

**Marathwada Shikshan Prasarak Mandal's**

**DEOGIRI COLLEGE, AURANGABAD**

# **GREEN POLICY**



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# **GREEN POLICY**

Green policy of the College always focused on the eco-friendly approach in every activity at every level. The institute founded Deogiri College with the objective to provide higher education to rural masses. The foundation of this college was a noble attempt towards the search of identity. Many years back this region had reached peaks of progress under the Yadav dynasty at Deogiri fort. Remembering the mission of Shivaji the great to bring out social justice to the backward sections, the college began to work hard for economically and socially backward masses. Deogiri College, Aurangabad was founded in 1960 at the central place of Marathwada. The region had been under the clutches of Nizam in the Hyderabad state till 1948. It became the part of Maharashtra in 1956 in accordance with the policy of formation of linguistic states. The foundation of this largest educational institute in Marathwada was nothing but a zealous attempt to provide light of knowledge to those who had been suffering in the darkness of ignorance. The institute was founded by Mr. V.R. Sawant and Mr. Vinayakrao Patil who were assisted by a team of dedicated social workers. Within a span of 62 years the college has built up its reputation as a formidable centre of higher education. It has with great difficulty, maintained the balance between qualitative and quantitative growth. On the one hand it has the strength of about 4500 students and on the other it has remarkable number of merit holders.

## **SCOPE OF THE GREEN POLICY**

Green Policy of the campus primarily involved in student related co-curricular and extracurricular activities which encourage them to take initiative in creating better vision encompassing infrastructural, administrative functions from the standpoints of energy efficiency, sustainability and the environment.

## **The focus areas of Green policy are:**

- Landscaping Initiatives
- Green Audit
- Clean Campus Initiatives
- Plastic Free Campus
- Solar Power Plant
- LED
- Waste Management processes
- Solid Waste Management
- Liquid Waste Management
- E-Waste Management
- Environment Audit
- Installation of Energy Efficiency Equipment
- Water Conservation through Rainwater Harvesting System
- Energy Audit
- Plastic-Free Campus

## **OBJECTIVES OF THE POLICY**

- To improve practices to climate protection and adaptation of natural resources.
- To continuously improve the efficient use of all resources, including energy and water, and to reduce consumption and the amount of waste produced, recovering and recycling waste where possible.
- To make the campus free from plastic.
- To conduct Environment, Green and Energy audits at regular intervals.
- To adopt paper less policy of E-governance.
- To conserve and protect ecological systems and resource
- To ensure judicious use of ecological resources to meet the needs and upcoming generations.
- To integrate environmental concerns into policies, plans and programmes for socio-economic development and outreach activities.
- To work with various organizations and communities to raise awareness and seek the adoption of environmental best practice and the minimization of any adverse effects on the environment.

## **POLICY:**

### **INITIATIVES FOR THE CLEAN CAMPUS**

Deogiri College decided to actively participate in the activities which supports the cleanliness not only in the campus but also around the campus with prior focus on the green initiatives which are described below.

1. To create mass awareness among the students and public rallies were conducted on the themes like Swachha Bharat Abhiyan etc.
2. Isolation of all kinds of waste stuff having negative effects on the college campus.
3. Administer the provisions and allied acts for and by students and staff members to maintain cleanliness.
4. Cleanliness activities in the College campus and its surrounding areas on an annual and bi-annual.
5. Conduct programs on the environmental management.
6. Focus waste management and maintenance.
7. Generating mass awareness on hygiene amongst students and staff members.
8. Staff Members of our institute will be encouraged to participate in the cleanliness drive in
9. Various events such as poster and slogan competitions, essay writing, spoken word poetry will be organized.

### **LANDSCAPING WITH TREES & PLANTS**

Landscaping is a key component of an ecosystem and, as such, is involved in the regulation of various biogeochemical cycles, e.g., water, carbon, nitrogen. Landscaping converts solar energy into the biomass and forms the base of all food chains.

