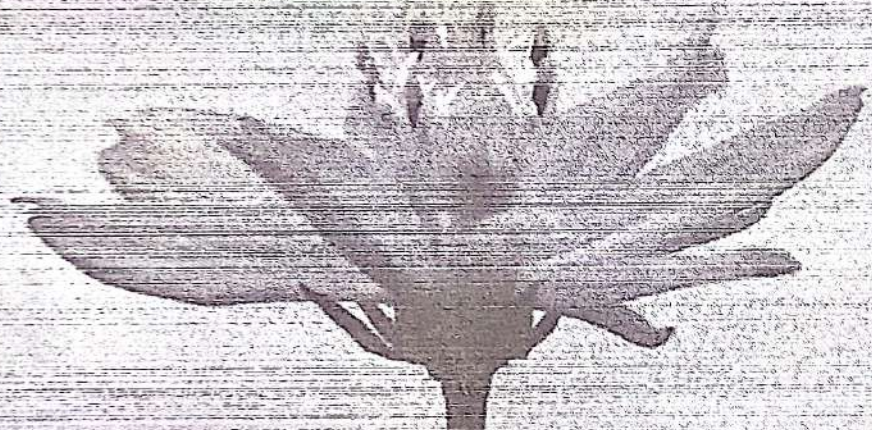


GREEN AUDIT REPORT 2020-2021



DNYAN PRABHODINI MANDAL'S
SHREE MALLIKARJUN & Shri Chetan Manju Desai College
Delem, Canacona, Goa



GREEN AUDIT

Green audit was initiated with the beginning of 1970s with the motive of inspecting the work conducted within the organizations whose exercises can cause risk to the health of inhabitants and the environment. It exposes the authenticity of the proclamations made by multinational companies, armies and national governments with the concern of health issues as the consequences of environmental pollution. It is the duty of organizations to carry out the Green Audits of their ongoing processes for various reasons such as; to make sure whether they are performing in accordance with relevant rules and regulations, to improve the procedures and ability of materials, to analyze the potential duties and to determine a way which can lower the cost and add to the revenue. Through Green Audit, one gets a direction as how to improve the condition of environment and there are various factors that have determined the growth of carrying out Green Audit. Some of the incidents like Bhopal Gas Tragedy (Bhopal; 1984), Chernobyl Catastrophe (Ukraine; 1986) and Exxon Valdez Oil Spill (Alaska; 1989) have cautioned the industries that setting corporate strategies for environmental security elements have no meaning until they are implemented.

The intention of organizing Green Audit is to upgrade the environment condition in and around the institutes, colleges, companies and other organizations. It is carried out with the aid of performing tasks like waste management, energy saving and others to turn into a better environmental friendly institute.

Goals of Green Audit

1. The objective of carrying out Green Audit is securing the environment and cut down the threats posed to human health.
2. To make sure that rules and regulations are taken care of
3. To avoid the interruptions in environment that are more difficult to handle and their correction requires high cost.
4. To suggest the best protocols for adding to sustainable development

Benefits of Green Audit

1. It would help to prepare plan to protect the environment.
2. Recognize the cost saving methods through waste minimization and management.
3. Point out the prevailing and forthcoming impacts on environment.
4. Ensures conformity with the applicable laws.
5. Empower the organizations to frame a better environmental performance.
6. It portrays a good image of an institute which helps building better relationships with the group of interested parties.
7. Promotes the alertness for environmental guidelines and duties.



STATEMENT OF ASSURANCE

(2020-21)

This audit is been conducted by the internal Green Audit Committee assigned by the college. The audit procedure tried to meet the terms of International Standards of Internal Auditing. In our decision, sufficient and appropriate audit procedures were completed and evidence gathered to support the precision of the conclusions reached and contained in this report. The conclusions are based on a comparison of the situations as they existed at the time of the audit.

Sr. No.	Name & Designation of Committee Member	Signature
1.	Prof. Dr. Manoj S. Kamat Principal & Chairman	
2.	Mr. Dipak Bowalkar (Dept. of Zoology) Convener	
3.	Ms. Divya Sawant (Dept. of Chemistry) Co-convener	
4.	Ms. Diksha Naik (Dept. of Botany) Member	
5.	Mr. Anand Velip (Dept. of Geography) NSS Co-ordinator	
6.	Ms. Karishma Parsekar (Dept. of Commerce) NCC Army Co-ordinator	
7.	Ms. Anisha Sawant Desai (Dept. of Commerce) NCC Navy Co-ordinator	





Dnyan Prabodhini Mandal's
SHREE MALLIKARJUN COLLEGE OF ARTS & COMMERCE
DELEM-CANACONA, GOA 403702

1993

E-mail ID: shreemallikarjuncollege@gmail.com



www.shreemallikarjuncollege.ac.in

Date: 21/10/2019

OFFICE ORDER

Committee for Green and Sustainability Practices

The Principal is pleased to constitute the Committee titled as above from the date mentioned herein for the period of 3 years with the following agenda:

- A. Develop policy framework for sustainability.
- B. Develop sustainability initiatives related to Environment Preservation, Energy Conservation, Water Sanitization and Women Hygiene and Health.
- C. Organizing events for sustainable Garbage collection, Tree Plantation and Orientation towards Flora and Fauna.
- D. Student sensitization through of Guest Lecture and awareness on the theme of Sustainability.
- E. Extension and community engagement and of up keep regular maintenance of garbage, sanitary pads incination, sanitary pads dispenser, solid waste management, herbal garden and vermicompost plant.
- F. Facilitate reporting and internal auditing of energy/water /green audit

- | | | | |
|----|-------------------------|---|-------------|
| 1. | Mr. Dipak Bowalkar | - | Convenor |
| 2. | Ms. Divya Sawant | - | Co-convenor |
| 3. | Ms. Diksha Naik | - | Member |
| 4. | Mr. Anand Velip | - | Member |
| 5. | NSS Incharge | - | Member |
| 6. | NCC Incharge | - | Member |
| 7. | Mr. Pradhyumn Bhairali- | - | Member |
| 8. | Ms. Saniha Desai | - | Member |
| 9. | College Gardeners | - | Member |

Kindly note and comply



Manoj S. Kamat
Dr. Manoj S. Kamat
Principal

21/10/19

Index

Sr. No.	Content	Page No.
I	Brief about College	6
II	Green Audit Committee Composition	7
III	Standard Operating Protocol for Green Audit	8
IV	Green Audit Policy	12
V	Campus Layout	15
VI	Green Initiatives in Campus	17
VII	Sustainable Initiatives and Green Practices by college	26
VIII	Awareness and Sensitization Activities	29
IX	Extension & Community Engagement	31
X	Suggestions Green Audit Committee to Improve Green Cover in Campus	37
		43



GREEN AUDIT EXECUTIVE SUMMERY REPORT

I) BRIEF ABOUT COLLEGE:

1. Name of the Institute: DPM's SHREE MALLIKARJUN & Shri Chetan Manju Desai College Delem, Canacona, Goa.
2. No. of Branches: B.A.; B.Com.; BSc;
3. No. of Students: 565
4. No. of Faculty Members: 50
5. No. of Non-Teaching Members: 37
6. No. of Buildings: 07
8. Total campus area: 6000 m²
9. College building Spread Area: 2011 m²
 - a) Girls common room: 01
 - b) Garbage collection bins: 06
 - c) Labs: 05
 - d) Class rooms: 13
 - e) Auditorium/ Conference room: 03
 - f) First aid/Sick room:01
10. Student Strength

Catagotary	Boys	Girls	Total
ST	129	120	249
OBC	48	102	150
SC	1	0	1
General	57	108	164
Total	235	330	565

Stream	Boys	Girls	Total
Arts	103	201	304
Commerce	65	68	133
Science	67	61	128
Total	235	330	565



II) Green Audit Committee Composition

Sr. No.	Name	Designation
1	Prof. Dr. Manoj S. Kamat	Chairman
2	Mr. Dipak Bowalkar	Convener
3	Ms. Divya Sawant	Co-convener
4	Ms. Disha Naik	Member
5	Mr. Anand Velip	NSS Co-ordinator
6	Ms. Karishma Parsekar	NCC Army Co-ordinator
7	Ms. Anisha Sawant Desai	NCC Navy Co-ordinator
8	Mrs. Sanika Naik	Gardener
9	Mr. Mainath Gaonkar	Gardener
10	Ms. Diksha Gaonkar	Science Student
11	Mast. Vishant Gaonkar	Science Student
12	Mast. Sujay Gaonkar	Science Student
13	Mast. Navil Komarpant	Science Student
14	Mast. Jay Naik	Science Student
15	Ms. Nishita Naik	Science Student
16	Mast. Vishwanath Naik	Science Student
17	Ms. Prajakta Nevkar	Science Student
18	Ms. Priti Tavodkar	Science Student
19	Mast Krishna Velip	Science Student
20	Mast. Pradeep Velip	Science Student
21	Mast. Rupesh Velip	Science Student
22	Mast. Varon Dias	Science Student



III) Standard Operating Protocol for Green Audit

1. Introduction and purpose

The rapid urbanization and economic development at local, regional, and global level has led to several environmental and ecological crises. On this background it becomes essential to adopt the system of the green campus for the institute which will lead for sustainable development

Green audit can be defined as systematic identification, quantification, recording and analysis of components of environmental diversity to determine:

- (a) The compliance status to environmental regulatory requirement.
- (b) The environment management system; and
- (c) The overall environmental risk of the premises.

