BEST PRACTICES (2020 – 21):

(1) Title of the Practice: Science awareness program

Objectives of the Practice: To promote scientific temper and awareness of science amongst school students.

The Context: Coordination with school

The Practice: The students of SYBSc were distributed in groups of 5 students. Each group made a presentation on the role of Microbiology in day-to-day life and careers in microbiology/ allied fields and interacted with school students through Google meet. School students from standard 8th, 9th and 10th from the following schools were invited.

Evidence of Success: Number of beneficiaries increased and the activity was extended to school in UP.

Problems Encountered and Resources Required: The follow up activity couldn't be done due to unavailability of lab.

(2) Title of the Practice: Reduction of carbon footprint by the use of E-resources by faculty members and students.

Objectives of the Practice: To make the optimum use of e-resources for smooth and effective teaching in the pandemic as it was online teaching.

The Context: Issues were faced by students living in remote areas due to weak network.

The Practice: E-resources used for assessment, study material sharing, CA2 video presentation, interactive teaching, online research presentations, conducting proctored exam.

Evidence of Success: Students monthly Attendance was automatically calculated by marking their Absence/Presence on a daily basis. This seamless procedure helped us to track low attendees easily. With this, students' attendance was thoroughly maintained.

Problems Encountered and Resources Required : Initial acclimatisation to the online tools by both faculty and students was required since this was not a common mode of teaching-learning. College provided necessary training for this and helped stream-line the process.

Practice 1:

Title of the Practice: Community Outreach

Objectives of the Practice: To be able to work towards the betterment of society in general, and of the immediate locality in particular.

The Context: The program is meant to inculcate the values of empathy, civic sense and good citizenship.

The Practice: The students first makes a study of the immediate locality through surveys, mostly oral, to identify the problems in the locality and understand the causes responsible for the condition. They then form groups to brainstorm and find a possible solution to it based on the principles learnt during their course of study and the skills acquired. With the help of the local people, the plan generated is applied and the students stay in constant teach with the local community to assess the effectiveness of the plan.

Evidence of Success:

Some of our prominent evidences of success are listed below:

1. **PROJECT NAZIF-** This project had a two- fold objective: (1) Promote cleanliness and hygiene ; (2) Inculcate the thought process of recycling from waste. Women were taught the process of soap-making by recycling the used bar soaps taken from nearby hotels and converting them into liquid hand wash. These were then sold at a very minimal price to public toilets as well as donated as free hand wash in slums which lack sanitation. This project which started in July 2019 has till now impacted more than 10000+ lives with free distribution and selling of 2000+ bottles and bars of soap.

2. **PROJECT VAARI -** Considering the ongoing water crisis especially in major parts of South Mumbai where the college is situated, "VAARI – Every Drop Counts",

launched in August 2019, involved a group of approximately 200 volunteers. The idea was to distribute tap caps amongst citizens to promote water conservation. A tap cap is a device that reduces the flow of water through a fan-like device built inside it which is able to store and thereby save around 7 litres of water per tap per day. The event ultimately came off as a huge success. It also helped communicate the idea of water conservation.

3. On Children's Day 2019, team Talaash from Jai Hind College visited an NGO –"Our Lady's Home" in Dadar East, Mumbai. This event was in collaboration with Navneet "YOUVA" and distributed drawing kits to underprivileged kids as a token of gift and love, and to spread joy and happiness to them who have little. The organizing committee spent time with these children, conducting small activities like drawing activities, small introduction games etc. we made them feel special on that day. This activity was conducted with 100 children from age group between 5 to 12 years old.

Problems Encountered and Resources Required: They have been manageable. There is support from community and local people. Faculty had to give one on one mentoring and guidance. At times, external experts were also called for guidance. No additional resources were required.

Practice 2:

Title of the Practice: Inculcation of Research Culture

Objectives of the Practice: To promote a culture of research, scientific reasoning and innovative thinking

The Context: The College believes in producing students who are job-generators rather than a job-seeker. To promote this culture, it is essential that students are made to develop an attitude of problem-solving such that they are able to generate ideas to solve problems. This in turn will prepare them for the future where they will be able to venture into their individual specialities with confidence.