It largely influences the energy balance at the earth's surface and within the atmospheric boundary layer, often mitigating extremes of local climate. Vegetation produces oxygen and sequesters carbon. Landscaping affects soil development over time, generally contributing to a more productive soil. It provides direct and indirect benefits like watershed protection, socioeconomic products and services for humans. It gives spiritual and cultural experiences to people. Landscaping can be easily described and mapped, and therefore can be used to monitor changes in cover, composition, and structure due to natural or human-influenced events and also to set conservation and habitat management goals. Soil erosion and degradation begins only when a substantial portion of the land from colleges is denuded of vegetation, then it proceeds with an accelerated mode that cannot be arrested by lands resistance alone. Deep soils on unconsolidated materials show slow rates of degradation and loss of their biomass production potential. In comparison with the soil available with lithic contact on steep slopes have comparatively low productivity, and low erosion tolerance if they are not protected by adequate vegetation. Soil and vegetation survey data from the campus clearly indicated that the percentage plant cover was greatly affected by the soil depth in the various dimensions. Vegetation cover increased with increasing soil depth and decreasing longevity of drought. In the soil depth class of 15-30 cm, the vegetation cover class of 25-50% had the maximum frequency of appearance in the semi-arid zone, whereas areas with soils having the same soil depth class had a higher vegetation cover with a 64% maximum frequency of appearance of the cover class 75-90% cover in the dry sub-humid zone. Soil erosion measurements conducted various regions showed that soil erosion rates for bare soils ranged from 0 to 3720 g m<sup>-2</sup> h<sup>-1</sup>, while the densely vegetated soils show controlled runoff and erosion.

This campus is rich in all indigenous plants of this area and ornamental plants create equal beauty along with as large areas of lawns and tiny herbs flowering species. Critical landscape design gets maximum use of limited area and protects and restores native vegetation. Just because of landscape beautifies the college campus and it also adds support sustainable development.

## **INITIATIVE BASED ON SENSOR ENERGY CONSERVATION**

The college has a big number of electronic and electrical equipments such as computers, LCD projectors, tube lights, CFLs, etc. For efficient use of electricity, various means like notices, oral instructions and awareness programmes like Dnyanprabodhini are used so that the importance of conservation of energy would be inculcated among students and employees. The college makes use of energy-efficient Compact Fluorescent Lamps (CFL). Tube lights are being replaced by CFL and the number of them has reached 299 while the number of tube lights is 220. Besides it, the college has 34 solar panels for water heating at Girls' and Boys' hostels. Energy preservation is the endeavor made to reduce the consumption of energy by using fewer of an energy service. This can be achieved either by using energy more efficiently through sensor based technology (using less energy for a constant service) or by sinking the quantity of facility used (for example, by driving less). Energy conservation is a part of the concept of Eco-sufficiency. Energy conservation measures (ECMs) in buildings by use of sensors to reduce the need for energy services and can result in increased environmental quality, personal financial security, national security and higher savings. It is at the top of the sustainable energy hierarchy. It also lowers energy costs by preventing future depletion. Energy can be conserved by reducing waste and losses, improving competence through technical upgrades, and better operation and maintenance. Lying on a global level, energy use can also be reduced by the stabilization of population growth.