The "Green Audit" aims to analyze environmental practices within and outside the college campus, which will have an impact the eco-friendly ambience. It was initiated with the motive of inspecting the work conducted within the organization whose exercises can cause risk to the health of inhabitant and environment..

Through 'Green Audit' one gets a direction as how to improve the condition of environment and the various factor that can determine the growth and healthy environment in the institution.

2. Vision

To promote the Environmental management and Conservation in the College Campus and the surrounding community.

3. Mission

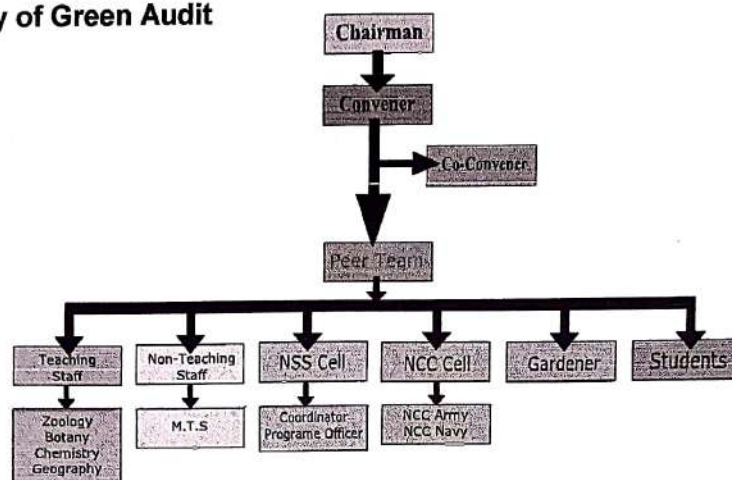
To identify, quantify, describe and empower the framework of Environmental sustainability in compliance with the regulation, policies and standards.

4. Objectives

- To systematically document, Analyze, Improve and Maintain biodiversity of Campus
- To actively involve students in biodiversity conservation activity and sustainable development practices.
- To conduct extension activities for spreading green initiatives in the community
- To bring out a status report on environmental compliance
- To identify gaps and suggest recommendation to improve the Green Campus status of the Institution.
- To establish a Benchmark to assess sustainable and eco friendly future of environment.



5. Hierarchy of Green Audit



6. Components of Green Audit

A) Biodiversity Audit: It deals with conservation and expansion of green cover in the campus along with awareness regarding conservation of biodiversity to college and surrounding community. The concerned auditor initiates documentation of biodiversity around campus and suggest for reducing carbon foot print campus.

B) Waste Management Audit: The waste clearance measures associated to hazardous wastes and recycling are reviewed. The auditor diagnoses the prevailing waste disposal policies and suggests the best way to combat the problems.

C) Water Audit: Evaluating the facilities of raw water intake and determining the facilities for water treatment. Water harvesting is one of the best techniques that can be adopted by simply storing the water and using it at the time of scarcity. The concerned auditor investigates the relevant method that can be adopted and implemented to balance the demand and supply of water.

D) Energy Audit: It deals with the energy conservation and methods to reduce its consumption and the related pollution. The auditor targets at the energy consuming methods adopted and find whether these methods are using the energy in a conservative way or not.

7. Audit Process

The selection of an auditor by the organization requires some appreciation of what an audit entails. Organizations should appreciate that the environmental audit and risk assessment required under Environmental Quality are much more than an inspection and documentation of the site conditions. The audit shall investigate the environmental problems that are noted at the site to determine the root cause of the regulatory noncompliance so that the organization can take feasible steps to improve the conditions. The biodiversity auditor will comprise of two independently working parties namely:



I. Internal Auditors (Self Study Reports)

II. External Auditor (External Independent Review)

Internal Auditors (Self Study Reports)

The internal auditor will comprise of a team of members from the institution which will include the Principal (Chairman), Convener, Vice- Convener, Peer members including Teaching and Non Teaching Staff and Gardner of the college.

A) Chairman : The Principal of the college will be designed as Chairmen of the Green Audit committee who will be appointing Convener & members of the committee and will closely monitor the progress of green audit. The selected committee members should fulfils following selection criteria.

1. Minimum Environmental Auditing Experience.
2. In-depth knowledge of Biodiversity –
3. Science or Engineering educational background.

B) Convener: Principal/Vice-Principal shall evaluate and assign the Convener of the committee to facilitate the Green Auditing. The Convener of the committee is responsible to communicate the verbal/written instructions/notices from the Principal/vice-principal to the members of the committee. The Convener of the committee under the guidance of Principal/vice-principal will also design an action plan of Biodiversity auditing for the particular academic year. The Convener of the committee is responsible to assign duties and task to the members of the committee. The Convener of the committee should ensuring the efficient and effective conduct and completion of the audit within the audit scope and plan. The Convener of the committee with the help of members of the committee will be responsible for preparation and submitting the audit report. The Convener of the committee shall also take an active role in the site audit activities and shall not delegate the task of the site audit activities entirely to the members of the committee.

C) Members of the committee: Members of the committee should have love, interest and knowledge of Biodiversity. The members of the Biodiversity audit will include the Teacher/Gardener/MTS/Student of the college. Members of the committee under the supervision of will responsible for completion of action plans of Biodiversity Audit. The members of the committee must work as a unit and the range of auditing and technical skills must be balanced among the team members. The team members should be competent enough to carry out the audit and have, as a minimum, certified skills in environmental auditing.

External Auditor (External Independent Review)

The External audit team should be independent third party organization so that they audit to ensure the objectivity of the audit, its findings and conclusions. The auditor who is selected should be free from bias and any potential conflict of interest



throughout the audit process. The selected External Auditor should also fulfill following criteria's:

1. Minimum Environmental Auditing experience
2. Certified skills in environmental auditing and relevant environmental management and technology.
3. Understanding of the environmental regulations and its requirements.

8. Review of preliminary

Before an audit is carried out, the scope of the audit has to be determined by the Chairman of the committee in accordance with the Institution. Determining the scope includes defining the extent and boundaries of the audit such as physical location, processes and organizational activities.



IV) Green Audit Policy

1. INTRODUCTION

Dnyan Prabhodhini Mandal's SHREE MALLIKARJUN and Shri Chetan Manju Desai College takes great pride in the natural beauty of its campus. Even though with small size, the campus offers insight into the complexity and balance of nature because of its special location on the foot hills of Karmal Ghats. The constant interaction with surrounding with rich biodiversity, campus holds vivid species of Flora and Fauna.

For those interested in nature, conservation and environmental study, the college offers a canvas of natural classrooms in which students and the extended community can learn and explore environmental principles and processes of concern.

Our College Mascot "THE EAGLE" Symbolises multi-dimensional aspect. The mascot encouraging students to adopt characters of eagle such like confidence, competence, connection with community and achieving high though remaining rooted to its values, on the other had "the Eagle" also symbolise the great diversity of raptor birds (27 Species) in the Taluka. Especially our mascot provides an umbrella for conservation Goa's largest raptor White Bellied Sea Eagle.

2. Objectives

The rapid utilization and economic development at local, regional and global level has led to several environmental and ecological crises. On this background it becomes essential to adopt the system of the Green campus for the institution which will lead for sustainable development.

The environmental policy of the college aims towards a systematic identification, quantification, recording, reporting, analysis and mitigation of components in the environment to determine:

- a) The compliance status to environmental regulation requirement.
- b) The environmental management system
- c) The overall environmental risk of the premises.
- d) The proper disposal of waste generated through different processes in campus.

3. Policy Framework:

With regard to the successful implementation of the College Environmental Policy, the College will abide by the following framework:

1. Responsibly manage all aspects of operations to meet recognized environmental standards and legal requirements.
2. Manage college operations to promote environmental protection and sustainable development where ever feasible.



3. Work with industry, government, public groups and the college community to determine environmental priorities.
4. Communicate with relevant stakeholder groups, in a timely and candid fashion, on the environmental aspects of college policies and operations.
5. Encourage all employees to be conscious of environmental considerations and to be protective of the environment.
6. Develop and implement environmental audits of all college operations including the physical plant, food services, purchasing, programs and transportation.
7. Develop and implement a procurement procedure which would encourage the procurement of products and services from suppliers who have a demonstrated commitment and capacity to produce those products and services in an environmentally responsible manner.
8. Establish an Environmental Committee /Green Audit Committee that would be responsible for monitoring the implementation of the Environmental Policy. The Committee would report to the Senior Management Committee of the College.
9. Endeavour to ensure that every graduate of Shree Mallikarjun & Shri Chetan Manju Desai College has received environmental awareness and resource utilization education, and wherever feasible, environmentally responsible training relevant to their chosen field of study and career path.

