. Girls Hostel.
- 10. P.E.T.Working Women's Hostel and
- 11. Krishik Sarvodaya Foundation Trust (R).

The Institution at present has Thirty-Two Classrooms, which are adequate to run the College in a single session. New construction has taken place at the cost of Rs.3.8 Cr to create facilities for examination centres and to provide facilities for autonomous status. Presently, the institution is functioning under the grant-in-aid scheme of Government of Karnataka.

VISION: The P.E.S College of Science, Arts and Commerce strives to

- 1. Build a learning culture.
- 2. Make students responsible citizens.
- 3. Create an atmosphere of oneness.
- 4. Imbibe moral and ethical values.
- 5. Inculcate traditional values of parental care and community living.
- 6. Love, Care, protect and improve one's roots.
- 7. Uphold human values irrespective of caste, creed, race or religion.
- 8. Dream of becoming a world citizen

### MISSION

- 1. Pursue and achieve excellence in quality teaching, learning and research.
- 2. Provide access to the students for optimum use of college infrastructure.
- 3. Foster and encourage innovation and creativity.
- 4. Recognize and accept social responsibility.

- 5. Respect and disseminate social harmony and unity in diversity
- 6. Create an environment of intellectual stimulus, scientific inquiry and responsibility.
- 7. Integrate global perspective.

# 2. BASIC INFORMATION

SL.NO	Description	Observation
1	Name of the Institution	M/s. P.E.S. College of Science, Arts & Commerce
2	Address	M.C. Road, Mandya-571 401,Karnataka
3	Contact Person	Sri. Dr. J.Mahadeva
4	Telephone No	08232-220252
5	Mail ID	pessac.mandya@gmail.com pessac.mandya@yahoo.in
6	Website	www.pessacmandya.ac.in
7	Total Area in Sq. feet	786573
8	Green Built Area, Sq. feet	259569
9	No of Staff	106
10	No of Students	2223

11	Type of courses run by	1. Science- B.ScPCM, PMCs, CBZ, BCA
	college	M.S. (Mathematics)
		M.Sc. (Mathematics)
	,	2. Arts- B.A:
		HEP, HES, HEE, HSK, HKF, HPF
		3. Commerce- B. Com, M. Com
		4. Management- B.B.A
	10.2	
12	Source of Water	Bore well and RainWater.
13	Water Consumption	1,20,810 litres/day
		(VSVM)
14	Wastewater Generation	96,648 litres/day
	h Wassas	10.1 November (markly southers - 11.0000, m.s.)
15	No of Pumps	3
16	Bore well	3
	Carrent Tradium	strong la Proposition 2. Sept Space on passes
17	Latitude and Longitude	12.5269°N, 76.8881 °E
		. as Whattle Dadowskies Course
18	Dist-Residence, meters	5
19	Dist-Highway, meters	3
*2	Zas zagawaj, metels	- CARDIN Loyen - Workpain
20	Waste water Discharge	UGD
	Point	Total
21	Power Requirement	100 KW/Day
		7. Klan-k no pears with flood light

# 3. INFRASTRUCTURE FACILITIES

1	Total land available (in acres)	2.18
2	Class Rooms (No. of class rooms and covered area in sq. Ft.)	32 No's, with 23.910 sq. Ft.
3	Laboratories (No. of labs rooms and covered area in sq. Ft.)	7 No's with 7,860 sq. Ft.
4	Central Library	4,680 sq. Ft.
5	Hostels(No. of rooms with students	Hostels accommodated)
	a. Men	85 Rooms Double seaters - 7,000 sq. Ft. (VSVM)

1. 84	b. Women	101 Rooms Double seaters - 8.500 sq. Ft. (Girls Hostel)
6	Sports Facilities in the College Campus (indoor/outdoor), Play grounds, Fitness equipment, sports coaches, etc.	1. Cricket stadium (Turf) 2. Swimming pool 3. Indoor facilities a) Shuttle Badminton Court (Wooden) = 4 b) Multi Gym = Men c) Multi Gym = Women 4. Volleyball court with flood light= 2 court 5. Tennis court - Synthetic 3, Clay 1 flood light
		6. Basketball with flood light 7. Kho-Kho court with flood light 8. Ball badminton court 9. Kabaddi court 10.Football field

## 4. GREEN AUDIT

### a. Definition

New England Interstate water pollution Control commission defines Green Campus as under.

- 1. Is one that carries out these functions according to a system-wide culture of environmental sustainability, balancing function and design with existing and foreseen resources?
- 2. Is a place where environmentally responsible practice and education go hand in hand and where environmentally responsible tenets are borne out by example?
- 3. Institution is a laboratory of self-scrutiny, experimentation, and application. At its best, it is a model environmental community where operational functions, business practices, academic programs, and people are interlinked, providing educational and practical value to the institution, the region, and the world.

# b. Benefits of Green Campus

- 1. Reduced maintenance costs.
- 2. Productivity gains for the occupants of the campus.
- 3. Carbon Neutral environment.
- 4. Un-interrupted clean power supply.
- 5. Drastic pollution reduction.
- 6. Healthy, hygienic study environment.
- 7. Recognition for the organization.
- 8. Attracts enrollment of students.
- 9. Sustainable future.

# 5. METHODOLOGY

The Green Audit was conducted for M/s. P.E.S College of Science. Arts & Commerce for the academic year 2020-2021 by M/s. Enviro Engineering Solutions to identify green practices being followed, identify the gaps and to make recommendations.

Desk study	Collection of associated legislation Issues in the education institutions Develop audit plan including materials
Field Study	Collecting data regarding environmental issues Identification of gaps
Evaluation	Evaluation of data  Discussions with stake holders
Reporting	Report writing     Verification of Report     Finalization

# 6. APPLICABILITY OF ENVIRONMENT REGULATION

a) Environment legislation

SL.	Applicable Act	Applicability
No	The stanks waste (management and has drong)	and applicable
1	The Water (Prevention and control of pollution) Act, 1974	Applicable
2	The Water (Prevention and control of pollution) Cess Act, 2003	Not Applicable, after GST, this has become redundant.
3	The Air (Prevention and control of pollution) Act, 1981	Applicable
4	The Environment (Protection) Act, 1986	Applicable
5	The Public liability Insurance Act, 1991	Not Applicable

b) Rules

SL.NO	Applicable Act	Applicability
1	The Water (Prevention and control of pollution) Rules, 2003	Applicable
2	The Water (Prevention and control of pollution) Cess Rules, 1978	Not Applicable
3	The Air (Prevention and control of pollution) Rules, 1983	Applicable
4	The Environment (Protection) Rules, 2016	Applicable
5	The Hazardous and other waste (management and Trans boundary movement) Rules, 2016	Applicable
6	The manufacture, storage and import of hazardous chemicals Rules, 2000	Not Applicable

7	The Chemical accident (emergency planning, preparedness and response) Rules, 1996	Not Applicable
8	The Biomedical waste management Rules, 2016	Applicable
9	The plastic waste (management and handling) Rules, 2016	Not Applicable
10	The solid waste management Rules ,2016	Applicable
11	The E-waste (management and handling) Rules, 2016	Applicable
12	The noise pollution (regulation and control) Rules, 2010	Applicable
13	The batteries (management and handling) Rules, 2011	Not Applicable

# 7. AUDIT FRAMEWORK

The following audit framework is used for conducting Green Audit:

SI.	Audit Area	Audit Observation
No	Degreete Pargulaus Waste	White is presented from the like and these
1	Water Consumption	Lebergardes Inegligible a pressure
3	1. Source of water supply	Bore well
	2. Storage tank capacity	100 KLD
	3. Total Population in Campus	1858 No's
	4. Hostel Population	and by the Commit Committee Department of
	1) Boys Hostel (85 rooms, 2 No's in	Total water
	each Room);taking average	Consumption=24,650
	consumption of 145	litres/capita/day
	litres/capita/day	

