Name of the College: M.E.S. College of Arts and Commerce, Zuarinagar, Goa

1.   **Title of the Practice:** Go- Green Initiative

2.   **Objectives of the Practice**

What are the objectives / intended outcomes of this "best practice" and what are the underlying principles or concepts of this practice (in about 100 words)?

The 'Go-Green' initiative at M.E.S. College of Arts and Commerce, Zuarinagar, Goa, aims at arriving at a culture of environmental conservation in and around the campus. The objective of the 'Go-Green' initiative is to sensitize students and the teaching community to conserve the natural resources for future generations. Emphasis is laid on several environmental aspects ranging from recycling to energy conservation.

By 'Going Green' the college aims to undertake projects/ practices that can lead to more environmentally friendly and ecologically responsible decisions and lifestyles, which can help protect the environment and sustain its natural resources for current and future generations.

3.   **The Context**

What were the contextual features or challenging issues that needed to be addressed in designing and implementing this practice (in about 150 words)?

The challenging issues that needed to be addressed in designing the 'Go Green' initiative were as follows:

1. Motivating students to become a part of the cause

2. Efficient usage of rain water harvested

3. Converting the waste into a resource

4. Motivating people from surrounding areas to use the vermin compost generated by us

5. Dedication of manpower to ensure cleanliness on the campus

4.   **The Practice**

Describe the practice and its uniqueness in the context of India higher education. What were the constraints / limitations, if any, faced (in about 400 words)?

The 'Go Green' initiative at M.E. S. College Campus is unique in the sense that environmental friendly practices and education combine to promote sustainable and eco-friendly practices in the campus. It offers the institution an opportunity to take the lead in redefining its environmental culture and developing new paradigms by creating sustainable solutions to environmental, social

and economic needs of mankind. Going Green is not only conducive to productivity but also creates a healthy learning environment.

Some of the initiatives taken in this direction are as follows:

1. Vermicomposting: The College has a vermicomposting unit which has been in operation since March 2008. Dry leaves and kitchen waste from the canteen are collected and are placed in the vermin composting unit which has two chambers.

2. Roof top rainwater harvesting project: The Roof top rainwater harvesting project has been in operation since July 2008. The main objective of rooftop rain water harvesting is to make water available for future use. The pipeline has been laid from the roof of one of the buildings which is connected to the sump, which is further connected to the bore well. The sump capacity is 15,625 ltrs. The financial assistance has been provided by the Department of Science and Technology, Government of Goa.

3. Creating Environmental awareness through 'Kasturi' Lecture Series: With a view to create an awareness among students and staff of the college as well as people living in the neighborhood about environmental and social issues, The Foundation For Environment Research and Conservation (FERC) in association with Murgaon Education Society and in collaboration with the Nature Club of MES College, has started a monthly lecture series , namely, "Kasturi". This initiative has been dedicated to the memory of Dr. Kasturi Desai, an eminent botanist and environmentalist from PES'sShri Ravi S. Naik College of Arts and Science, Farmagudi Goa.The details of lectures delivered are as follows:

(i)Dr. Narayan Desai, educationist and youth mentor, spoke on the topic 'Our People Our World-The Role of Youth in the Society.'

(ii) Ms. Puja Mitra, Founder, Terra-Conscious, delivered a talk on 'Enabling Collaborative Action for Responsible Travel in Goa.'

(iii) Shri. Sanjit Rodrigues, Managing Director, Goa Waste Management Corporation, was interviewed on the topic 'Working towards a Zero Waste Goa.'.

(iv) Shri. Arch. Rajiv D'Silva delivered a talk on ' Sustainable Architecture in six (not so easy) steps.'

(v) Mr. Isaac Kehimkar, Director, INaturewatch Foundation, spoke on 'Exploring Wild India: Journey of the Butterfly Man.'

(vi) A documentary on 'Agrarian crisis, climate change and Farmers Suicides' was screened.

(vii) Shri. Roland Martins, Coordinator, GOACAN spoke on 'Our Civic and Consumer Rights-Do we really care?'

4. Tree plantation drive: The college organizes 'Vanamohotsav' every year in collaboration with Lions Club of Vasco da Gama, Lions Club of Cortalim, and/or NGOs. Plants like Imli, Jamun, mango and such seasonal trees have been planted over the years.

5. Dry Waste management: The College has tied up with Goa Waste Management Corporation for segregation of dry waste. There are dustbins situated across the campus. The dry waste is then segregated into three categories, namely, paper and cardboard, plastic and glass and metal. This is handed over to the Goa Waste Management Corporation for the purpose of recycling.

6. Recycling of paper: The Resource Management Cell has launched the project 'Re Paper' bin wherein waste paper generated at various points on the campus is collected by the daily wage workers, stored and then sent for recycling.

7. Energy conservation and efforts towards reducing carbon footprint: The College has installed LED bulbs and tubelights in the classrooms and corridors.
Carpooling and public transportation drastically reduce carbon dioxide emissions by spreading them out over many riders. At M.E.S. college, teachers travelling long distances have a car-pool system.

5.   Evidence of Success

Provide evidence of success such as performance against targets and benchmarks, review results. What do these results indicate? Describe in about 200 words.
1. The vermicomposting unit generates manure every 3 -4 months which is sold at a reasonable price of ₹ 15 per kg to the college staff and people from the neighbourhood. Thus, we have been able to promote the use of organic manure at an affordable rate in the neighbourhood. We generate about 1500 kg of vermicompost per year.

2. The roof top rainwater harvesting project has been beneficial as it has augmented our water supply since ground water is being recharged. The approximate water harvested is 1,072,000 ltrs per year.

3. Creating environmental awareness among the community by inviting the public to attend the 'Kasturi' Lecture series will go a long way in achieving environmental sustainability.

