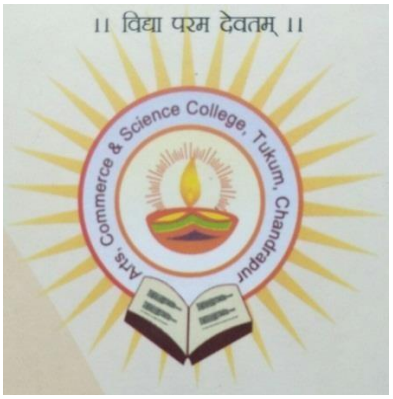
Dnyandeep Shikshan Prasarak Mandal, Chandrapur

ARTS, COMMERCE AND SCIENCE COLLEGE

TUKUM, CHANDRAPUR



BEST PRACTICES

ACADEMIC YEAR

2020-2021

Co-ordinator

Dr. M.G. Thakre

Principal

Dr. J.M. Kakde

PREFACE

Best practices added values to human life and support main goal of an institution. It can change the life of whole institution as well as individual stakeholders. These practices are able to instill the scientific approach to issues or problems of the society. The quality becomes an imperative in best practice; it should impart quality in its outcome and must be beneficial for stakeholders. The college has adopted environment friendly policies on plantation and waste management.

Nature provides free services to all. In recent years, environmental problems have increased by human activities and development of science and technology and planet earth is facing tremendous pressure from increases in population. Humans have contributed global warming which has led to catastrophic climate change in many parts of the world. People have to work for benefit of the planet and reduce emission in appropriate way. Colleges have a responsibility to install green lifestyle among the young and high profile students by undertaking green moves which can help to lower the global temperature.

In the present write up "best practices" report, outline existing scenario of campus. A brief content of this report would help everyone to think about preserving resources, show willingness to learn their importance, adopt steps to minimize resource use and set an example for others to follow the path of best practices to achieve the goal of sustainable development.

We express our deep sense of gratitude to the Chairman of the of Dnyandeep Shikshan Prasarak Mandal, Dr. N. H. Khatri and management body of DSPM and Dr. J.M. Kakde, Principal of the college for their support in preparation of the report.

We would also like to acknowledge Dr. N.R. Dahegaonkar and Dr. P. M. Telkhade, NAAC coordinators for their encouragement in preparing the report. We are also thankful to Dr. Sushil B. Kapoor sir, for his whole hearted support.

Best practice 1 - Utilization of AC condensed Water

Title of the Practice: Utilization of AC condensed water in a laboratory

Objectives of the Practice: Energy conservation is important for reducing dependence on conventional energy resources; it also helps save energy costs and energy bills. Overuse of water leads to scarcity of water and lowers the groundwater table. AC condensed water if properly collected can be utilized for many purposes. Our college has taken initiatives for its use in the laboratory for practical purposes.

Context: The distilled water generation in the laboratory as well as procured from the market yields a high cost. The energy required to heat the water to boiling in the water distillation process is expensive, in this context the utilization of AC condensed water is effective to best use in the laboratory for general practices and washing laboratory glassware.

The practice: Collection of AC condensed water with the involvement of students is beneficial because a) Additional cost of distilled water generation in the laboratory is reduced to its maximum b) Cost of energy is reduced c) The time required to generate water is also reduced d) Raw Water required to produce distilled water is also reduced e) Students could learn the importance of water and energy conservation f) The distilled water demand of the laboratory is fulfilled.
The collection and utilization of AC condensed water involve the following activities. a) Meeting is organized at the start of the session b) All the formalities like the use of fresh PVC container for a collection of AC condensed water is completed c) AC condensed water from principles cabin is routinely collected d) Water quality parameters are checked before use for laboratory practices e) The routine laboratory practices are performed using AC condensed water f) Surplus water is also used for washing glassware g) The quantity of condensed water obtained from the AC is adequate to fulfill the demand h) The cost of purchasing distilled water from the market is almost negligible

Evidence of Success: Students are taking interest in this practice. They are regularly collecting and analyzing the water for its purity prior to its use in the laboratory

Problem encountered: The collection efficiency of AC condensed water is reduced during non operation of AC Resources required: Except for the PVC containers and active participation of staff and students, no other resources are required

Best Practice 2 - Estimation of biomass of trees

Title of the Practice: Estimation of biomass of trees

Objectives of the Practice: Estimation of biomass of trees is a tool for getting information of growth contained within a single tree, a species, or a population. Based on the weight of the trees, the potential of trees to capture carbon dioxide can be assessed effectively. Estimation of biomass of trees is a routine practice of the college

The Context: Tree plantation is important because as it cleans the air which we breathe. Trees add beauty to their surroundings by greening and cooling the campus area. Measurement of the tree trunk is the best practice to calculate weight, which further can be useful to calculate the carbon dioxide capturing capacity of the tree.

The practice: Estimation of biomass of trees is a unique practice for carbon sequestration a) Meeting of staff is the first step to take stock of trees on the campus b) Identification of trees with a girth more than 30 cm c) Counting all the trees at breast height d) Summarizing all the data for final conclusion

Evidence of Success: Such practice is significant for research in forestry for staff and students. People outside the campus can also be benefited from the aesthetics of the campus and fresh surroundings

Problem encountered: The unevenness of the tree trunk creates problems during the measurement.

Resources required: Basic accessories such as measuring tape and calculators are required for the collection and analysis of the data.