ķ	2) Girls Hostel (101 room,2 No's in each Room);taking average consumption of 145 litres/capita/day	Total water  Consumption=29,290  litres/capita/day
	3) Non-residing Population (Difference of Total Population and Hostel Population);taking average consumption of 45 litres/capita/day	1486 No's  Total water  Consumption=66,870  litres/capita/day
3	4) Total water consumption of the campus (addition of Hostel consumption and Non-residing consumption)	1,20,810 litres/day
2	Waste water Generation	in a leak proof container to a scientific manage
3	1.Total wastewater generated from the campus (80% of total water consumption)	96,648 litres/day
	2. Wastewater discharge	Underground Drainage (UGD)
16	3.Lab Effluent	100 litres; effluent is treated and then discharged to the UGD line.
3	Domestic Hazardous Waste	Waste is generated from DG Set and from laboratories (negligible quantity)
4	Solid Waste	2. In a sign of a Program.
	Under Solid waste Management definition-"Bulk waste generator"	Rules, 2016 institution is covered under the

undertakings, State Gov Sector undertakings of Colleges, Universities. (	vernment De r Private C Other Educa s, Places of V	pied by the Central Government Departments or epartments or undertakings. Local Bodies, Public Companies, Hospitals, Nursing Homes. Schools, ational Institutions, Hostels, Hotels, Commercial Worship, Stadia and Sports Complexes having an ceeding 100 Kg/Day.
Dry waste (of classroom); Avg generate kg/day	fice & tion of 0.4	743.2Kg/day-collected by the city corporation.

	Wet waste(canteen & hostel);Avg generation of 0.4kg/day	858.8kg/day-sent to piggery.
5	Air Pollution	Source of air pollution – D.G. set.
6	E-Waste	
	Under E-waste Management Rules "Bulk Consumer"	, 2016 institution is covered under the definition
	Government or State Government I Educational Institutions, Multina	and Electronic Equipment such as Central Departments, Public Sector Undertakings, Banks, ational Organizations, International Agencies, Companies that are Registered under the
	Factories Act, 1948 (63 of 1948) and	* * * * * * * * * * * * * * * * * * *
7	Hazardous waste	Used Oil is generated from DG Set; it is stored in a leak proof container in a scientific manner.
8	Rain water harvesting	The college has implemented the rain water harvesting mechanism.
9	Solar Energy	The college has not yet implemented the solar energy, it will be done in future academic year
10	Environmental Policy	Environmental policy is present
11	Environmental awareness Programs/conference/workshops	The various programs conducted/attended by the College are:
		<ol> <li>Emission Test Camp.</li> <li>Plantation Program.</li> <li>Awareness program to save water in Mandya City.</li> </ol>
		<ul><li>4. Celebrates World Environmental Day every year.</li><li>5. Green Marathon</li></ul>

12	Waste Management	<ol> <li>Solid waste has been stored in different coloured bins such as         <ol> <li>Green Colour Biodegradable waste or wet waste</li> <li>Blue Colour - Non biodegradable</li> <li>Wastes" or the "Dry Waste</li> </ol> </li> <li>Domestic Hazardous waste separate stored in a bin in scientific manner         <ol> <li>E-waste stored in separate storage bins in a scientific manner.</li> <li>Bio-medical Waste stored in different bins with different colour such as:</li></ol></li></ol>
13	College Achievements in line with Government	1. The college has reduced energy consumption by using LED lights instead of traditional lights due to which 20% of the electric energy is saved  2. They are using Solar water heaters in hostels boys & girls) instead of electric energy  3. RO water filter is installed on campus.
		<ul> <li>4. As per IS standards, the college has maintained 33.33% of Green Belt Area.</li> <li>5. The college is plastic, litter &amp; smoke free campus.</li> </ul>

# 8. FIELD OBSERVATIONS

SL.	Control	Controls	Audit Observation
Νo	Objectives	the street of company	
1.	To minimize water consumption	Repair sources of water leakage, such as dripping taps as quickly as possible.	The college carries out regular checking and maintenance of pipelines, taps to control water wastage.
		Install appliances which reduce water consumption such as, Aerators on taps used for hand washing, Installing water misers, Landscaping with drought- tolerant plants, Dual flush toilets, Leak technology, detection Recycling rooftop rainwater, Rooftop vegetation, Hand sanitizers.  Encourage a decrease in water usage among staff, students and conference guests.	Yes, the college is positive in installing rain water harvesting mechanisms to reuse rainwater in toilets. Gardening, and washing of corridors.  Yes, the college encourages all its faculties and student body to decrease water usage
	All almost Ale a deglerate ep ann game proce	Use a hygienic efficient water and storage mechanism to minimize the loss of water during storage.	management program to minimize the real losses of water
		Minimize the wastage of water, if RO filters are used and regular service to be done.	liters capacity in each floor of the
		Install water recycling mechanism i.e., rain water harvesting system.	The college has implemented the Rain water Harvesting system.
2	Minimize the use of chemical	Ensure that all cleaning products used by college have minimal detrimental impact on the environment.	liquids are used in college and a toilet cleaners are eco-friendly.

	pollutants and Hazardous waste	Minimize the use of fertilizers and pesticides in college grounds, opting for the use of compost.  Produced on site	Negligible amounts of fertilizers and pesticides are used in the college.
		wherever possible.  Dispose the chemical waste generated from laboratories in a scientific manner.	Most of the waste generated is water-soluble and ultimately disposed of to UGD, which is in diluted form but before discharging into UGD, necessary treatment is done.
6		Reduce the practice of burning plastic and other material that emits harmful gas on burning.	No such burning is observed/evidence at the time of auditing by us.
	han him mens at Policy is approved, on filteral and continued	Provision of Separate bins for Storage of Domestic Hazardous waste as per the norms.	Yes, the college maintains separate Hazardous waste storage bins to store the generated domestic hazardous waste.
		Provision of Storage room for Domestic Hazardous waste as per norms.	Separate storage room is not provided. Since domestic hazardous waste is generated.
3	Minimize Air pollution in the campus.	Identify the sources of air pollution.	The college has identified different air pollution sources.
		Maintenance and periodic sampling of identified air pollution sources.	The sampling of identified pollution periodically maintained.
4		Is the Ambient Air Quality (AAQ) Monitoring within the National Ambient Air Quality (NAAQ)	Yes, AAQ is within the NAAQ Standards.
		Standards?	
4	Ensure that environmental awareness is	Conduct environmental awareness workshops as a part of the program.	Yes, the college conducts such programs.

	created	Conduct events such as planting trees to spread environmental awareness among the students.	Have an active club to conduct events.	
	ogade a Kreen or Domesand sa	Promote environmental awareness as a part of course work in various curricular areas, independent research projects.	Yes, the college has a Environmental Science subject, wherein environmental awareness is promoted.	
	CLESTEN  be Andle exerce terrings with a tuto a green cu g the desired aid	Awareness programs to promote recycling among staff, students through training, posters and incentives.	Yes, the college promotes recycling among staff and students regarding.	
5	Ensure that Environment al Policy is enacted, enforced and reviewed	Establish a college Environmental  Committee that will hold responsibility and serve as a source of advice and guidance to staff and students on how to implement the policy.	The college has implemented the Environmental Policy.	
		A Green officer who is engaged in the profession of providing guidance on environmental impact.	Yes, there is a green officer.	

### 9. RECOMMENDATION

- 1. The college is already using LED lights in hostels instead of traditional lights and is saving 20% of electricity; if the college uses solar panels for the whole campus it can save electricity.
- 2. Engage a Green/Maintenance Officer to look over environmental issues and create environmental awareness in the campus.

## 10. CONCLUSION

The Audit carried out in the M/s. P.E.S College of Science, Arts & Commerce and discussions with stakeholders indicate that there is willingness to convert the campus into a green campus. Time schedule for implementation will go long way in achieving the desired objective.