4. Green Audit Policy

The Green audit aims to analyze environmental practices within and outside the college campus, which will have an impact on the eco-friendly ambience. It is initiated with the motive of inspiring the work conducted within the organisations whose exercise can cause risk to the health of the inhabitants and the environment. The management of healthy environment and determining its assets in the college campus will be carried out annually by internal Green Audit committee. The findings and analysis of same will be proposed to Principal of college through a self study report. Further it will be subjected to external independent review through external green auditor agency appointed by college.

The college shall establish a Green Audit committee comprising of passionate and environmental conscious members including staff and student representatives, who will work in coordination with college administration to;



i) Develop specific policies and target to promote, monitor and improve environmental practices and work towards reducing the carbon footprint of the institution.

ii) Perform Green audit of the College.

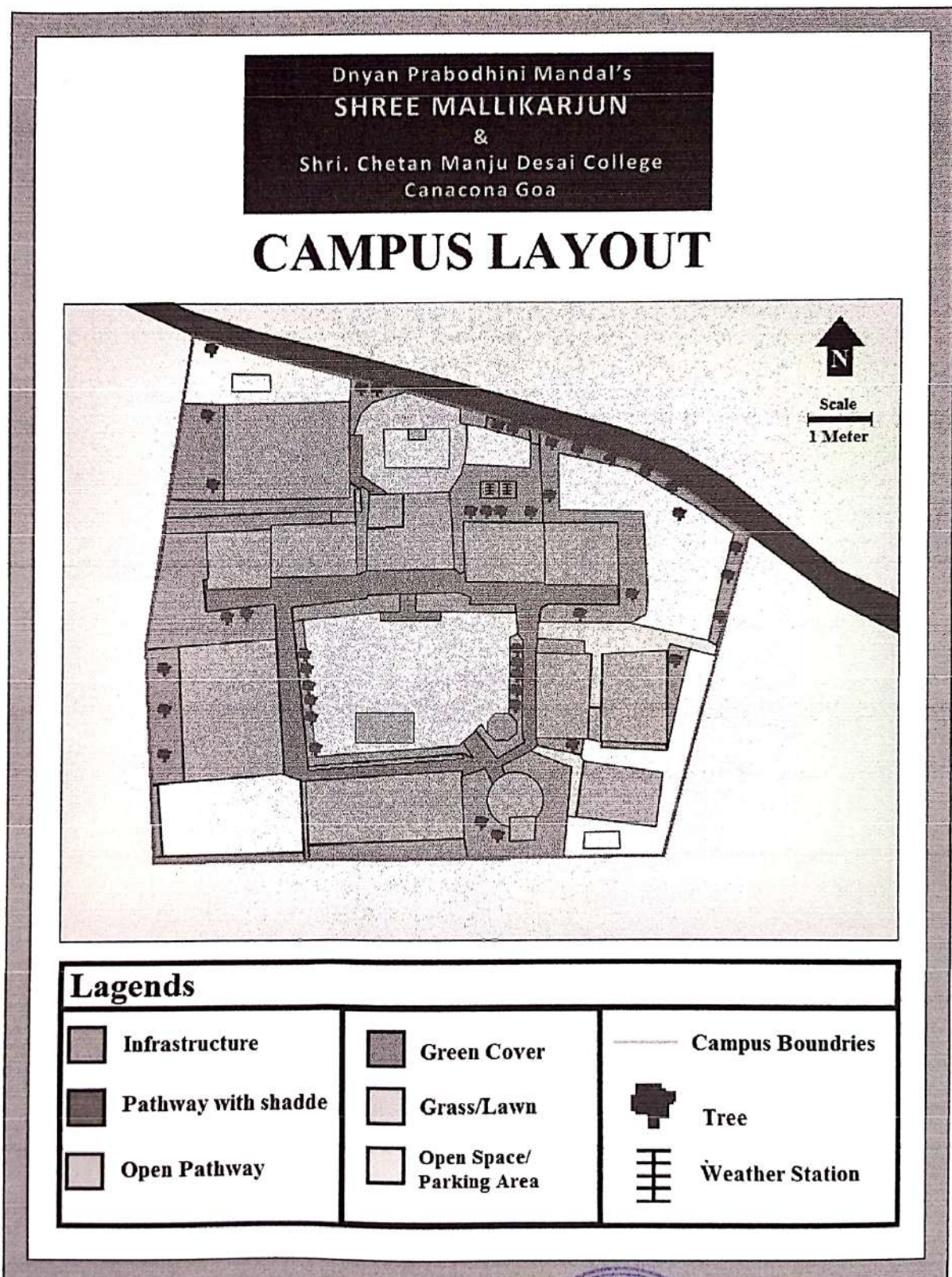
Targets are to be reviewed regularly and this policy is to be reviewed after every three years.

The Committee should also encourage activities pertaining to Environmental protection and sustainable development specific to Canacona Taluka and college campus such as:

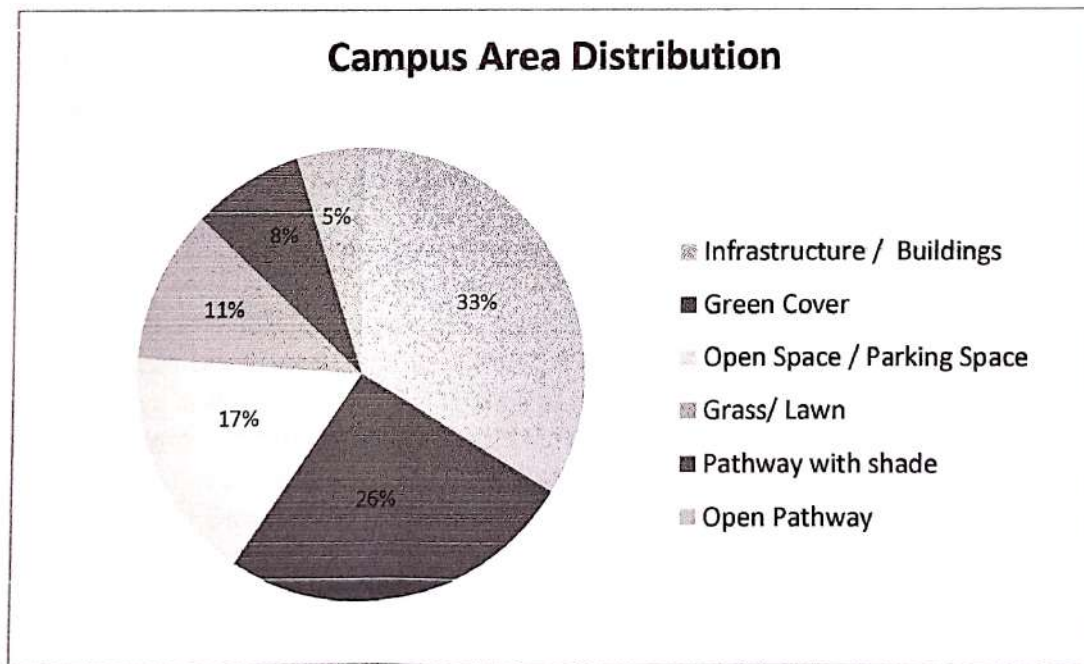
1. Van Mahostav: Tree Plantation
2. Collaboration with Panchayat: Biodiversity Management Committee.
3. Use of digital tools in biodiversity monitoring such as Epicollect and ebird
4. Coastal conservation focusing on sand dune and Mangrove ecosystem management.
5. Activities on cleanliness drives and environmental sensitisation in community.
6. Liquid waste, lab waste & bio-hazard waste management in college campus
7. Facilitation of rain water harvesting and open well recharge.
8. Reduction in use of single use plastic.



V) Campus Layout



Sr. No.	Feature	Area in Square Meters	Percentage
1.	Total Area	6000	100
2.	Infrastructure / Buildings	2011	34
3.	Green Cover	1535	26
4.	Open Space / Parking Space	1020	17
5.	Grass/ Lawn	638	11
6.	Pathway with shade	507	8
7.	Open Pathway	289	5



VI) Green Initiatives in Campuss

A) Systematic Documentation of Animal Diversity of College Campus using eBird and Padlet

Dyan Prabhodhini Mandals, Shree Mallikarjun and Shri Chetan Manju Desai College Campus is spread across 6,000 sq meter of which 37% of the campus is total green cover which includes Trees, Shrubs, Ornamental, Flowering Plants, Grass and Lawn. A sustainable ecosystem is only created when a biotic component that is plants and animals have sustainable interaction with abiotic factors. After the successful documentation of floral diversity of campus the faunal diversity documentation project was undertaken in academic year 2020-21. The Students of SYBSc Zoology students along with teachers of Zoology Mr. Dipak Bowalkar; Mrs, Sanchita Naik Gaunkar and Ms. Shweta Moye was assigned the task of documenting animal diversity of the campus.

As most animal show dynamic and constant locomotion, An random opportunistic surveys were made in and around campus within the radius of 1 kms. Different groups of animal were recorded and photographed. All the observation made were uploaded on e platforms for systematic and long term documentation. Two different platforms were used to document the animal diversity in campus. Total of 120 faunal species reported from campus during the study.