## **INITIATIVE BASED ON USE OF LED BULBS IN THE COLLEGE**

A LED lamp is an item for consumption that uses a Light-emitting diode and that is assembled into a street lamp or a light bulb. LED lamps last much longer, and are more efficient than luminous lamps. Unlike luminous lamps, most LED lamps do not need to "warm up" before they emit the full quantity of light in our everyday life. By replacing 40 watt florescent tube by 9 watt LED tube or 14 watt T-Bulb we can save approximately Rs.1116 per year. LED lighting fixtures are more beneficial for saving energy and to conserving the environment. These lighting solutions help a lot in maintaining campus security, providing better quality light, improving student safety, and giving facility managers a sense of peace that comes with purchasing long-lasting products. LED light bulbs last much longer and consume far less energy. The high efficiency and directional nature of LEDs makes them ideal for many uses. LEDs are increasingly common in street lights, parking garage lighting, walkway and other outdoor area lighting, refrigerated case lighting, modular lighting, and task lighting. Natural light is the best and most important light to incorporate in the classroom. Natural sunlight provides physical and physiological benefits to both students and teachers alike. The truth is that LED lights are directional, which means that they are excellent for use as reading lights. The electric light bulb has been called the most important invention since man-made fire. The light bulb helped to establish social order after sundown, extended the workday well into the night, and allowed us to navigate and travel safely in the dark. Without the light bulb, there would be no nightlife. As solid-state light sources, LEDs have very long lifetimes and are generally very vigorous. The main reason that LEDs use so much less electricity than incandescent lighting is that they don't produce light in the same way.

This process doesn't use a filament and creates little heat, instead relying on a property of semiconductors to generate light. LED lights are up to 80% more efficient than traditional lighting such as fluorescent and incandescent lights. 95% of the energy in LEDs is converted into light and only 5% is wasted as heat. Less energy use reduces the demand from power plants and decreases greenhouse gas emissions. LED tubes are much more efficient on your energy costs as well as your carbon footprint on the environment. There's nothing more sustainable than Energy.

## **SOLID WASTE MANAGEMENT**

Reduce, Recycle and Reuse: The garden waste, garbage, paper, e-waste and laboratory waste are segregated as per the Aurangabad Municipal Corporation (AMC) Guidelines. Waste generation from tree droppings and lawn management is a major solid waste generated in the campus. The waste is segregated at source by providing separate dustbins for Bio-degradable and Non-biodegradable waste. The biodegradable waste from College campus is converted into the compost. The institute has adopted two composting processes. One in 24sqft compost pit and another is Dual Biocomposting Tumbler. After completion of the process, compost is used as manure in the garden, lawns and sold to the students and staff. 85 to 90 kg of waste were harvested everyday and in one month 2700 kg of waste collected and yearly 32,400 kg waste were collected. Single sided used papers are reused for writing and printing in all departments. Important and confidential reports/ papers are shredded and sent for recycling after completion of their maintenance period. Various activities are organized by different departments and committees to highlight the importance of waste management. Students of M. Sc. EVS and NSS Volunteers participated in the workshop.

The plant not only treats the solid waste generated in the campus but also converts it to Bio-energy. The organic solid waste generated in the campus is utilized as a feed for anaerobic digester. This waste is consumed by the microorganisms present in digester and leads to production of bio-methane. The bio-methane/bio-gas thus obtained is utilized as a substitute to LPG which is routinely used in laboratories. Generally, canteen waste is utilized for running such biogas plants by our college while avoiding the leaf litters and paper waste. The plant, running in our Institution, exactly focused on the same issue and with our indigenously developed technology, we made it possible to utilize such type of waste to generate bio-gas. In addition, the effluent of anaerobic digester is utilized as a liquid fertilizer and is applied for flourishing the college garden. Disposal of Sanitary Napkins- Institution has installed incinerator for disposal of used sanitary napkins.

## **LIQUID WASTE MANAGEMENT**

The liquid waste from the College is connected to Municipal sewage system. The liquid waste generated in the College can be categorized into, the sanitary water and the water discharged from laboratories. The sanitary water is carried with pipelines and sent to the common sewage treatment plant of the Aurangabad Municipal Corporation. The laboratory waste can be again classified as organic and inorganic. It is a usual practice of most institutions to release the organic liquid waste in sewers. However by doing this, they are not only increasing the BOD of waste water but also losing the potential energy source. Department of Biotechnology and Microbiology has established a unique liquid waste processing plant in the department. The majority of liquid waste generated in departmental laboratory is organic in nature. We are adding this organic liquid waste to the processing plant with prior decontamination of it. The processing plant is moreover an anaerobic digester.