# **Environmental Audit**

# **INTRODUCTION (2020-21)**

PES College of Science, Arts & Commerce has realized the paramount importance of environment audit. Self-assessment of the environment will reflect the responsibility of the College in mitigating the environmental problems, if any, within the Campus. The College has been making efforts to keep the environment clean and hygienic, since its inception,

Environment audit is used to determine the type and volume of waste, which can be used for a recycling project or to improve waste minimization process. Environment audits can create health consciousness and promote environmental awareness, values and ethics. It provides a better understanding of environmental impact within the Campus, to the staff and students.

## **OBJECTIVES**

The purpose of the environment audit is to identify, quantify, describe and prioritize the framework of environmental sustainability in compliance with the applicable regulations. policies and standards.

The major objectives of the environment audit are as follows:

- To assess the quality of soil within the Campus to investigate the quality of water available in the open wells
- To analyze the impact of our activities on quality of ambient air
- To assess the impact of our activities a noise pollution.
- To evaluate the waste management strategies.

## **ENVIRONMENT AUDIT COMMITTEE**

Following committee has been constituted in order to achieve the objectives of the environment audit:

Puneeth G.M.
Dr. J. Mahadeva
Dr.Manjunatha.M
Veeresha. S.K
Gireesh.R
Bhavya H.S

### SCOPE OF ENVIRONMENT AUDIT

The scope of environment audit encompasses the assessment of quality of soil, quality of water, quality of ambient air, causes for noise pollution, if any, and evaluation of waste management practices adopted by the College.

The assessment of quality indicates fertility. The assessment of quality of water indicates potability of water. The assessment of quality of air indicates the impact of our activities on quality of ambient air. The assessment of noise pollution indicates the impact of our activities in creating noise. The evaluation of waste management practices indicates the efficiency of such practices.

### **OBSERVATIONS**

The observations with respect to the Environment Audit are as follows:

### Assessment of Quality of Soil

As the Campus constitutes more herbs, shrubs and trees which indicates the soil fertility in general. The soil sample was collected from prominent places within the Campus as per protocol. The soil sample was mixed well and air dried. Further, the soil sample was given, for testing, to the department of Geology, PES college of engineering, Mandya.

The soil sample was subjected to various tests to identify potential of hydrogen (pH) value, electrical conductivity, organic carbon and nutrients like, nitrogen, phosphorous, potassium, zinc, iron, copper, manganese, boron, sulphur, calcium, magnesium, etc. According to the report the quality of the soil is good with enriched nutrients, moist condition and useful microorganisms.

# Clean and Green Campus Initiatives

Biodegradable waste is composted using vermin composting and aerobic composting techniques.

The compost produced is utilised for growing vegetables, fruits, flowers, ornamental plants and trees. Non-biodegradable waste that can be recycled are initially stored in the waste storage area, until a sizable quantity is accumulated and then sold to scrap vendors. Non-biodegradable waste that cannot be recycled is handed over to Mandya Municipality City Corporation (MMCC) on a daily basis. Highly insignificant quantity of food waste so collected is handed over to the cattle and pig rearing agrientrepreneurs.

Partial grey water is utilised for watering some of the plants and trees. Remaining grey water and black water is let into the underground drainage facility provided by the MMCC. Liquid chemical waste is diluted before discarding into the wash basin.

Used sanitary napkins, cotton swabs, bandages are incinerated in conventional thermal incinerators and residual ash is handed over to MMCC. Tissue cultures, media and needles are sterilized through heat killing methods using a pressure cooker and wrapped in specific polythene bags and then handed over to MMCC. Biomedical waste generated during health and blood donation camps are handed over to the collaborating hospital for the proper disposal.

E-wastes are rarely generated. The quantity of e-waste generated is negligible. Buy back arrangement has been made for disposal of batteries. Equipment procured through governmental sponsorship (UGC, etc.) are stored as per respective guidelines. Other e wastes are handed over to scrap vendors.

The experiments conducted in the laboratories do not require hazardous chemicals and radioactive elements. After segregation the chemicals are neutralized and diluted before discarding. Outdated and decolourised chemicals are stored separately and returned to the supplier. Further, organic pesticides are used in the campus. Organic floor cleaners are being used.

Following waste recycling initiatives are practised in the College:

- o Unused sheets of the test booklets are used as scribbling pads.
- o Single-use plastic bottles are used to grow plants in the bottle garden.
- Wires are reused during the experiments, as much as possible, to reduce and recycle ewaste.

### RECOMMENDATIONS.

Following recommendations have been made by the Committee for further improvements:

- Continue to use organic manure and pesticides so as to maintain the quality of soil.
- Periodic maintenance of open wells shall be carried out.
- Increase the green coverage by planting more herbs, shrubs and trees.
- Continue the waste management practices.
- Competitive quotations shall be called for selling the scrap materials.
- Continue to use organic floor cleaners.
- Continue the waste recycling initiatives that are presently being practice

# **ENERGY AUDIT**



# 2020-21 M/s P.E.S COLLEGE OF SCIENCE, ARTS & COMMERCE M.C.ROAD, MANDYA – 571 401 KARNATAKA STATE.





Prepared By,

# M/s. ENVIRO ENGINEERING SOLUTIONS

ThrupthiNilaya, 8<sup>th</sup> Cross, Leelavathi Extension, Maddur, Karnataka - 571428.

# **CERTIFICATE**

M/s. Enviro Engineering Solutions, Thrupthi Nilaya, 8<sup>th</sup> Cross, Leelavathi Extension, Maddur, Karnataka – 571428, has carried out Energy Audit for P.E.S. College of Science, Arts & Commerce, M.C. Road, Mandya-571401, Karnataka State during March, 2021.

Date: 12.03.2021

Place: Maddur

For Enviro Engineering Solution

uthorized Signatory

Proprietor

### **ACKNOWLEDGEMENT**

We are thankful for Management of P.E.S. College of Science, Arts & Commerce, Mandya, for giving us an opportunity to conduct an energy audit for their college.

It is appreciable that Management is showing concern to save energy & environment and taking all initiations. It will also motivate others. Energy conservation is not just a matter of saving money, but the environment & natural resources too. In this concern Initiation to conduct an audit will be the first step.

We are thankful to the Principal & all staff of P.E.S. College of Science, Arts & Commerce who has shown interest and also supported us. It's their involvement that encouraged us to put our best possible effort to deliver the best possible result.

The Corona pandemic has affected work flow, this has put a lot of stress and uncertainty. Despite this all staff have put their effort and given time in their tight schedule. We thank everyone.

All concerned teaching & office staff have contributed to the energy audit process with maximum information, clearly and timely.

Thanking all

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P.E.S. College of Science, Arts & Commerce, Mandya

Category	Educational institution
Year of establishment	1966
Total area of campus	3.00 acres
Energy consumption per annum	6.4666 units per annum
Individual be	uilt-up area
Classroom	42
Lab	07
Admin	02
Auditorium	01
Hostel	01
Type of m	ajor load
UPS and Computers	UPS-05 and computers-245
Air conditioner	04
Lighting	516
Fans	295
pumps	03

# 2. Energy conservation measures adopted at present

# 1) Use of LED lights

Using 18w LED lights in place of 40 w tubes

Savings 22wx 8 hours' x 210 days x 147nos= 5433 units

Savings by use of 9w LED tube light in place of 40w fittings

=31w x 8hours x 210 days' x 197 nos = 10259 units

Total saved = 5433+10259=15692 units

# 2) Use of street lights:

There are 05 street lights in the premises:

Savings per annum- 05 nos x 40wx 365 days= 73000 watt hour Savings approximate 73 units

# 3) Use of 4 star rated refrigerator

Energy saved by use of 4 star refrigerator instead of old refrigerator

Total cooling capacity-1990 ltrs

Energy consumption- (BEE std)- 3144 units/annum

Savings compared to single star or old refrigerator

Based on BEE CEC- Comparative energy consumption criteria till 31.dec 2016

Savings 37%

Normal consumption- present consumption =

4990 - 3144=1846 units per annum.