1. Digital common sharing canvas platform PADLET:

Padlet is an online notice board used as blank slate to customize as own platforms and help to add numerous media resources like videos, images, helpful links, a classroom newsletter, fun classroom updates, lesson material, answers to questions, and more.

Padlet was used as digital cloud-based software-as-a-service to host a real-time collaborative web platform in which students and teachers can upload, organize, and share their observations and finding related to animal diversity of campus on virtual bulletin board. A project Titled "ANIMAL WORLD" An Faunal Biodiversity Documentation of DPM's Shree Mallikarjun & Shri Chetan Manju Desai College Campus was Created for proving single common platform to share observations. Total of 89 observation were recorded on the Padlet by students

Link <https://padlet.com/dipakbowalkar1/gxp4oily2ekoy3kr>

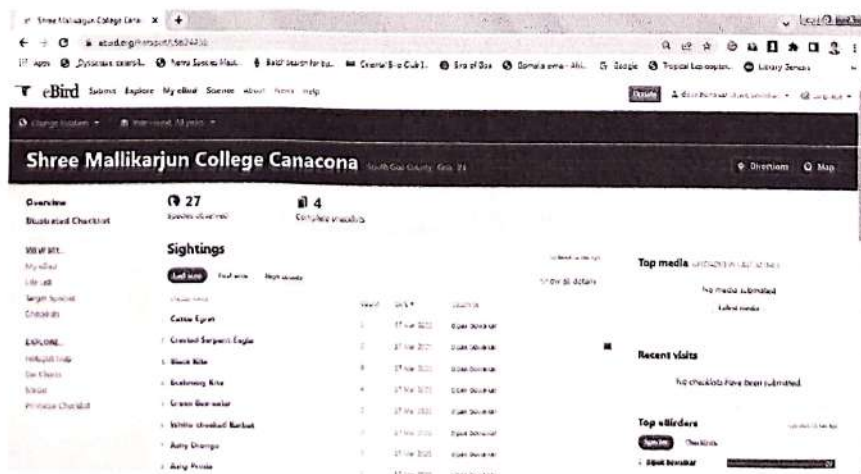


2. Use of eBird for documentation of Birds

eBird is an online database of bird observations providing scientists, researchers and amateur naturalists with real-time data about bird distribution and abundance Launched in 2002 by the Cornell Lab of Ornithology at Cornell University and the National Audubon Society, eBird gathers basic data on bird abundance and distribution at a variety of spatial and temporal scales. An single sharable hot spot



Padlet Project : “ ANIMAL WORLD” An Faunal Biodiversity Documentation of DPM’s Shree Mallikarjun & Shri Chetan Manju Desai College Campus



List of Faunal Diversity Documented during the survey

Sr. No.	Common Name	Konkani Name	Scientific Name
I) MAMMALS			
1	Indian palm Squirrel	Channi	<i>Funambulus palmarum</i>
2	Black Faced Langur	Makod	<i>Semnopithecus vetulus</i>
3	Cattle	Gaurna	<i>Bos taurus</i>
4	Dog	Petto, Sune	<i>Canis lupus familiaris</i>
5	Cat	Majar	<i>Felis catus</i>
II) BIRDS			
6	Cattle Egret	Bakki	<i>Bubulcus ibis</i>
7	Crested Serpent-Eagle	Murayalo	<i>Spilornis cheela</i>
8	Black Kite	Kalli Ghon	<i>Milvus migrans</i>
9	Brahminy Kite	Dhavi Ghon	<i>Haliastur indus</i>
10	Green Bee-eater	Kirati	<i>Merops orientalis</i>
11	White-cheeked Barbet	Kuutto	<i>Megalaima viridis</i>
12	Ashy Drongo	Gobra Kirkavlo	<i>Dicrurus leucophaeus</i>
13	Ashy Prinia	Gobare Shetuk	<i>Ashy Prinia</i>
14	Red-vented Bulbul	Khapri Pikoli	<i>Pycnonotus cafer</i>
15	Spotted Dove	Kavado	<i>Spilopelia chinensis</i>
16	Indian Pond-Heron	Bakke	<i>Indian Pond-Heron</i>
17	Malabar Pied-Hornbill	Gadaduvayre	<i>Anthraceroceros coronatus</i>
18	White-throated Kingfisher	Kirkiro	<i>Halcyon smyrnensis</i>
19	Rufous Treepie	Son Kavlo	<i>Dendrocitta vagabunda</i>
20	Red-whiskered Bulbul	Shend Pikoli	<i>Pycnonotus jocosus</i>
21	Jungle Babbler	Bajbhaje	<i>Turdoides striata</i>
22	Jungle Myna	Salori	<i>Acridotheres fuscus</i>
23	Oriental Magpie-Robin	Madval	<i>Copsychus saularis</i>
24	Tickell's Blue Flycatcher	Nile Etcule	<i>Cyomis tickelliae</i>
25	Purple-rumped Sunbird	Pichpiche	<i>Leptocoma zeylonica</i>
26	White-browed Wagtail	Pitpite	<i>Motacilla maderaspatensis</i>
27	Crested Treeswift	Shend Pakoli	<i>Hemiprocne coronata</i>
28	Asian Brown Flycatcher	Changule	<i>Muscicapa latirostris</i>
29	Western Yellow Wagtail	Haryale	<i>Motacilla flava</i>
30	Rose-ringed Parakeet	Kir	<i>Psittacula krameri</i>
31	Greater Racket-tailed Drongo	Vadlo Kirkavlo	<i>Dicrurus paradiseus</i>
32	Orange-headed Thrush	Kastur	<i>Geokichla citrina</i>
III) REPTILES			
33	Calotes	Shedoo	<i>Calotes versicolor</i>
34	Monitor Lizard	Sal	<i>Varanus indicus</i>
35	Wall Lizard	Pal	<i>Calotes hemidactylus</i>



36	Goan Dwarf Geeko	Pal	<i>Cnemaspis goaensis</i>
37	Draco	Udipi sheddo	<i>Draco dussumieri</i>
38	Blind snake	Gaindol sap	<i>Indotyphlops braminus</i>
39	Rat Snake	Dinnod	<i>Ptyas mucosa</i>
40	Checkered Keelback	Pasko	<i>Fowlea piscator</i>
41	Striped Keelback	Pasko	<i>Amphiesma stolatum</i>
42	Spactakled Cobra	Nag	<i>Naja naja</i>
43	Indian Rock Python	Har	<i>Python molurus</i>
44	Whitakers Boa	Malund	<i>Eryx whitakeri</i>
45	Bronze Back tree Snake	Pasko	<i>Dendrelaphis tristis</i>
IV) Amphibians			
46	Common Indian Tree Frog	Bebo	<i>Polypedates maculatus</i>
47	Bull Frog	Bebo	<i>Hoplobatrachus tigerinus</i>
48	Dobson's Burrowing Frog	Bebo	<i>Sphaerotheca dobsonii</i>
49	Fungoid Frog	Bebo	<i>Hydrophylax malabaricus</i>
V) Butterflies			
50	Common Mommmon	Phulpakhru	<i>Papilio polytes</i>
51	Common Crow	Phulpakhru	<i>Euploea core</i>
52	Common Rose	Phulpakhru	<i>Pachliopta aristolochiae</i>
53	Common Bush Brown	Phulpakhru	<i>Mycalesis perseus</i>
54	Chocolate Pansy	Phulpakhru	<i>Junonia iphita</i>
55	Lime	Phulpakhru	<i>Papilio demoleus</i>
56	Common Sailor	Phulpakhru	<i>Neptis hylas</i>
57	Common Jezebel	Phulpakhru	<i>Delias eucharis</i>
58	Southern Birdwing	Phulpakhru	<i>Troides minos</i>
59	Blue Mommmon	Phulpakhru	<i>Papilio polymnestor</i>
60	Glassy tiger	Phulpakhru	<i>Parantica aglea</i>
61	Malabar Banded Peacock	Phulpakhru	<i>Papilio Buddha</i>
62	Danaid Eggfly	Phulpakhru	<i>Hypolimnas misippus</i>
63	Common Pierrot	Phulpakhru	<i>Castalius rosimon</i>
64	Red Pierrot	Phulpakhru	<i>Talicauda nyseus</i>
65	Nigger	Phulpakhru	<i>Orsotriaena medus</i>
66	Common Four Ring	Phulpakhru	<i>Ypthima huebneri</i>
67	Common Wanderer	Phulpakhru	<i>Pareronia valeria</i>
VI) Other Invertebrates			
68	Dragonfly	Bhirmut	Odonata sps.
69	Damselfly	Dhakli Bhirmut	Odonata sps.
70	Grasshopper	Pittol	Orthoptera sps.
71	Black Ant	Kalli Muy	<i>Lasius niger</i>
72	Dung Beetle	Bam	Coleoptera sps.
73	Snail	Gogol Gai	Gastropoda sps.
74	Yellow Spotted Millipede	Paishya Kido	<i>Harpaphe haydeniana</i>
75	Mango Stem Borer	Ammaya Kid	<i>Batocera rufomaculata</i>
76	Slug	Gogol Gai	Gastropod asps.