The addition of such liquid waste stimulates the microbial methane generation process inside the digester. The generated gas is utilized for experimental purpose. The waste microbial culture media processed before its utilization as a feed for digester. In our Institution all the buildings are architect designed taking into account for maximum utilization of natural resources. Awareness among the students and staff on water conservation is created. Liquid waste generated by the Institution is treated by a Sewage Treatment Plant (STP) which was installed in the year May 2010 with a capacity of 50,000 liters. This Sewage plant is in operation and is utilized every day. The campus is zero water discharge campus i.e. no water is discharged outside the campus as the treated water is used for gardening. This saves potable groundwater and supply of plant treated water by government agency. Water conservation has become the need of the day. Rainwater harvesting is a way to capture the rainwater at the time of downpour, store that water above the ground or charge the underground water and use it later. Water harvesting The Institution has significant provisions for rainwater harvesting. A total of twenty four rain harvesting pits are placed in all blocks of the college. The rain water is channelized properly to recharge the ground water level. Adequate arrangements to collect the roof water during rain are in place.

### **E-WASTE MANAGEMENT:**

Deogiri College works towards generating minimal e-waste by reusing it. Regular maintenance of electronic equipment and computers ensures longer life. E-waste bin is provided for the collection of the e-waste generated in college campus, which is given to the authorized agency for recycling and disposal. All the miscellaneous e-waste such as CDs, batteries, fluorescent bulbs, PCBs and electronic items are collected from every department and office and delivered for safe disposal. Useful parts of electronic gadgets like hard disk, CPU, monitors, mobile phone charger, CD drive etc. have been removed from the old computers for reuse. The electronic waste generated in the Institution is collected and kept in separate store room. After suitable time, the same is handed over to the authorized hazardous waste collection agency. In addition to this, the researchers of the Institution are working on bioremediation of e-waste.

## **WASTE RECYCLING SYSTEM**

A waste management system is the strategy an organization uses to dispose, reduce, reuse, and prevent waste. Possible waste disposal methods are recycling, composting. In order to reduce waste at college, recycling efforts must be improved and organic recycling services must be provided. Additionally, the students, faculty, and staff must be properly educated on proper waste management practices. In a society that values convenience, the current “throwaway” lifestyle encourages a linear approach to the production and disposal of products, rather than a circular approach that regards waste as simply another resource. College students, staff, and faculty often lead busy lives and value convenience; as they go about their day rushing between activities and classes, the purchase of single-use products is often the most convenient choice. The consequence of this expediency comes in the form of high quantities of waste. In an era where societies around the world are becoming more conscious of the issues surrounding waste, college can greatly improve its image by increasing the diversion rate of waste is removed from the landfill waste. Recycling of waste providing composting services will be integral for the reduction of waste at college. Waste management (or waste disposal) includes the processes and actions required to manage waste from its inception to its final disposal. This includes the collection, transport, treatment and disposal of waste, together with monitoring and regulation of the waste management process and waste-related laws, technologies, economic mechanisms. Degradable solid waste collected from Girls Hostels, Canteen and Boys Hostel. Guest Houses and from Residential Quarters are dumped in the Vermicomposting Unit to make some Organic fertilizer which are used for Gardening.