# 4) Use of air conditioner of 4 Star equivalent

Savings by use of 3 star rated equivalent air conditioners with EER 3.2 in comparison with EER 2.3 of single star BEE 2011

Savings case 1-29% - 661 units  $x^2 = 1322$  units

Savings case 2-21% -94.63 units X2 = 189 units

Total saved = 1322 +189 = 1511 units

# 1) Total energy saved per annum

Energy saved per annum	
15692	
1846	
1511	
19049 units per annum.	
	15692 1846 1511

# 2) Cost benefit;

Tariff LT2(b)

Low tension 440v/230vac supply

Segment-educational installation.

Considering unit rate 7.50 Rs

Cost saved- 19049 x 7.50= 142867.5 rs per annum.

3) Environmental benefit

Saving in greenhouse gas emission carbon dioxide

=31217 Units X 0.8 kg/kwh- 24973kgs of CO2

# 3. Scope of Energy Audit:

This energy audit is conducted with the following scope.

- •Study of energy Utilization bills for one year
- Energy Source-Transformer centre
- •Demand side study (Equipment type, Usage, Energy Conservation option)
- Power quality (Voltage, Current & PF)
- illumination
- Automatic controls usage
- •Renewable Energy Present usage and option for solar on grid system

# Process;

- ♦ Site walk through
- **❖** Data collection
- **❖** Test & measurements
- **❖** Analysis
- ❖ Draft report (Abstract)
- ♦ Concluding meeting
- ❖ Final report submission.

# 04. CONSUMER POWER INPUT DETAILS

NAME	PES COLLEGE OF SCIENCE, ARTS &
	COMMERCE COLLEGE, MANDYA
CATEGORY	AIDED EDUCATIONAL INSTITUTION
CONTACT DEMAND	72.87KW + 0 HP
TARIFF	S-9456
TYPE OF SUPPLY	LT 440V /3PH
TRANSFORMER	100KVA / DEDICATED/
INPUT TO TRANSFORMER	11KV ,3ph
T.C. LOCATION	INSIDE CONSUMER PREMISES
RRNO	S-9456
AVGMD	30KVA
ENERGY CHARGES	RS 7.95 + TAX
FIXED CHARGES	RS 65/- PER KW
NORMAL CONSUMPTION	19049 UNITS PER ANNUM
AMOUNT SPENT ON	Rs 142867.5. Per annum
ELECTRICITY	
SUB METERING	YES -FOR ATM

# OTHER MAJOR SOURCES OF ENERGY

SOLAR ROOFTOP ON GRID SYSTEM	NIL
SOLAR OFF GRID SYSTEM	Nil
DIESEL GENERATOR	KIRLOSKAR GREEN POWER IDEAS. NOISE LIMIT-<75dB(A) At 1Mtr.

# Beyond the Campus Environmental promotion and sustainability activities



## P.E.S. College of Science, Arts & Commerce, Mandya.

M.C. Road, Mandya, Karnataka - 571 401

Dr.J.Mahadeva, M.Sc., Ph.D, Principal Affiliated to University of Mysore Accredited by **NAAC** with 'A' Grade

#### REPORT

Name of the Department /	Bharath Scouts & Guides			
Committee	P.E.S. Mandya Rovers			
Co-ordination	Forest department			
Title of the Program	D - line Burning Progran	a & service	camp	
Date	30-12-2020 to 05-01-202		Time / Days	07 days
Venue	Bandipura National Reserve Forest, Himavad Gopalaswamy temple, Bandipur			
Objectives	<ul> <li>To understand the importance of social responsibility</li> <li>To Protecting the forest from wildfire</li> </ul>			oonsibility
Number of staff participated	02	Number of students 18 Participated / benefitted		18
Outcomes	<ul> <li>Forest protection from wildfire</li> <li>Preventing the spread of wildfire</li> <li>Students tend to be overly protective of forest protection</li> </ul>			est protection.
Details of the Organizing	Rovers scouts leader Sri S.K. Veeresha			or protection.
Committee	Asst. Rovers scouts leader Sri Nandeesh kumara M.S.			A.S.
Any other relevant	06 Members senior rovers participated			
information	Appreciation letter is given by Forest Department.			

Rovers Scouts Leader Rovers Scouts Leader P.E.S.S.A.&.C.College, Mandya.



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P.E.S. Mandya Rovers crew "D- Line Burning Program" 30-12-2020 to 05-01-2021 List of Participated Students

Sl.No.	Name	Course
1.	Adarsha H.R	3 <sup>rd</sup> B.Sc
2.	Yadunandan H.S	3 <sup>rd</sup> B.Com
3.	Lokesha G	3 <sup>rd</sup> B.A
4.	Manjunatha D.N	3 <sup>rd</sup> B.Com
5.	Sudeep T.M	3 <sup>rd</sup> B.Com
6.	Arjun K.S	3 <sup>rd</sup> B.com
7.	Raveesh Gowda B.C	2 <sup>nd</sup> B.Com
8.	Prajwal V.P	2 <sup>nd</sup> B.Sc
9.	Ranjan Kumar	2 <sup>nd</sup> B.Sc
10.	Puneeth N	2 <sup>nd</sup> B.Sc
11.	Panchaksari Aradya	2 <sup>nd</sup> B.Sc
12.	Aruna G N	2 <sup>nd</sup> B.Sc
13.	Dinesh K	2 <sup>nd</sup> B.Sc
14.	Sanjay K. K	2 <sup>nd</sup> B.Sc
15.	Maheshgowda N	2 <sup>nd</sup> B.A
16.	Nagendramurthy N.D	2 <sup>nd</sup> B.Sc
17.	Harish M.R	2 <sup>nd</sup> B.Sc
18.	Nagesh B	2 <sup>nd</sup> B.A

Revers Court de de le P.E.S.S.A.&.C.College, Mandya.

Principal

☐ S. College of Science & Commerce, MANDYA:

# Relevant Photos "D- Line burning Program"





# **Appreciation Letter from the Bandipur Forest Officer**

### ಶನಾಗಚಿಶ ಸರಾಗರ



ವಲಯ ಅರಣ್ಯಾಭಿಕಾರಗಳ ಕಥೆಯ, ಗೋಪಾಲಸ್ವಾದುಣಿಲ್ಲ ವಲಯ, ಮೊಲುಕಾಮನಹಳ್ಳ, ಗುಂದುಜೆಯ ತಾ. 571126

ಸಂ.ವ.ಆ/ಗೋ.ವ/ಆ.ಸಂ.ಕಾ.ಭಾ/ಅ.ಸ/2021-22

ರವರಿಗೆ.

ಪಿ.ಇ.ಎಸ್. ವಿಜ್ಞಾನ, ಕಲಾ ಮತ್ತು ವಾಣಿಜ್ಯ ಕಾಲೇಜು

ಮಂಡ್ಯ.

ಮಾನ್ಯರೆ.