77	Owl Moth	Pako	Caligo sps.
78	Plant bug	Bam	Miridae sps.
79	Huntsman Spider	Koli	Sparassidae sps.
80	Blistel Beetle	Bam	Meloidae sps.
81	Earthworm	Gaindol	Lumbricina sps.
82	Mosquito	Noraj	Culicidae sps.
83	Scorpion	Vinchu	Arachnid asps.
84	Housefly	Mus	Musca domestica
85	Indian Luna Moth	Pako	Actias selene
86	Canefly	Mus	Saccharosydne saccharivora
87	Yellow flyer	Pako	Diachlorus sps.
88	Handmaiden moth	Pako	Syntomoides imaon
89	Scarlet lily Beetle	Bam	Lilioceris lili
90	Praying Mentis	Bam	Mantodea
91	Oleander Hawk Moth	Pako	Daphnis nerii
92	Giant wood Spider	Koli	Nephila pilipes
93	Mud Dauber	Mus	Sceliphron caementarium
94	Fall Webworm	Kid	Hyphantria cunea
95	Brown Crab	Kulli	Cancer pagurus
96	Green Dock Beetle	Bam	Gastrophysa viridula
97	Hammer head worm	Kid	Bipalium
98	Red Giant Centipede	Salli	Scolopendra heros
99	Sting Bug	Bam	Halyomorpha halys
100	Pill Bug	Bam	Armadillidiidae
101	Atlas Moth	Pako	Attacus atlas
102	Seven spotted Ladybird	Kid	Coccinella septempunctata
103	Assassin Bug	Kid	Reduviidae sps.
104	Brown Millipede	Paisya Kido	Diplopod asps.
105	Violin Mentis	Kido	Gongylus gongylodes
106	Carpenter Bee	Mus	Xylocopa sps.
107	Japanese silk moth	Pako	Antheraea yamamai
108	Whip Scorpion	Villu kido	Thelyphonida sps.
109	Cricket hunter wasp	Gagil mus	Chlorion sps.
110	Ichneumon wasp	Gangil mus	Ichneumonidae sps.
111	Spotted lanternfly	Kid	Lycorma delicatula
112	Signature Spider	Koli	Argiope anasuja
113	Black Solder Fly	Mus	Hermetia illucens
114	Cricket	Toll	Acheta domesticus
115	Stick Insect	Kid	Phasmatodea sps.
116	Giant Katydid	Pittol	Macrolyrstes corporalis
117	Honey Bee	Mhava Mus	Apis indica
118	Black Centepede	Salli	Tantilla sps.
119	Fire Ant	Muy	Solenopsis sps.



2. Science View Point

Volume I, No. 01

Research Journal

SCIENCE VIEWPOINT 2021



Editor: Dr. Mithil S. Fal Desai

**Dnyan Prabodhini Mandal's
Shree Mallikarjun and Shri Chetan Manju
Desai College, Canacona-Goa 403702**

shreemallikarjuncollege@shreemallikarjuncollege.ac.in



Table of Contents

- **Synthesis Of Heterocyclic Compounds Derived From Chalcones**

By Ms. Priyanka P. Kavalekar.....01-19

- **Growing plants on Martian soil**

By A. Velip, L. Vagmode, N. Komarpant, S. Gaonkar, S. Dalal, S. Velip, I. Gaonkar, U. Fal Dessai and M. Fal Desai.....20-25

- **Sensitive Detection Of Metal Ions On Different Platform – A Comparative Study**

By Ms. Shubhlaxmi K. Naik.....26-44

- **Study of Chalcone**

By Ms. Divya R. Sawant.....45-55



3. National Science Day 2021

The National Science Day 2021 was celebrated at Shree Mallikarjun and Shri Chetan Manju Desai College in association with the Goa State Council of Science and Technology. The college sincerely thank the National Council for Science and Technology and the Goa State Council of Science and Technology for financial support.

The National Science Day is celebrated in India to commemorate the award of the first Nobel Prize to Indian scientist Sir C V Raman, for the discovery of the 'Raman Effect'. This day is celebrated to emphasize the culture of science for the wellbeing and prosperity of mankind. To celebrate this occasion SHREE MALLIKARJUN & Shri Chetan Manju Desai College in association with Goa State Council for Science & Technology had organized a series of following events.

1. Know and Grow: On this occasion, we acknowledge the contribution of three 'Indian Scientists' (Prof. Sheshnath Bhosle, Prof. Rodney Fernandes, and Prof. Sundar Dhuri) who have marked their footprints at the international level. The invited talks with the theme 'Know and Grow' indent to give more insights about the theme of this year's National Science Day, 'Future of Science, Technology and Innovation (STI): Impacts on Education, Skill and work'.

2. The Magic of Science: The Magic of Science is a competition for students that intends to develop scientific temperament and create general awareness among society. The working model explains a concept, principle, process, or application of basic principles of science and technology.

3. Science in Surrounding: The Science in Surrounding is a photography competition that should have a scientific title and explanation of 50 words about the photograph.

4. Mask painting: Mask painting competition for the students was hosted with themes, Technology for people, Nobel people in technology and COVID-19 impact on the Indian economy

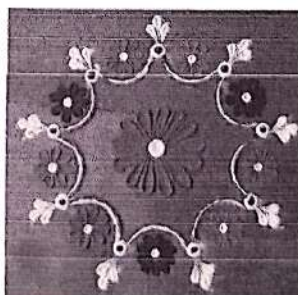
5. Selfie with Science: The Selfie with Science is a selfie competition that intends to share the thoughts and inventions of various scientists across the globe.

Below are some pictures of the event. More about the event can be seen on Facebook link([MithilFd-#Nationalscienceday2021...](https://www.facebook.com/MithilFd-#Nationalscienceday2021...)) and youtube video link(<https://youtu.be/eV7avH2T23U>).

Pictures



Banner



Rangoli



Decoration at college entrance





Participants with guest



Inauguration by watering the plant



Memento as Aloe vera plant



Felicitation of Prof. Sheshnath Bhosle



Talk by Prof. Sheshnath Bhosle



Talk by Prof. Rodney Fernandes



Inauguration of science exhibition



Science exhibition



Science exhibition



Science exhibition



Science exhibition



Photography exhibition



Judges



Prize distribution



Prize distribution



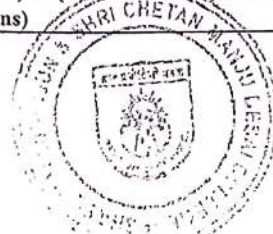
Group picture with guest and judges





4 List of Activities conducted on Sustainable Development Goals (SDGs) Academic Year 2020 – 21

Sr. No.	Department	Name of Activity/Program	Date of Activity
1	Economics	Career Opportunities In Economics (SDG 04- Quality Education)	01-06-2021
2	Information Technology	Webinar On "Abc Of Google Forms" (SDG 04- Quality Education)	02-06-2021
3	History	Contribution Of Women To Goa's Freedom Struggle: 1946-1961 (SDG -05 Gender Equality)	18-12-2020
4	History	Webinar On 'Careers Through History' (SDG-04: Quality Education, SDG-10:Reduced Inequalities)	22-12-2020
5	History	International Womens' Day Celebration (SDG-05_Gender Equality, SDG-10:Reduced Inequalities, SDG -16: Peace, Justice And Strong Institutions)	03-08-2021
6	History	Azadi Ka Amrut Mohtsav: India's Independence 75 Years- Empowering Educators (SDG -04: Quality Education, SDG -10: Reduced Inequalities, SDG-16: Peace, Justice And Strong Institutions)	03-12-2021
7	History	Webinar-Azadi Ka Amrut Mohtsav: India's Independence 75 Years- Roles And Responsibilities Of Students (SDG -04: Quality Education), (SDG -10:Reduced Inequalities, SDG -16: Peace, Justice And Strong Institutions)	04-12-2021
8	History	Celebration Of Goa Revolution Day (SDG_04: Quality Education, SDG_10:Reduced Inequalities, SDG_16: Peace, Justice And Strong Institutions)	18-06-2021
9	History	Webinar On Goa Revolution Day (SDG_04: Quality Education, SDG_10:Reduced Inequalities, SDG_16: Peace, Justice And Strong Institutions)	18-06-2022
10	Science	Webinar On "Ozone For Life (SDG_13: Climate Action)	28-10-2020
11	Library	Celebration Of Birth Anniversary Of Dr. S. R. Ranganathan (National Librarian's Day) (SDG 04- Quality Education) & (SDG 16- Peace, Justice And Strong Institutions)	08-12-2020
12	Library	Book Exhibition On Hindi Books On The Occassion Of Hindi Pakwada (SDG 04- Quality Education) & (SDG 16- Peace, Justice And Strong Institutions)	14-09-2020 to 30-09-2020
13	Library	Book Exhibition On Mahatma Gandhi The Occassion Of Gandhi Jayanti (SDG 04- Quality Education) & (SDG 16- Peace, Justice And Strong Institutions)	10-02-2020
14	Library	Book Exhibition On Dr A.P.J Abdul Kalam (SDG 04- Quality Education) & (SDG 16- Peace, Justice And Strong Institutions)	15-10-2020
15	Library	Saraswati Puja (SDG 16- Peace, Justice And Strong Institutions)	24-10-2020
16	Library	Webinar On Career In Library Science (SDG 04- Quality Education) & (SDG 16- Peace, Justice And Strong Institutions)	01-09-2021
17	Library	Webinar On Awareness Program On N-List (SDG 04- Quality Education) & (SDG 16- Peace, Justice And Strong Institutions)	02-09-2021