## **GREEN AUDIT**

In recent time, the Green Audit of an institution has been becoming a paramount important for self-assessment of the institution which reflects the role of the institution in mitigating the present environmental problems. The college has been putting efforts to keep our environment clean since its inception. But the auditing of this non-scholastic effort of the college has not been documented. Therefore, the purpose of the present green audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards. Deogiri College is a quality-conscious college. We strive to be responsible and sensitive to the surrounding Environment. We are committed to sustainable development and continual improvement in our environmental performance. The management, administration and the students of the college look after the environment carefully. We are having eco-friendly units like rain-water-harvesting units, , solar panel, vermin-composting unit, etc. The Green Audit Committee will act as per the environmental policy and shoulder the responsibility for maintaining and protecting the environment in and around the college with the help of students, staff and society. Our college has a beautiful green campus. We have skilfully planted the plants so as to have oxygen and make the campus fresh full of oxygen. The greenery has remained useful in developing Oxygen Park in our college. College is also maintaining plants like *Dalbargia*, *Samanea saman*, *Terminalia katappa*, *Plumeria*, *Thuja*, *Eucalyptus*, etc. Institute is completely smoking and tobacco free campus and use of these are a punishable offence. The instructions regarding this are already given to the students and the staff members. The display boards are displayed at various places in the Institute. In reference to this subject we created various eye opening posters and wallpapers through in our Institute.

## **ENERGY AUDIT**

Energy Auditing is a tool for identifying energy efficiency potential and measures. An energy audit is an important tool or method for finding such potentials for energy efficiency measures and for assessing their financial viability, which can be carried out at different levels. A simple level just includes a brief site inspection as well as assessing the broad energy input and output of a system – this identifies low cost energy saving opportunities. Medium level audits include an in-depth analysis of energy costs, energy usage and system characteristics along with on-site energy demand measurements to identify energy efficiency measures which are more capital intensive and need to be aligned with the financial budget plan of the site. The most sophisticated level, which is referred to as an investment grade audit, includes an additional continuous monitoring of system data and process characteristics. Energy audits on such comprehensive levels can also form an important basis or first step for introducing and establishing energy management systems (EMS) in enterprises/ other institutions. They enable efficient management of energy demand and consumption in production or processing entities. Energy Conservation means steps taken to reduce and to use as much energy as necessary through changing energy consumption behavior, e.g. switching off lights when not in use. Energy Efficiency means using less energy to provide the same service/output, eg. Replacing inefficient light bulbs with efficient ones. Faulty means an equipment not working or made correctly; having defects. Potential savings means the actual reduction in operating expenses from the improved energy efficiency generated by an energy conservation or efficiency activity. Retrofitting means upgrading an existing system to improve energy efficiency. Tariff means the amount of money charge by the supplier (utility) per kWh for the use of electrical energy. Vampire Load means the way power is consumed by electronic and electrical appliances while they are switched off or in standby mode (consuming electricity at a cost but not doing any work).

## **CLEAN AND GREEN CAMPUS RECOGNITION AWARDS**

Deogiri College is one of the well-known institutes in the state involved in the activities which empowers clean and green campus initiatives.





## **ENVIRONMENTAL PROMOTIONAL ACTIVITIES ORGANIZED BEYOND THE CAMPUS**

Deogiri College has been actively engaging students into various environmental factors and avenues. Single such has been the involvement of students in cleaning the spaces in and around the city of Aurangabad. The College has organized Cleaning Programme at Railway Station and Bus Station wherein the students of the College have been actively participate in cleaning of the various sections like picking up the plastic and other trash left by the trekkers and other tourists. The plastic is highly hazardous to the environment and thus in line with Swachh Bharat Abhiyan, the students inculcates a habit of cleanliness not only inside the campus but also in the spaces and societies around us. Beyond the campus Environmental Promotional activities are initiated by College under Anti Pollution Activities like, PUC Camp, Nirmalya Sankalan (Litter Collection) etc. organized under beyond the college campus. Environmental Conservation with Tree Plantation, at village Pandhari. Awareness Program on “Swachha Bharat Abhiyan” in Karnapura area. Plantation at Gogababa Hills at Dr.Babasaheb Ambedkar Marathwada University, Aurangabad with Clean & Green Villages Drive.

## **ENVIRONMENTAL AUDIT**

In recent time, the Environmental Audit of an institution has been becoming a paramount important for self-assessment of the institution which reflects the role of the institution in mitigating the present environmental problems. The college has been putting efforts to keep our environment clean since its inception. But the auditing of this nonscholastic effort of the college has not been documented. Therefore, the purpose of the present environmental audit is to identify, quantify, describe and prioritize framework of environment sustainability in compliance with the applicable regulations, policies and standards.