ವಿಷಯ: ಅಭಿನಂದನೆ ಸಲ್ಲಿಸುತ್ತಿರುವ ಕುರಿತು

ಮೇಲ್ಕಂಡ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ, ಬಂಡೀಪುರ ಹುಲಿ ಸಂರಕ್ಷಿತ ಪ್ರದೇಶದ ಗೋಪಾಲಸ್ವಾಮಿ ಬೆಟ್ಟ ವಲಯದಲ್ಲಿ ದಿನಾಂಕ:30–12–2020 ರಿಂದ 05–01–2021 ರವರೆಗೆ ಮಂಡ್ಯದ ಪಿ.ಇ.ಎಸ್. ವಿಜ್ಞಾನ, ಕಲಾ ಮತ್ತು ವಾಣಿಜ್ಯ ಕಾಲೇಜಿನ "ಪಿ.ಇ.ಎಸ್ ಮಂಡ್ಯ ರೋವರ್ಸ್ಗ್ ಕ್ರೀವ್" ನ ರೋವರ್ಸ್ಗ ಸ್ಕೌಟ್ ಲೀಡರ್ ಪ್ರೊ ಎಸ್.ಕೆ.ವೀರೇಶ ರವರ ನೇತೃತ್ವದಲ್ಲಿ ಸಹಾಯಕ ರೋವರ್ಸ್ಗ ಸ್ಕೌಟ್ಸ್ ಲೀಡರ್ ಪ್ರೊನಂದೀಶ್ಕುಮಾರ ಎಂ.ಎಸ್ ಮತ್ತು 18 ಮಂದಿ ರೋವರ್ಗಳು ಹಾಗೂ 8 ಮಂದಿ ಸೀನಿಯರ್ ರೋವರ್'ಗಳು ಅರಣ್ಯಕ್ಕೆ ಬೆಂಕಿ ಬಿದ್ದು ನಾಶವಾಗದಂತೆ ಮುಂಜಾಗ್ರತಾ ಕ್ರಮವಾಗಿ ನಡೆಸುವ "ಡಿ ಲೈನ್ ಬರ್ನಿಂಗ್" ಕಾರ್ಯದಲ್ಲಿ ಸಕ್ರಿಯವಾಗಿ ಭಾಗವಹಿಸಿ, ಅರಣ್ಯ ಸಂರಕ್ಷಣಾ ಕಾರ್ಯದಲ್ಲಿ ಭಾಗವಹಿಸಿರುತ್ತೀರಿ. ನಿಮ್ಮ ಸಹಕಾರ ಹೀಗೆ ಮುಂದುವರೆಯಲೆಂದು ಆಶಿಸುತ್ತ ಅರಣ್ಯ ಇಲಾಖೆ ವತಿಯಿಂದ ಅಭಿನಂದನೆಗಳನ್ನು ಸಲ್ಲಿಸುತ್ತೇವೆ.

ಧನ್ನವಾದಗಳೊಂದಿಗೆ.



## P.E.S. College of Science, Arts & Commerce, Mandya.

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#### REPORT

Name of the Department	Bharath Scouts & Guid	es			
/ Committee	P.E.S. Mandya Rovers				
Co- ordination	Muncipality & Kayaka				
Title of the Program	Awareness jatha on cle	anliness mo	vement and dr	y litte	er separation
Date	06-03-2021		Time / Days	25.00 0.007.00	00PM to 00PM
Venue	Dr. siddagangashree pa	rk, Swarnas	andra, Mandy	a	
Objectives	<ul> <li>The cleanliness Drive would promote the values of cleanliness</li> <li>Discipline and respect for the environment in the students.</li> <li>Educate and sensitize them about the importance of cleanliness for a healthy, socially responsible, economically</li> </ul>			e students. importance of	
	dynamic and pro	ogressive na	tion.		
Number of staff participated	2		of students red / benefitted		18
Outcomes	<ul> <li>The public is separating the garbage and dry garbage and maintaining social hygiene.</li> <li>The public is engaged in keeping their surroundings clean.</li> <li>Separate garbage and dry trash are being sent to the municipal vehicle.</li> </ul>				
Details of the Organizing Committee	Rovers scouts leader Sri S.K.Veeresha Asst. Rovers scouts leader Nandeesh kumara M.S				
Any other relevant information	Appreciation Letter from the Neharu Yuva Kendra				

Roy Scout Leader Rovers Scout Leader P.E.S.S.A.&.C.College, Wandya.



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## P.E.S. Mandya Rovers crew

## "Awareness Procession on cleanliness movement and Dry litter separation" 06-03-2021

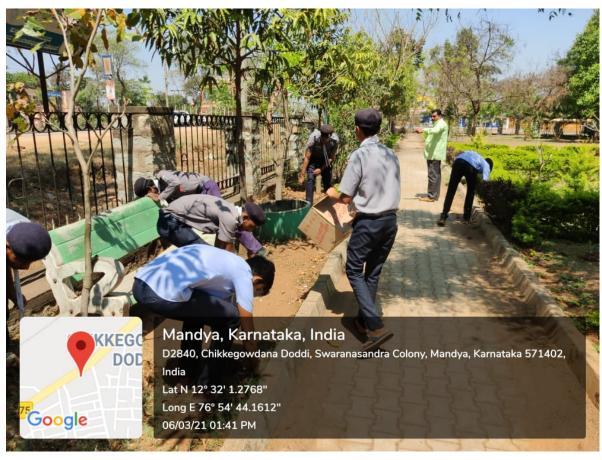
## List of Participated Students

	Participations List	
Sl. No.	Name	Class
1.	Adarsha H.R	3 <sup>rd</sup> B.Sc
2.	Yadunandan H.S	3 <sup>rd</sup> B.Com
3.	Raveesh Gowda B.C	2 <sup>nd</sup> B.Com
4.	Panchaksari Aradya	2 <sup>nd</sup> B.Sc
5.	Manoj	2 <sup>nd</sup> B.Sc
6.	Manojkumar M	1 <sup>st</sup> B.Com
7.	Sukruth D P	1 <sup>st</sup> B.Com
8.	Darshan K	1 <sup>st</sup> B.Com
9.	Srinivasa K	1 <sup>st</sup> B.Com
10.	Adarsh B.L	1 <sup>st</sup> B.Com
11.	Abhi M.R	1 <sup>st</sup> B.Com
12.	Gururaj H S	1 <sup>st</sup> B.Com
13.	Gagan M R	1 <sup>st</sup> B.Com
14.	Rathan Gowda K.M	1 <sup>st</sup> B.Com
15.	Harsha J	1 <sup>st</sup> BCA
16.	Uday Kumar Y S	1 <sup>st</sup> B. Sc
17.	Shashank Gowda U N	1 <sup>st</sup> B.sc
18.	Nithin M B	1 <sup>st</sup> B.Sc

Revers Sevia Leaderer P.E.S.S.A.&.C.College, Mandya.

# Relevant Photos Cleanliness movement and dry litter separation Program





## Appreciation Letter from the Neharu Yuva Kendra

ಭಾರತ ಸರ್ಕಾರ ಯುವ ಕಾರ್ಯ ಹಾಗೂ ಕ್ರೀಡಾ ಸಚಿವಾಲಯ ನೆಹರು ಯುವ ಕೇಂದ್ರ, ಮಂಡ್ಯ.



ಕರ್ನಾಬಕ ಸರ್ಕಾರ ಜಲ್ಲಾಡಕತ, ಜಲ್ಲಾ ಪಂಜಾಯತ್, ಮಂಡ್ಯ ನಗರಸಭೆ, ಮಂಡ್ಯ.

ಕರ್ನಾಟಕ ಪಜ್ಞಕ್ ಶಾಲೆ ಮತ್ತು ಬಾಲಕೀಯರ ಸರ್ಕಾರಿ ಪದವೀ ಪೂರ್ವ ಕಾಲೇಜು, ಅರಕೇಶ್ವರ ನಗರ. ಕಾಯಕಯೋಗಿ ಸಮಾಹ ಸಂಸ್ಥೆ (೨), ಮಂಡ್ಯ.

ಅನನ್ಯ (ಹಾರ್ಟ್) ಹೆಲ್ತ್ ವಿಜುಕೇಷನ್ ಅವರ್ನನೆಸ್ ಮತ್ತು ರೂರಲ್ ಡೆವಲಪ ಮೆಂಟ್ (ರಿ.), ಮಂಡ್ಯ ಜಾಗೃತಿ ಯುವತಿ ಮತ್ತು ಮಹಿಳಾ ಮಂಡಳ, ಮಂಡ್ಯ. ಇವರ ಸಹಯೋಗದಅ.