Mani
23/11

26



Dnyan Prabodhini Mandal's
SHREE MALLIKARJUN
&
Shri. Chetan Manju Desai College
Delem, Canacona-Goa 403702

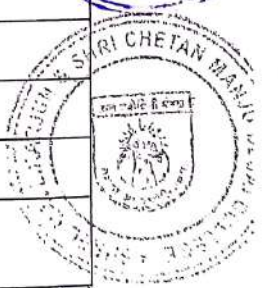
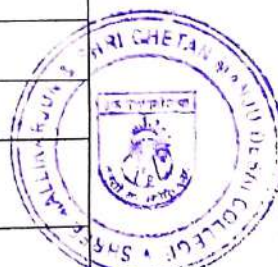


India Today Ranking
115 (Arts) 150 (Commerce)

1993
E-mail: shreemallikarjuncollege@gmail.com

Website: shreemallikarjuncollege.ac.in

18	Library	Book Exhibition On Azadi Ka Amrut Mahotsav (SDG 04- Quality Education) & (SDG 16- Peace, Justice And Strong Institutions)	03-12-2021
19	Library	Book Exhibition On World Book Day (SDG 04- Quality Education) & (SDG 16- Peace, Justice And Strong Institutions)	23-04-2021
20	Library	Book Exhibition On Goa Revolution Daya (SDG 04- Quality Education) , (SDG 16- Peace, Justice And Strong Institutions) & (SDG 17- Partnerships For The Goals)	18-06-2021
21	NSS	Poster Competition On Youth And Hiv/Aids (SDG 3 - Good Health And Wellbeing)	08-05-2020
22	NSS	Poster Painting And Digital Poster Making On The Topic Of Women Empowerment And Gender Equality (SDG 5 - Gender Equality)	03-08-2021
23	NSS	Celebration Of International Women Day (SDG 5 - Gender Equality)	03-08-2021
24	NSS	Making Digital And Hand Drawn Posters On Drug Abuse & Illicit Trafficking (SDG 3 - Good Health & Wellbeing)	26-06-2021
25	NSS	Posters On Appropriate Behaviour Towards Covid-19 (SDG 3 - Good Health & Wellbeing)	15-10-2020
26	NSS	Awareness Drive About Tika Utsav - Covid-19 Vaccination (SDG 3 - Good Health & Wellbeing)	11-04-2021 to 14-04-2021
27	NSS	Poster Competition On 'Covid-19 Pandemic - Responsibilities & Opportunities' (SDG 3 - Good Health & Wellbeing)	06-12-2021
28	NSS	Making And Distribution Of Face Masks (SDG 3 - Good Health & Wellbeing)	February - June 2021
29	NSS	Fit India Freedom Run (SDG 3 - Good Health & Wellbeing)	15-08-2020 to 02-10-2020
30	NSS	Tree Plantation (SDG 13 - Climate Action)	March - June 2021
31	Marathi	Guest Lecture On 'B. B. Borkar Yanchi Kavita' By Prof. Vinayak Bapat (SDG 04- Quality Education)	30-11-2020
32	Marathi	Guest Lecture On 'Marathi Bhasha Aani Vyavasayachya Sandhi' By Prof. Chinmay Ghaisas (SDG 04- Quality Education)	30-11-2020
33	Marathi	National Level Online Poetry Competition (SDG 8 - Decent Work And Economic Growth)	30-11-2020
34	Marathi	Guest Lecture On 'Bhasha Aani Jeevan' By Prof. Kuldeep Kamat (SDG 04- Quality Education)	04-03-2021
35	Sociology	Slogan Writing Competition On Role Of Legal Services In Promoting Welfare Of People (SDG 13 - Climate Action)	28-10-2020
36	Sociology	National Webinar On Career Counselling (SDG 8 - Decent Work And Economic Growth)	28-01-2021
37	Sociology	Webinar On Impact Of Pandemic On Mental Health And Social Life (SDG 3 - Good Health And Wellbeing)	26-06-2021
38	Hindi	International Webinar On Hindi Ka Vaishvik Paridrishya (SDG 04- Quality Education)	19-06-2020
39	Hindi	Premjayanti Samaroh (Workshop) (SDG 04- Quality Education)	31-07-2020
40	Hindi	Devnagri Typing (SDG 04- Quality Education)	21-10-2020 to 21-11-2020



Handwritten signature and date:
22/11

22



Dnyan Prabodhini Mandal's
SHREE MALLIKARJUN
 &
 Shri. Chetan Manju Desai College
 Delem, Canacona-Goa 403702



India Today Ranking
 115 (Arts) 150 (Commerce)

1993
 E-mail: shreemallikarjuncollege@gmail.com

Website: shreemallikarjuncollege.ac.in

41	Hindi	30 Days Workshop On Prayojanmulak Hindi (SDG 04- Quality Education)	08-03-2021 to 7-04-2021
42	Hindi	Seven Days State Level Multilingual Compering Workshop (SDG 04- Quality Education)	01-11-2020 to 07-11-2020
43	Hindi	Workshop On Rojgaar Ki Vibhin Uplabdhya (SDG 04- Quality Education)	29-12-2020
44	Commerce	Career As A Company Secretary (SDG 04- Quality Education), (SDG 8 - Decent Work And Economic Growth), (SDG 16- Peace, Justice And Strong Institutions) & (SDG 17- Partnerships For The Goals)	23-11-2020
45	Commerce	Investor Awareness Program (Financial Literacy) (SDG 01- No Poverty)&(SDG 8 - Decent Work And Economic Growth)	07-12-2020
46	Commerce	Workshop On Industry Academia (SDG 01- No Poverty), (SDG 8 - Decent Work And Economic Growth) & (SDG 9- Industry, Innovation And Infrastructure)	30-07-2021
47	Commerce	How To Manage Bcom & Ca (SDG 04- Quality Education), (SDG 8 - Decent Work And Economic Growth), (SDG 12- Responsible, Production And Consumption) & (SDG 17- Partnerships For The Goals)	05-10-2020
48	Commerce	Webinar On Basics Of Gst & Its Pratical Applicability For Entrepreneurship (SDG 04- Quality Education) &(SDG 8 - Decent Work And Economic Growth)	22-04-2021

Prof. Dr. Manoj S. Kamat
 Principal

23/11/2021



VII) Sustainable Initiatives and Green Practices by college

1. Swachh Bharat Programmes

The NSS Unit celebrated Mahatma Gandhi Jayanti by conducting Plogg Run and swachhata programme on 2nd Oct 2020 between 9.00 am and 11.00 am. Due to pandemic situation, COVID-19 norms and restrictions imposed by the government on movement, gathering at one place was avoided and volunteers were asked to participate in Plogg Run initiative by running for 2 kms while gathering garbage on the way at their native places.

Participation: Volunteers – 10 (Males- 08, Females- 02)

Programme Officer/s - 02



Besides plogg run programme, cleaning drive at 2 different localities was also conducted on 2nd October 2020 to encourage volunteers to inculcate swachhata value in their lives.



Participation: Volunteers – 08 (Males- 05, Females- 03)



Programme Officer/s – 02

Volunteers were also encouraged to learn about Mahatma Gandhiji by drawing posters and displaying the same for public to sensitise people about the values that were preached by this great national leader.

Participation: Volunteers – 03 (Males- 02, Females- 01)

Programme Officer/s – 01

2. Go Green Initiative

As the world witness global warming with an increase in greenhouse gases especially carbon-di-oxide and consequent climate change, global community has realised the significance of green cover. Hence plantation of trees and reduction of carbon footprints has assumed focal point in the global discussions. While adhering to the commitment of reduction in the carbon footprints, the NSS Unit has pledged to contribute to increase green cover in the vicinity through the network of active volunteers. Volunteers willingly participated in planting saplings in their native areas and are obliged to take care of the same.