The Green Campus, Energy and Environment Policies will develop the exciting new co-curricular and extra-curricular practices that encourage to students take the lead in creating positive change. These initiatives describe for a thorough review of all infrastructural, administrative functions from the stand points of energy efficiency, sustainability and the environment.

World's energy demand is growing fast because of population explosion and technological advancements. It is therefore important to go for reliable, cost effective and everlasting renewable energy source for energy demand arising in future. Solar energy, among other renewable sources of energy, is a promising and freely available energy source for managing long term issues in energy crisis. Solar industry is developing steadily all over the world because of the high demand for energy while major energy source, fossil fuel, is limited and other sources are expensive. Deogiri College is one of the prime institutions contributing in the Environmental and Social prosperity by inculcating the practical knowledge to aware the individuals regarding the importance of renewable sources of energy. A great effort has been made to tackle the energy crises through the installation and functioning of ultimate source of energy i.e. solar energy. As a prime institute

Deogiri College initiated a practice to adopt eco-friendly lifestyle by the consumption of energy through solar source for which solar appliances have been installed on almost all the buildings including college building, Girls and Boys hostels and offices. Our College installed Solar Panels of 15 M. Wt. on the terraces of Wing A. It is producing average 72 to 90 Units electricity per day. The Sun emits enough power onto Earth each second to satisfy the entire human energy demand for over two hours. Given that it is readily available and renewable, solar power is an attractive source of energy. However, as of 2018, less than two percent of the world's energy came from solar. Historically, solar energy harvesting has been expensive and relatively inefficient. Even this meager solar usage, though, is an improvement over the previous two decades, as the amount of power collected from solar energy worldwide increased over 300-fold from 2000 to 2019. New technological advances over the last twenty years have driven this increased reliance on solar by decreasing costs, and new technological developments promise to augment this solar usage by further decreasing costs and increasing solar panel efficiency.

## **REPORT ON RESTRICTED ENTRY OF AUTOMOBILES**

Automobile exhaust is the curse to the ambient ecological systems. So as to prevent campus from the negative consequences arising due to the automobiles restricted entry in the campus is one of the eco-friendly and resource conservation based practice which is being carried out in the college campus. Carbon and carbon containing compounds directly affect the respiratory tracts which results into various diseases. To control over the propagation of particulate matter and gaseous contaminants which may have numerous impacts over the premises restricted entry of the vehicles proves very beneficial. It not only protects the students and staffs but also retain the natural composition of the campus as it was in earlier period of time. It also inculcates eco-friendly habits among the students about protecting and conserving health and most crucial air resources which is always required in natural composition.

At global level many practices are being held to tackle environmental contamination and pollution, so restricted entry of automobiles in the college campus becomes a lesson to various stake holders. In the developed countries air pollution is one of the burning issues. At micro and macro level serious concern and awareness must be raised by looking towards the present scenario of decreasing life expectancy rates. As a part of society college campus need to be an ideal place which should be free from ecological disturbances from various dimensions which may cover resource conservation and health safety. The practice of restriction of vehicle entry in the campus was started through the Green policy initiative part where any staff, student or outsider must park their vehicles outside the campus.

### **BATTERY POWERED VEHICLE & USE OF BICYCLES**

Electric Mahindra TREO SFT model Battery powered vehicles have an electric motor instead of an internal combustion engine. As a part of Deogiri College, adopted a green culture and promoting a greener ecosystem along with providing a pollution-free atmospheric campus, this initiative has been taken up. We are committed to building a green campus and achieved a fairly good amount of success in this endeavour through our massive plantation drives and the same will continue. It gives me happiness to share with all that we have added yet another dimension to our initiatives. With the installation of electric vehicles inside the campus, we look forward to going one step ahead on lines with the Govt. of India who have been working aggressively on promoting new and renewable sources. The model no. of Battery powered vehicle is MB7U8CLLFMJH31754 and its carrying capacity is 3 + 1. Manufacturer of E-Rickshaws auto is Mahindra & Mahindra. India's e-mobility transition is spearheaded by small vehicle segments, mainly, the everywhere electric rickshaw. The e-rickshaw is the chosen mode of last-mile commute for the office, especially in and around metro routes and highly populated zones.