.ಪಿ. ಇ.ಎಸ್. ಮಂಡ್ಯ ಹೊಡ್ಸ್ ್ರೈವ್, ಪಿ. ಇ.ಎಸ್. ಪದೂ ಕಾರ್ಬ್ ಒ. ಮೂಡ್ಸ್. ಮಂಡ್ಯ ಜಿಲ್ಲೆಯಲ್ಲಿ ಇವರು

ದಿನಾಂಕ: 06-03-2021 ಸ್ಥಳ: ಸಿದ್ದಗಂಗಾತ್ರೀ ಉದ್ಯಾನವನ, ಬೆಂಗಳೂರು – ಮೈಸೂರು ಮುಖ್ಯ ರಸ್ತೆ, ಮಂಡ್ಯ. ಇಲ್ಲಿ ಯುವ ಜನರಿಗೆ

ಸ್ವಚ್ಛತಾ ಅಂದೋಲನ ಮತ್ತು ಹಹಿಕಸ ಮತ್ತು ಒಣಕಸ ಬೇರ್ಪಡಿಸುವ ಕುರಿತು ಜಾಗೃತಿ ಜಾಧಾ

ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಭಾಗವಹಿಸಿರುತಾರೆ.

ಅಧ್ಯಕ್ಷರು, ಕಾಯಕಯೋಗಿ ಸಮೂಹ ಸಂಸ್ಥೆ. ಮಂಡ್ಯ.

ರಾಷ್ಟ್ರ ಪ್ರಶಸ್ತಿ ಮರಸ್ಕೃತರು, ಮಂಡ್ನ

ಪೌರಾಯುಕ್ತರು, ನಗರಸಭೆ, ಮಂಡ್ಯ

(ಅನಂತಪ್ಪ)

ಜಿಲ್ಲಾ ಯುವಜನ ಅಧಿಕಾರಿ ನೆಹರು ಯುವ ಕೇಂದ್ರ ಮಂಡ್ನ



### P.E.S. College of Science, Arts & Commerce, Mandya.

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### Report

Name of the Department /	P.E.S. College of Science, Arts & Commerce - 7 <sup>th</sup> Criteria			
Committee	Bharath Scouts & Guides - P.E.S. Mandya Rovers			
Title of the Program	Opening function of	'Terrace Garden	,	
Date	13-03-2021		Time / Days	01 Day
Venue	P.E.S. College of Sc	cience, Arts & Co	mmerce, Man	dya
Objectives	❖ Construction of the green Campus			12 11 11 11 11 11
	Use of inappropriate the second of the se	ropriate materials	(Waste Mana	gement)
Number of staff	18	Number of	students	15
participated	1000	Participated	/ benefitted	
Outcomes	> The green atr	mosphere in the co	ollege is build	ing
	Used without	t throwing out any	useless items	S
		s of plants and ve		
Details of the Organizing	Rovers scouts leade	r& 7 <sup>th</sup> Creteria coo	ordinator Sri S	K. Veeresha
Committee	All Criteria Members & Rovers			
Any other relevant	<ul> <li>Grown flowers and vegetables were given free of charge to</li> </ul>			
information	teachers and non teaching staff.			
	<ul> <li>Vegetables have been used for college ceremonies</li> </ul>		nonies.	

Rovers Scouts Leader Rovers Scout Leader P.E.S.S.A.&.C.College, Mandya.



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### P.E.S. Mandya Rovers crew Opening Function of 'Terrace Garden' 13-03-2021

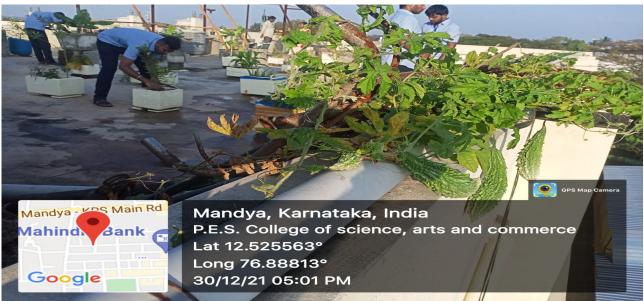
List of Participated Students

	Participations List	
Sl. No.	Name	Class
1.	Adarsha H.S	3 <sup>rd</sup> B.Sc
2.	Yadunandan H.S	3 <sup>rd</sup> B. Com
3.	Raveeshgowda B.C	2 <sup>nd</sup> B.Com
4.	Naveenkumar H M	2 <sup>nd</sup> B.Com
5.	Manojkumar M	1 <sup>st</sup> B.Com
6.	Sukruth D P	1 <sup>st</sup> B.Com
7.	Darshan K	1 <sup>st</sup> B.Com
8.	SrinivasaR	1 <sup>st</sup> B.Com
9.	Adarsh B.L	1 <sup>st</sup> B.Com
10.	Abhi M.R	1 <sup>st</sup> B.Com
11.	Rathangowda K.M	1 <sup>st</sup> B.Com
12.	Harsha J	1 <sup>st</sup> BCA
13.	Udaykumar Y.S	1 <sup>st</sup> B. Sc
14.	ShashankGowda U N	1 <sup>st</sup> B.sc
15.	Nithin M B	1 <sup>st</sup> B.Sc

Rosers Scout Leader Rovers Scout Leader P.E.S.S.A.&.C.College, Mandya.

## **Relevant Photos Opening function of 'Terrace Garden'**









## Memo on Opening Function of 'Terrace Garden'



# P.E.S. College of Science, Arts & Commerce P.E.S. MANDYA ROVERS CREW

M.C.Road, MANDYA - 571401



Prof. Veeresha S.K. Rovers Scouts Leader Date: 11-03-2021

Principal

Letter No. P.E.S/Rovers/2020-21

#### Memo

It is here by inform to you that to inaugurate Terrace garden by Sri. Vijay Anand, President of P.E.T. along with the principal of P.E.S. College of Science, Arts & Commerce, Mandya, at 11.00 A.M. on 13-03-2021 in College Campus. So, all the Rovers must be present in time with out Fail.

Rovers Scout Leader Rovers Scout Leader P.E.S.S.A.&.C.College, Mandya.

e-mail: pesmandyarovers@gmail.com

**29945774281, 9743006213** 

S.K. Veeresha S.K. Veeresha Rovers Scout Leader Rovers Scout Leader P.E.S.S.A.&.C.College, Mandya.

## **Invitation of Opening Function of 'Terrace Garden'**



# People's Education Trust ®, Mandya P.E.S College of science, Arts & Commerce M.C Road, Mandya, Karnataka – 571401

(Affiliated to University of Mysore, re-Accrediated by NAAC with 'A' Grade)





kri K. S. Vijay Anand President

## TITLE OF THE PROGRAM

"OPENING FUNCTION OF TERRACE GARDEN"

RESOURCE PERSON DR. HOOGAR MBBS, MD, MANDYA.

DATE: 13/03/2022 TIME: 11.30 AM VENUE: P.E.S. COLLEGE OF SCIENCE, ARTS & COMMERCE

> Dr. J. Mahadeva Principal

Organised by:
P.E.S Mandya Rover Crew &
All Staff Members.



## P.E.S. College of Science, Arts & Commerce, Mandya.

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Dr.J.Mahadeva, M.Sc., Ph.D, Principal

Affiliated to University of Mysore Accredited by NAAC with 'A' Grade

#### REPORT

Name of the Department /	Bharath Scouts & Guides			
Committee	P.E.S. Mandya Rovers			
Co – ordination	P.E.S. College of so	cience, arts and	commerce, Mar	ndya
Title of the Program	World environment			
Date	05-06-2021 Time / Days 01 days			01 days
Venue	In own villages	In own villages		
Objectives	❖ To preserve	nd the important nature he necessity of n		uth
Number of staff participated	02	Number of students Participated / benefitted		28
Outcomes	<ul> <li>To protect the nature</li> <li>Students have built a green forest near their home &amp; Agricultural Area</li> </ul>			
Details of the Organizing Committee	Rovers scouts leader Sri S.K.Veeresha Asst. Rovers scouts leader Sri Nandeesh kumara M.S.			