Participation: Volunteers – 44 (Males- 13, Females- 31)

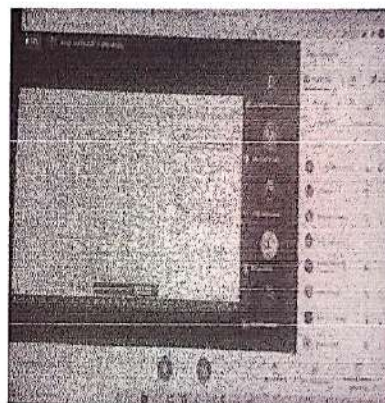
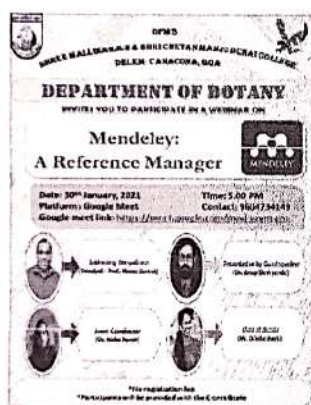
Programme Officer/s – 03



VIII) Awareness & Sensitization Activities

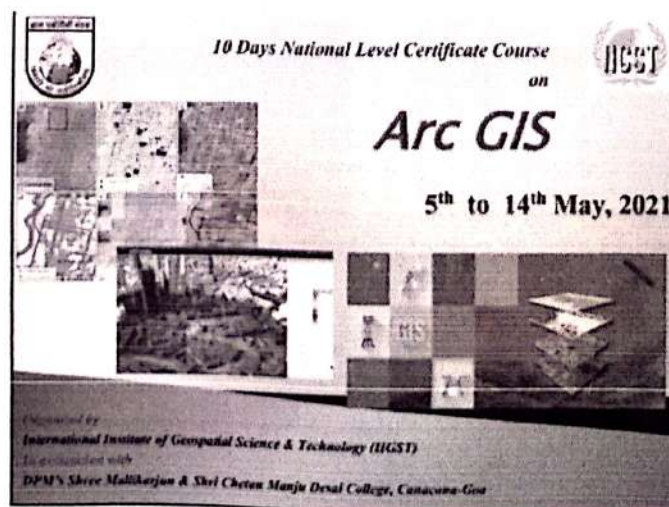
1. Webinar on demonstration on Mendeley free referencing app

The online webinar session on "Mendeley: A reference Manager" organised by the Department of Botany aimed at enlightening the wide array of audiences. It was a purely a research oriented topic and would benefit greatly to those involved in creating and compiling the vast literature database. We had total of 35 participants for the webinar which included Guest speaker (01), teachers (08) and; research and undergraduate students (26) from host as well as other institutes. Webinar was focussed on demonstrating the various tools and application of Mendeley in organizing the comprehensive literature database. Session also addressed the automatic citation of references in word files. Guest speaker also highlighted about the operation of this app on android phones. Resource person adopted the integrated approach of power point presentation and live demonstration to expound this app.



2. Certificate Course on Arc GIS

10 Days National Level Certificate Course on Arc GIS from 5th to 14th may 2021 Organized by International Institute of Geospatial Science & Technology (IIGST) In association with DPM's Shree Mallikarjun & Shri Chetan Manju Desai College, Canacona-Goa.

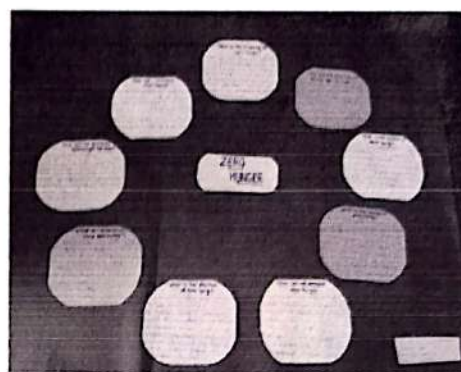


3. Poster Making Activity on sustainable Development Goals & Eco-tourism.

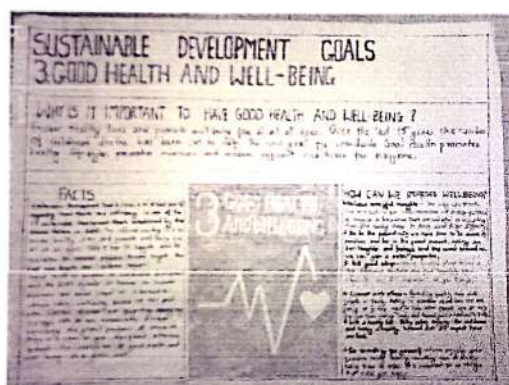
As a part of Internal Semester Assessment the student of S.Y.BSc Skill Enchantment Course "Wildlife and Ecotourism" prepared the poster of the theme "Sustainable Development Goals and their role in Ecotourism"



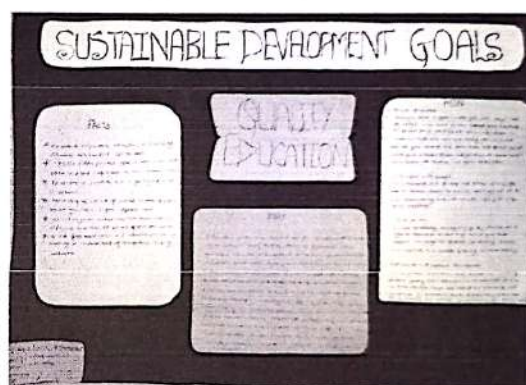
SDG-1: No Poverty
(Vishant Gaonkar)



SDG -2: Zero Hunger
(Sujay Gaonkar)



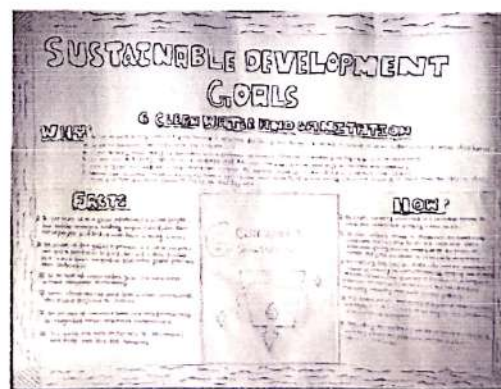
SDG-3: Good Health & well being
(Prajjata Nevkar)



SDG-4: Equal Education
(Navil Komarpant)



SDG-5 Gender Equality
(Dicksha Gaonkar)

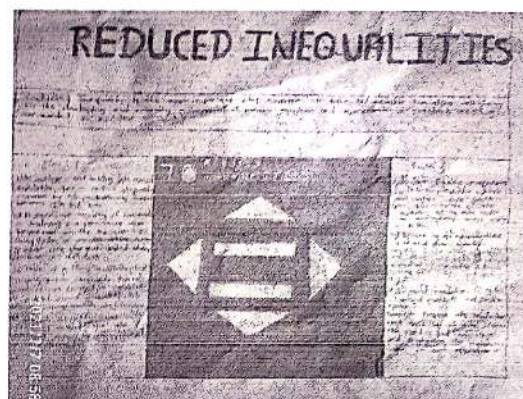


SDG-6: Clean water & Sanitization
(Jay Naik)

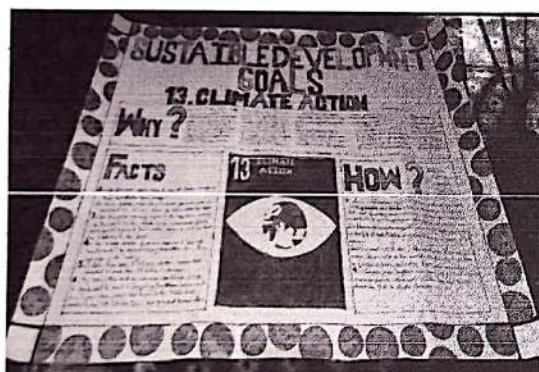




SDG-7: Affordable & Clean Energy
Inequality
(Krishna Velip)



SDG-10 : Reduce
(Priti Tavodkar)



SDG-13: Climate Action
(Nishita Naik)



SDG-14: Life Below Water
(Rupesh Velip)

4. World Environment Day celebration

On account of World Environment Day, on 05th June 2021, a monologue competition was organised on the theme of 'Me & My Environment' on online platform by using Google Classroom. The programme was devised to provide platform to volunteers to present their experiences about environment and to appreciate their sentiments towards immediate surroundings.

Participation: Volunteers – 05 (Males- Nil, Females- 05)

Programme Officer/s – 01





5. COVID-19 Awareness Jan Andolan campaign

In the pursuit of controlling the spread of COVID-19 in the country, Jan Andolan campaign was launched by the Central Government through myGOV portal. The campaign was designed to encourage the people to take pledge and commit oneself to the responsibility of taking all necessary precautions that will prevent the spread of COVID-19. To express their commitments towards community service, NSS volunteers joined Jan Andolan campaign and took pledge by logging on myGOV portal since 11th October 2020

Participation: Volunteers – 42 (Males- 17, Females- 25)