Overall, India is home to 1.5 million battery-powered electric rickshaws, serving to over 60 million users per day, for whom affordable mobility is critical. E-rickshaws not only form an important part of the mobility ecosystem in tier II and III cities but also are an environment-friendly last-mile commute in various cities of India. India's fleet of e-rickshaws is much larger than all the electric cars sold in China since 2011, and second only to China's massive fleet of electric two-wheelers.

## **BAN ON USE OF PLASTIC**

The University Grant Commission (UGC) has issued guidelines to ban the use of plastic in universities and institutions. The University Grant Commission (UGC) on Friday, August 30, 2019, issued guidelines to ban the use of plastic in universities and educational institutions. According to the guidelines the college has banned use of plastic in the campus. The students of department collected wood, glass and plastic scrap from laboratories, library, and office of college campus is given to scrap dealer for recycling. Signboards/Posters are displayed on the College campus for encouraging ideas of a plastic free environment. Plastic-Free Campus has been observing most of its duties in terms of solid waste management since its inception. Since 1950 to 2018, about 6.3 billion tonnes of plastics have been produced worldwide, 9% and 12% of which have been incinerated and recycled respectively. Human population increase and consistent requirement for plastics and plastic products are mainly responsible for continuous increase in the generation of plastics waste and its accompanied ecological pollution. At global level bundle of studies are being carried out to understand nature of different types of plastics, their production, hazardous chemical constituents, prevailing disposal methods and the detrimental effects of these constituents to air, water, soil, organisms and human health with associated disposal methods. Long term usage and exposure of plastics and plastic products to high temperature may lead to leaching of toxic chemical constituents into the food, drinks and water.

Unwise disposal of plastics on land and open air burning leads to the release of toxic chemicals into the air causing floral and faunal health hazards. The ban on plastic usage is the need of the era and it is to be considered for global level prevention and control of plastic wastes. In view of the Government of India's resolution to ban all single use plastics due to the hazardous impact of plastic use and pollution, the college administration strictly bans the use of single use plastics in its premise to make it a 'Plastic Free Campus'.

### **PEDESTRIAN FRIENDLY PATHWAYS**

Deogiri College Campus has sufficient space for the parking vehicles of staff and students. Roads inside the campus are well maintained. Pedestrians can walk safely through the roads. Entry of any vehicles inside the campus is restricted. Vehicles of students and visitors are parked outside the campus except for all the disabled persons. Campus has a separate parking area for disabled people. Pathways and roads inside the campus are well maintained. Pedestrians can walk safely through the pathways. Our college is well connected through bus, Railway, auto-rickshaw from different places. Inside the campus only E-Rickshaw will rounding whole campus. Besides this college have walkways. Students or employees can avail bus or can walk or go through bicycle in the campus. Pedestrian pathways should be wide enough to comfortably accommodate to all users. The appropriate path width varies as a function of the volume of walkers, their walking speed, and how much space they need walk comfortably. Surfacing materials should be selected for the best combination of drainage, attraction, and comfort. Additionally, both vehicular and pedestrian paving surfaces must be universally accessible according to the standards. Path side landscaping should support the use of pathways as a venue for socialization, relaxation, and contemplation. These purposes can be enhanced by stimulating and attractive artwork and other Building entrances should include transitional walk-off areas and an awning over the entrance porch, thereby creating a covered gathering area with added seating located within twelve feet of the door.