Rovers Scouts Eader Rovers Scout Leader P.E.S.S.A.&.C.College, IV

3.



## P.E.S. College of Science, Arts & Commerce, Mandya.

M.C. Road, Mandya, Karnataka - 571 401

Dr.J.Mahadeva, M.Sc., Ph.D, Principal Affiliated to University of Mysore Accredited by NAAC with 'A' Grade

# P.E.S. Mandya Rovers crew World environment day at a 'Home Plant Program' 05-06-2021

List of Participated Students

	List of Participate Participations List	
Sl. No.	Name	Class
1.	Adarsha H.S	3 <sup>rd</sup> B.Sc
2.	Madan C.S	3 <sup>rd</sup> B.Sc
3.	Yadunandan H.S	3 <sup>rd</sup> B. Com
4.	MahammedVasim	3 <sup>rd</sup> B.Com
5.	Gunavantha G	3 <sup>rd</sup> B.Com
6.	Raveesh Gowda B.C	2 <sup>nd</sup> B.Com
7.	Naveenkumar H M	2 <sup>nd</sup> B.Com
8.	Nagendramurthy N D	2 <sup>nd</sup> B.Sc
9.	PanchakshariAradya	2 <sup>nd</sup> B.Sc
10.	Prajwal V P	2 <sup>nd</sup> B.Sc
11.	Aruna G N	2 <sup>nd</sup> B Sc
12.	MaheshGowda N	2 <sup>nd</sup> B A
13.	Nagesha B	2 <sup>nd</sup> B A
14.	Mahesh M	2 <sup>nd</sup> B A
15.	Manoj V N	2 <sup>nd</sup> B Sc
16.	Manoj Kumar M	1 <sup>st</sup> B.Com
17.	Sukruth D P	1 <sup>st</sup> B.Com
18.	Darshan K	1st B.Com
19.	SrinivasaR	1st B.Com
20.	Adarsh B.L	1st B.Com
21.	Abhi M.R	1st B.Com
22.	Gururaj H.S	1 <sup>st</sup> B.Com
23.	Gagan M R	1 <sup>st</sup> B.Com
24.	Rathan Gowda K.M	1st B.Com
25.	Harsha J	1 <sup>st</sup> BCA
26.	Uday Kumar Y.S	1 <sup>st</sup> B. Sc
27.	Shashank Gowda U N	1 <sup>st</sup> B.sc
28.	Nithin M B	1 <sup>st</sup> B.Sc

S.K.Veeresha Rovers Scouts Leaderler

P.E.S.S.A.&.C.College, Mandya.

Principal

## Relevant photos of world Environment Day





## Memo On World environment day at a 'Home Plant Program'



## P.E.S. College of Science, Arts & Commerce P.E.S. MANDYA ROVERS CREW

M.C.Road, MANDYA - 571401



Prof. Veeresha S.K. Rovers Scouts Leader

Date: 03-06-2021

Letter No. P.E.S/Rovers/2020-21

#### Memo

It is here by inform to you that to create importance of Nature, we conduct 'World Environmental day celebration on 05-06-2021 by P.E.S. Mandya Rovers Crew, Mandya. All the Rovers enthusiastically participate in this program and make this program in your own villages without fail.

Rovers Scouts leader

e-mail: pesmandyarovers@gmail.com

S.K.Veeresha Rovers Scout Leader P.E.S.S.A.&.C.College, Mandya. **29945774281, 9743006213** 

Principal PES College of



## P.E.S. College of Science, Arts & Commerce, Mandya.

M.C. Road, Mandya, Karnataka - 571 401

Dr.J.Mahadeva, M.Sc., Ph.D, Principal Affiliated to University of Mysore Accredited by NAAC with 'A' Grade

#### REPORT

Bharath Scouts & Guides	S	
P.E.S. Mandya Rovers		
Preparation of Eco Frien	dly Ganesh	
26-07-2021	Time / Days	1 day
In their Natives		
❖ Concept of Save Environment		
❖ It Enhance the skill of Creativity		
02	Number of students	12
	Participated / benefitted	
It avoids the Envi	ronment pollution	
> It is promoting ma	ass to grow more trees	
The avoids idols i	nade up of harmful chem	icals
Cleanness the lakes & Seas when immersed in		
water.		
Rovers scouts leader Sri S.K.Veeresha		
Asst. Rovers scouts leader Sri Nandeesh kumara M.S.		
	P.E.S. Mandya Rovers Bharat scouts & guides, I Preparation of Eco Frience 26-07-2021 In their Natives Concept of Save I It Enhance the ski  02  It avoids the Envi It is promoting material in the state of the ski Cleanness the lake water.  Rovers scouts leader Sri	P.E.S. Mandya Rovers  Bharat scouts & guides, Karnataka  Preparation of Eco Friendly Ganesh  26-07-2021  In their Natives  Concept of Save Environment  It Enhance the skill of Creativity  O2  Number of students  Participated / benefitted  It avoids the Environment pollution  It is promoting mass to grow more trees  The avoids idols made up of harmful chem pollute water bodies  Cleanness the lakes & Seas when immerse water.  Rovers scouts leader Sri S.K.Veeresha

Rovers Scouts Leader Rovers Scouts Leader P.E.S.S.A.&.C.College, Mandya.

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Dr.J.Mahadeva, M.Sc., Ph.D, Principal

### P.E.S. Mandya Rovers crew Preparation of Eco Friendly Ganesh 26-07-2021 List of Participated Students

	Participations I	List
Sl. No.	Name	Class
1.	Adarsha H	3 <sup>rd</sup> B.Sc.
2.	Yadunandan H.S.	3 <sup>rd</sup> B.Com
3.	Raveesh Gowda B.C	2 <sup>nd</sup> B.Com
4.	Manoj V N	2 <sup>nd</sup> B Sc
5.	Manoj Kumar M	1 <sup>st</sup> B.Com
6.	Sukruth D P	1 <sup>st</sup> B.Com
7.	Darshan K	1 <sup>st</sup> B.Com
8.	Srinivasa R	1 <sup>st</sup> B.Com
9.	Adarsh B.L	1 <sup>st</sup> B.Com
10.	Abhi M.R	1 <sup>st</sup> B.Com
11.	Gagan M R	1 <sup>st</sup> B.Com
12.	Harsha J	1 <sup>st</sup> BCA

Rovers Scouts Leaderder Rovers Scoutege, Mandya. P.E.S.S.A.&.C.College, Mandya.

# Relevant Photos Preparation of Eco Friendly Ganesh





# Appreciation Letter from the Karnataka State Pollution Control Board



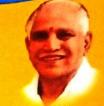
Karnataka State Pollution Control Board ಭಾರತ್ ಸ್ಕೌಟ್ಸ್ ಮತ್ತು ಗೈಡ್ಸ್, ಕರ್ನಾಟಕ



## Certificate of Appreciation

### NANDEESH KUMARA M S

MANDYA DISTRICT



Sri. B.S. Yeddyurappa Chief Minister

has Participated in Creating Awareness Campaign about Turmeric Ganesha in their locality and his/her action contributes to Sustainable Development Goal 4, 13, 14.

The Services and Efforts are highly Appreciated.



Shri. Srinivasulu Member Secretary

Shri. P G R Sindhia
State Chief Commissioner















Sri. Anand Singh Minister for Forest, Environment and Ecology

Kamataka State Pollution Control Board, Parisara Bhavan, #49, Church St, Bengaluru, Karnataka 560001
The Bharat Scouts and Guides, Karnataka, State Headquarters, Shanthi Gruha, #39, Palace Road, Bengaluru - 560001

S.K. Veeresha
Rovers Scoul Leader
P.E.S.S.A.&.C.College, Mandya.