Programme Officer/s - 02



6. Poster Making Appropriate Behaviour towards COVID-19

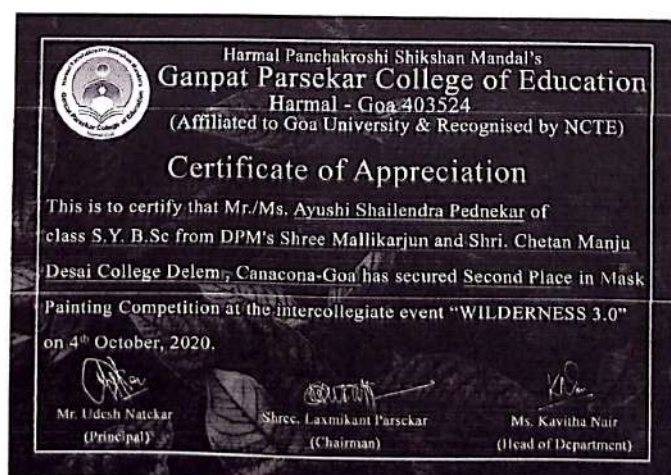
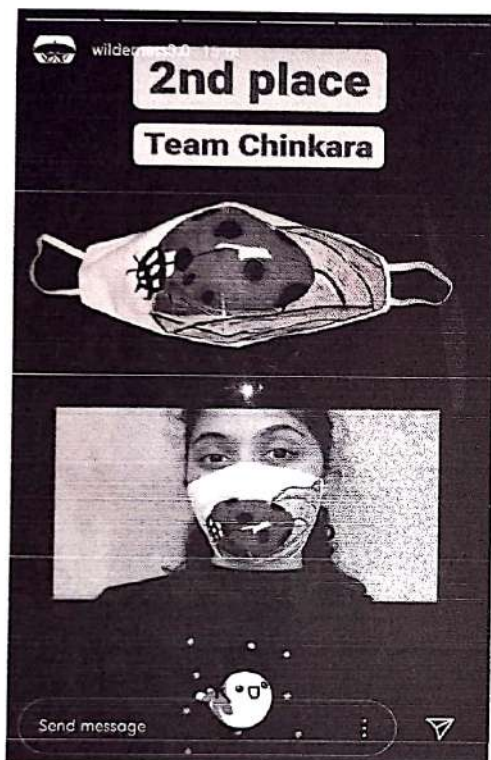
In order to make awareness on corona virus and COVID-19 pandemic for effective control on its spread, posters were made on **Appropriate Behaviour towards**



IX) Extension & Community Engagement

1. Participation in WILDERNESS 3.0

Three students of B.Sc Zoology; Dilesh Gaonkar (Photography), Ayushi Pednekar (Mask Painting), Tanaya Gosavi (Quiz, Fashion Sketch) participated in state level intercollegiate event WILDERNESS 3.0 Organized by Department of Zoology, Parsekar College of Education, Harmal on 04/10/2020. Ayushi Pednekar bagged Second place in Mask Painting.



2. Webinar on "OZONE FOR LIFE"

DPM's Shree Mallikarjun & Shri Chetan Manju Desai College Delem, Canacona Goa, Department of Science and IQAC Cell, in association with The Goa State council for Science & Technology, organized a webinar on the Topic "Ozone for Life" on 29 October, 2020 at 03:00 PM. The Guest Speaker for the webinar was Dr. Rohan K. Kunkalekar, Assistant Professor, School of Chemical Science' Goa University. The Webinar was conducted online on Google meet platform. It was attended by 92 audience from different states of India.

Dr. Rohan Kunkalekar brief that the Ozone layer is a fragile shield of gas, that protects the Earth from the harmful portion of the rays of the sun, thus helping preserve life on the planet. This layer is constantly depleting because of harmful chemicals released into atmosphere such as Chlorofluorocarbons (CFCs) mostly releasing from air-conditioning, refrigeration etc.

The lecture was an initiative to create awareness and protection of ozone layer among the general peoples, students and researchers from different organizations.


DPM's Shree Mallikarjun
&
Shri Chetan Manju Desai College
Delem, Canacona Goa
In Association with
Department of Science, Technology & Environment

On occasion of 35 years of Ozone layer Protection
Department of Science and IQAC Cell is Organizing

A Webinar on

**OZONE
FOR LIFE**
On
28th October, 2020 at 3:00 PM

Guest Lecturer: Dr. Rohan Keshav Kunkalekar
Assistant Professor
Department of Chemistry, Goa University



3. Covid 19 : Tika Utsav

NSS Volunteers participated in the nationwide awareness drive about **Tika Utsav** regarding COVID-19 vaccination from 11th to 14th April 2021 through social media. About 82 people were made aware about vaccination by visiting neighbourhood and following COVID-19 pandemic norms by volunteers. Social media platforms like whatsapp were also used to contact people.

Participation: Volunteers – 13 (Males- 05, Females- 08)

Programme Officer/s - 03



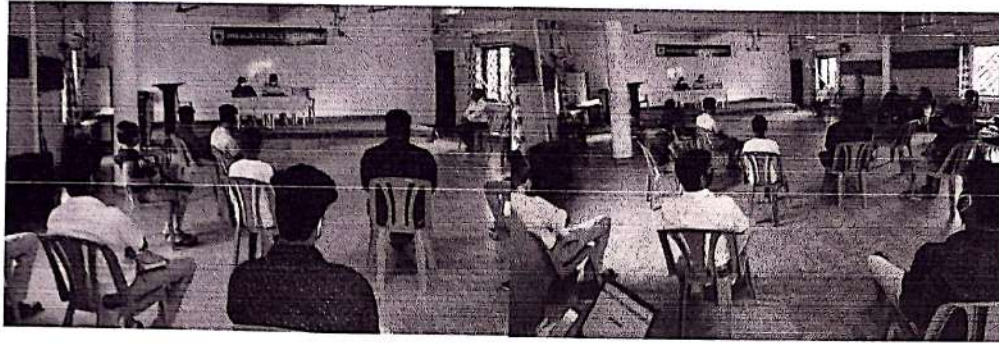
4. A Disaster Management Training

A Disaster Management Training with respect to COVID-19 pandemic was organised by District Collectorate Office, Madgaon on 09th May 2021 between 3.00 pm and 6.00 pm in the college auditorium. It was designed to train NSS and other volunteers to extend their assistance to contact and moral support to COVID patients.

Participation: Volunteers – 08 (Males- 05, Females- 03)

Programme Officer/s – 02 + 06 (Other staff)





5. Covid 19 : Mask Distribution

To respond the needs of the society forced upon by the COVID-19 pandemic, NSS volunteers sought to make awareness through making and distributing of face masks in their immediate neighbourhood. By investing their own resources, volunteers stitched face masks and made awareness among people about appropriate use of masks in public places while distributing the same. About 705 face masks were made and distributed by the NSS volunteers.

Participation: Volunteers – 37 (Males- 05, Females- 32)

Programme Officer/s - 03



BIODIVERSITY MANAGEMENT
COMMITTEE
VILLAGE PANCHAYAT SHRISTHAL
VADAMOLE CANACONA GOA



Ref. No. VPS/CAN/F-Bio-Dive/2020-21/15

Date: 14/09/2020

Dr. Manoj Kamat
The Principal
Shree Mallikarjun and Shri Chetan Manju Desai College,
Delem, Canacona, Goa.
403702

Sub: Letter of Appreciation for Providing Technical Support in Documentation of PBR

Respected Sir,

We are glad to inform you that Shristhal Biodiversity Management Committee's (BMC's), Peoples Biodiversity Registration (PBR) document has successfully validated and approved by Thematic Expert Committee (TEC) appointed by Goa State Biodiversity Board (GSBB). The report presented was well appreciated by all thematic members as one of the unique PBR documentation. This could have been not possible without all the support & resources provided by your college.

We are extremely grateful for the timely Guidance, Support and Resources you have given for documentation of the Peoples Biodiversity Registration. Looking forward for more such collaborative activities with the college in the coming future.

Thanking you in appreciation
Yours Sincerely

Vinay M. Tubaki
Chairperson
Biodiversity Management committee
Village Panchayat Shristhal

Shri Sandeep S. Desai
SECRETARY
Biodiversity Management committee
Village Panchayat Shristhal

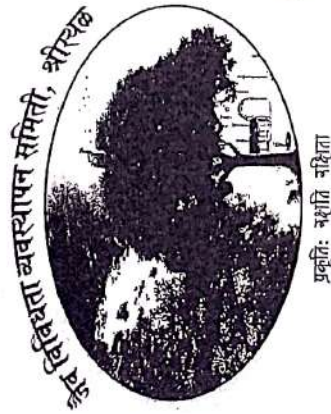
2585
16/9/20
C-86/C-130



PS
100% Science
Dated 14/9



BIODIVERSITY MANAGEMENT COMMITTEE



Shristhal - Canacona

Certificate of Appreciation

This Certificate is awarded to

Mr. Deepak Bowalkar

for his meritorious service, contribution towards documentation
process of PBR & Participation in All Social Activities
conducted by

BIODIVERSITY MANAGEMENT COMMITTEE - SHRISTHAL



Place : Shristhal, Canacona

Date : 27th October 2020

(Vinay Tubki)

President

(Sandeep Desai)

Secretary

X) Suggestions Green Audit Committee to Improve Green Cover in Campus

1. Number of Plantation activity need to promoted involving students in the activity as primary focus.
2. All the perennial Plants need to be identified with their updated scientific & local name and provided with a proper label on each tree for awareness.
3. A dedicated site for Eco-friendly area can be established within campus such as Herbal Garden, Floral Garden, Fruit Garden, Butterfly Garden Etc.
4. Each new plantation need to immediately Geo-tagged after plantation with details of the plant and name of the planter.
5. Number of Automobile use in the campus should be minimized to reduce carbon emission.
6. The Green Cover and Eco-friendly awareness need to be also incorporated as part of extension activity and community service.