4. Increasing number of trees are planted every year.

5. Recycling of paper has been a success. The paper collected is being sent to Ms. Roshan Bandekar, an entrepreneur who owns a unit making bags, envelopes, etc. from handmade paper. The paper collected from M.E.S. College is being used to make gift bags.

6. Dry waste segregation is beneficial for recycling.

6. Problems Encountered and Resources Required

Please identify the problems encountered and resources required to implement the practice (in about 150 words).

At times, there is not enough demand for the vermicompost generated by us. Hence, the college has distributed the vermicompost free to the people from the neighbourhood. We need to convince people about the advantages of vermicompost vis-à-vis chemical fertilizers.

As far as rainwater harvesting is concerned, the percolation of water into the soil is difficult as the land is very rocky. Hence, it is a difficult task to recharge the ground water

As far as tree plantation is concerned, we have to use JCB machines to dig the pits. We cannot dig the pits manually due to the extremely rocky terrain. This involves an additional cost.

We have been undertaking these practices with the existing manpower. Inadequate human resources are a major problem.

7. Notes (Optional)

Please add any other information that may be relevant for adopting/ implementing the Best Practice in other institutions (in about 150 words).

Any other information regarding Institutional Values and Best Practices which the College would like to include.

Name of the College: M.E.S. College of Arts and Commerce, Zuarinagar, Goa

1.   Title of the Practice: Peer learning

2.   Objectives of the Practice

What are the objectives / intended outcomes of this "best practice" and what are the underlying principles or concepts of this practice (in about 100 words)?
The main objective of peer learning is to make the students understand the concepts thoroughly. In this mode of learning, students interact with their peers and learn from each other without any supervising authority. When a bright student teaches concepts to his classmates, it happens in a free and conducive leaning environment. In such an environment, learning takes place at the student's level and discussions are held without any fear of judgement. This creates an environment of open communication which is very important for learning. Therefore our institution has given top priority to peer learning as one of the methods of teaching and learning.

 The intended objectives of peer learning are

1. To provide the students free and conducive learning environment
2. To make the students understand subject/concepts
3. To improve the academic performance of students

3.   The Context

What were the contextual features or challenging issues that needed to be addressed in designing and implementing this practice (in about 150 words)?
Peer learning can provide a great support system for students, and the interchanging roles of teacher and learner create a dynamic learning experience.

The issues that needed to be addressed were

1. Identifying the students/advanced learners having good subject knowledge to teach the peers.
2. Motivating the slow learners to come forward voluntarily so as to be guided by the advanced learners.
3. Identifying the courses for which peer learning needs to be introduced.
4. Creating a monitoring mechanism for peer learning.
5. Establishing a mechanism to assess the end result of peer learning.

4.   The Practice

Describe the practice and its uniqueness in the context of India higher education. What were the constraints / limitations, if any, faced (in about 400 words)?

- Peer learning has been considered as one of the methods of interactive learning. This is a process wherein an academically bright student teaches a group of academically weaker students. Students learn a great deal by sharing their ideas with others and participating in activities as they get an opportunity to learn from their peers. Further they develop skills in learning activities, working collaboratively with others, giving and receiving feedback and evaluating their own learning.

- Peer learning involves sharing of knowledge, ideas and experience between the participants. It can be described as a way of moving beyond independent to interdependent or mutual learning.

- The teaching methodology of peer learning has been practiced in our institution as one of the effective ways to help undergraduate students understand concepts more clearly and enhance their knowledge about the subject.

- Peer learning has been going on informally at M.E.S. College for several years. As per the recommendations and decisions taken by the IQAC, peer learning was formalized in the year 2017-18.

- To begin with, students were briefed about the purpose of this teaching methodology, wherein the advanced learners will teach slow learners.

- Teachers conducted a basic test (objective type/concepts/brief answers, etc) in their respective course/paper. This has been considered as one of the ways to identify the advanced learners and slow learners.

- In certain courses, advanced learners were identified by the teachers, while in others, advanced learners voluntarily agreed to help their peers.

- Generally, an advanced learner was assigned a group of five or less than five slow learners. The number of advanced learners varies between 1-4 or even more per class.

- Peer learning was conducted in certain courses of the B.A/ B.Com programmes. The same has been documented. Each advanced learner records the details of sessions taken (namely, date, time and topics covered) with their peers. These forms are submitted to the teacher of the respective subjects. In addition to this, every teacher maintains a record sheet of the details of the advanced learners and slow learners. These documents are then submitted to the IQAC.

- The advanced learners were given appreciation certificates at the end of the academic year.

5. Evidence of Success

Provide evidence of success such as performance against targets and benchmarks, review results. What do these results indicate? Describe in about 200 words.

- Peer learning has been found to be useful as it helps the students to develop their independence as learners and to share their knowledge with their peers.
- There has definitely been a positive outcome. Students of Semester I, II, III and IV have benefited in terms of better results. Some students who were tutored by advanced learners in Semester V and VI have pursued higher education. A total of 162 advanced learners, were given appreciation certificates at the end of the academic year.

6. Problems Encountered and Resources Required

Please identify the problems encountered and resources required to implement the practice (in about 150 words).

The problems encountered in peer learning are:

1. There are time constraints in scheduling the peer learning class as all students in the group may not be available at the same time.
2. Some of the slow learners were hesitant of being taught by their own peer.
3. Some of the advanced learners have the subject knowledge but lack the ability to transfer this knowledge to their peers.
4. The advanced learners faced the problem of teaching their peers since the levels of understanding and grasping concepts differed from peer to peer.

7. Notes (Optional)

Please add any other information that may be relevant for adopting/ implementing the Best Practice in other institutions (in about 150 words).