## P.E.S. College of Science, Arts & Commerce, Mandya.

M.C. Road, Mandya, Karnataka - 571 401

Dr.C.R. Raju M.Sc., Ph.D, Principal

Affiliated to University of Mysore Accredited by NAAC with 'A' Grade

#### REPORT

Name of the Department /	Bharath Scouts & Guid	Bharath Scouts & Guides		
Committee	P.E.S. Mandya Rovers Crew			
Title of the Program	Shravana festival spec	al camp		
Date	03-09-2021 to 07-09	-2021	Time / Days	05 days
Venue	Himavad Gopalaswam Forest, Bandipur	Himavad Gopalaswamy Temple, Bandipura National Reserve Forest, Bandipur		
Objectives	<ul> <li>To understand the importance of social responsibility</li> <li>Pond cleaning, Remove the Partenium &amp; Lantana</li> <li>Prohibition awareness campaign on plastic use</li> <li>Making people aware of traffic control</li> </ul>			
Number of staff participated	02	Number o	of students ed / benefitted	15
Outcomes	<ul> <li>Forest treasures were rescued from the wildlife.</li> <li>Increased number of plants in the forest.</li> <li>People have reduced their use of plastic.</li> </ul>			
Details of the Organizing Committee	Rovers scouts leader Sri S.K.Veeresha Asst. Rovers scouts leader Sri Nandeesh kumara M.S.			
Any other relevant information	Appreciation letter is g	iven by Fore	st Department.	

Royer Soguis Lidaderder
P.E.S.S.A.&.C.College, Mandya,



## P.E.S. College of Science, Arts & Commerce, Mandya.

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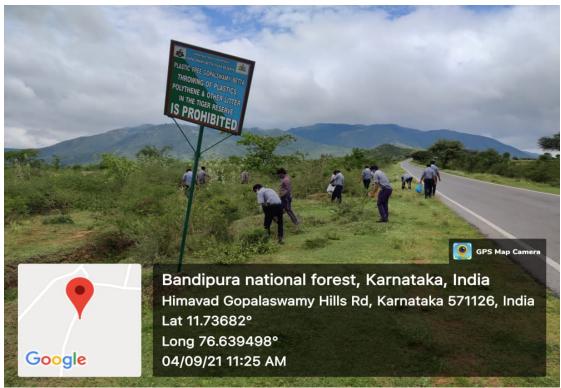
### P.E.S. Mandya Rovers Crew Shravana Festival Special Camp 03-09-2021 to 07-09-2021

List of participated students

	Participated S Participations List	tudents
Sl.	Name	Class
No.		
1.	Raveesh Gowda B.C	2 <sup>nd</sup> B.Com
2.	Naveen Kumar H M	2 <sup>nd</sup> B.Com
3.	Panchakshari Aradhya	2 <sup>nd</sup> B.Sc.
4.	Nagendramurthy	2 <sup>nd</sup> B.Sc.
5.	Manoj Kumar M	1 <sup>st</sup> B.Com
6.	SrinivasaR	1 <sup>st</sup> B.Com
7.	Adarsh B.L	1 <sup>st</sup> B.Com
8.	Abhi M.R	1 <sup>st</sup> B.Com
9.	Gururaj H.S	1 <sup>st</sup> B.Com
10.	Sukruth D P	1 <sup>st</sup> B.Com
11.	Darshan K	1 <sup>st</sup> B.Com
12.	Gagan M R	1 <sup>st</sup> B.Com
13.	Rathan Gowda K.M	1 <sup>st</sup> B.Com
14.	Harsha J	1 <sup>st</sup> BCA
15.	Uday Kumar Y.S	1 <sup>st</sup> B. Sc

P.E.S.S.A.&.C.College, Mandya.

## Relevant Photos Shravana Festival Special Camp





## **Appreciation Letter from the Forest Department**

#### ಕರ್ನಾಟಕ ಸರ್ಕಾರ



ವಲಯ ಆರಣ್ಯಾಧಕಾರಗಳ ಕಥೇರಿ, ಗೋಷಾಲಸ್ವಾಣಕಟ್ಟ ವಲಯ, ಮೇಲುಕಾಮನಹಳ್ಳ. ಗುಂದ್ಲುಷೇವೆ ತಾಗ 571126

ಸಂ. ವ.ಅ.ಅ/ಗೋ.ವ/ಅ.ಪ/2021-22 ರವರಿಗೆ. ದಿನಾಂಕ: 07-09-2021

ಪ್ರಾಂಶುಪಾಲರು ಪಿ.ಇ.ಎಸ್. ವಿಜ್ಞಾನ, ಕಲಾ ಮತ್ತು ವಾಣಿಜ್ಯ ಕಾಲೇಜು ಮಂಡ್ಯ.

ಮಾನ್ಯರೆ,

ವಿಷಯ: ಅಭಿನಂದನೆ ಸಲ್ಲಿಸುತ್ತಿರುವ ಕುರಿತು

\*\*\*\* \*\*\*\*

ಮೇಲ್ಕಂಡ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ, ಬಂಡೀಮರ ಹುಲಿ ಸಂರಕ್ಷಿತ ಪ್ರದೇಶದ ಗೋಪಾಲಸ್ವಾಮಿ ಬೆಟ್ಟ ವಲಯದಲ್ಲಿ ದಿನಾಂಕ:03-09-2021 ರಿಂದ 07-09-2021 ರವರೆಗೆ ಮಂಡ್ಯದ ಪಿ.ಇ.ಎಸ್. ವಿಜ್ಞಾನ, ಕಲಾ ಮತ್ತು ವಾಣಿಜ್ಯ ಕಾಲೇಜಿನ "ಪಿ.ಇ.ಎಸ್ ಮಂಡ್ಯ ರೋವರ್ಸ್ಸ್ ಕ್ರೇವ್" ನ ರೋವರ್ಸ್ಸ್ ಸ್ಟೌಟ್ ಲೀಡರ್ ಪ್ರೊ, ಎಸ್.ಕೆ.ವೀರೇಶ ರವರ ನೇತೃತ್ವದಲ್ಲಿ ಸಹಾಯಕ ರೋವರ್ಸ್ಸ್ ಸ್ಟೌಟ್ಸ್ ಲೀಡರ್ ಪ್ರೊ,ನಂದೀಶ್ ಕುಮಾರ ಎಂ.ಎಸ್ ಮತ್ತು 15 ಮಂದಿ ರೋವರ್ ಗಳು ಹಾಗೂ 6 ಮಂದಿ ಸೀನಿಯರ್ ರೋವರ್ ಗಳು ಕೊಣಗಳ ಸ್ವಚ್ಛತೆ, ಪ್ಲಾಸ್ಟಿಕ್ ನಿರ್ಮೂಲನಾ ಅಭಿಯಾನ, ಲಂಟಾನ ಮತ್ತು ಪಾರ್ಥೇನಿಯಂ ಗಿಡಗಳ ಸ್ವಚ್ಛತಾ ಕಾರ್ಯದಲ್ಲಿ ಸಕ್ರಿಯವಾಗಿ ಭಾಗವಹಿಸಿ, ಅರಣ್ಯ ಸಂರಕ್ಷಣಾ ಕಾರ್ಯದಲ್ಲಿ ಭಾಗವಹಿಸಿರುತ್ತೀರಿ. ನಿಮ್ಮ ಸಹಕಾರ ಹೀಗೆ ಮುಂದುವರೆಯಲೆಂದು ಆಶಿಸುತ್ತ ಅರಣ್ಯ ಇಲಾಖೆ ವತಿಯಿಂದ ಅಭಿನಂದನೆಗಳನ್ನು ಸಲ್ಲಿಸುತ್ತೇವೆ.

ಧನ್ಯವಾದಗಳೊಂದಿಗೆ,

क्षेत्रका <del>जिल्लाकार</del> हिंदुईकुंश्रुक्त्या संस्थित वर्धिक कोश्योक्त्यानेकर्

S.K.Veereshader Rovers C.College, Mandya. P.E.S.S.A.& C.College, Mandya.