The Practice: Research was made an integral component of the syllabi across all courses offered in the college from Semester IV onwards. Students were gradually introduced to the concept of research by introducing the idea of identification of a research problem, literature review and collation of data. Small problems were given to students mapped with their theory so that they could correlate with them. Journal access and literature search was taught to them. The ideas generated and the theoretical basis formed in Semester IV, helped them to find practical solutions to these problems through various methods such as Surveys, Case studies, laboratory analysis, etc. in Semester V, In the final Semester, students compiled the data collected, analysed and presented their results.

Evidence of Success: A number of students had been successful in generating good research data which was evident in the increased participation of students in research platforms such as Jigyasa, Avishkar both which were inter-collegiate as well as in X-plore, an intra-collegiate research festival. Many amongst them also presented research papers in regional as well as national conferences.

1. Students from the department of Psychology presented research papers in conferences organised by the Bombay Psychologists' Association. Research papers ere also published in International Journal of Life Skills Education", as also in the "Journal of Psychology JHC".
2. Students from the department of Botany completed 4 interdisciplinary research projects, one with Haffkine Institute, one with Department of Chemistry and Life Sciences, JHC, one with Department of Department of Chemistry and Biotechnology, and one with Department of Department of Chemistry, Microbiology and Biotechnology at the centre of research, JHC. All of these were also presented at the Inter-University Avishkar Meet.
3. Department of Chemistry was successful in completing two interdisciplinary research projects , of which two were presented as posters and two were published in journals.

Problems Encountered and Resources Required: Training of students to acquire the mind set posed a problem in the beginning. However once trained, the students could carry ot the work allocated on their own with guidance from mentors. Peer mentoring and mentoring by

seniors also helped. The management helped in procurement of resources. Teacher mentees also helped in applying for minor research projects, of which students were made a part of.

BEST PRACTICES

2018-19

Practice 1:

Title of the Practice: Indigenous Software solutions by in-house Start-ups

Objectives of the Practice: To develop students into entrepreneurs , to inculcate the seed of creativity, to understand the nature of problem and seek a solution, to promote a culture of self-sufficiency

The Context: Nurturing student start-ups and converting ideas into solutions for real-life problems.

The Practice: The BSc IT and the B. Voc. SD departments have a research component as an integral module of their programs. Students are presented with contexts encountered within the institution and are encouraged to come up with innovative solutions for the same. This gives them practice to apply the theoretical concepts in search of these solutions. These solutions are then applied and being within the institution, the student gets a first-hand report of the effectiveness of the solution devised. This also helps in bolstering the confidence of the students as he/she gets to witness the success of his efforts.

Evidence of Success: The software apps which have been designed by the students for the purpose of providing an indigenous solution to institutional requirements are as follows: 1) App for College Exam time-table and Seating Arrangement: Bipin Dubey and Rehan Qureshi (TYIT); 2) App for College Marksheet Generation – Sakina Vora and Tarun Tomar (TYIT); 3) Automated Package – Devashri Veerla (TYIT); 4) Attendance System using RFID – Tasneem Pipalyawala, Kavi Shinde, NAvid Gowani, Rukaiya Sabuwala (SYBVoc); 5) App for Attendance System – Vishnuwardhan (TYBVoc); 6) Marksheet Generation System – Sakshi Sangtani, Anuj Trivedi (TYBVoc); 7) App for Decentralized network – Prajwal Poojari, Aziz Kanorwala, Ujjal Ray, Kalpesh Khandelwal (SYBVoc).

Besides the above, there were several green solutions which were devised: 1) UGV Unmanned Ground Vehicle – Neel Sagar, Umang Nagda; 2) Solar Power bank – Aarushi

Talati, Isha Shah, Himangsho Goyal, Binoli Shah; 3) Green Fuel – Dilshad Khan, Deepak Jha, Inderpal Khalsa, Hitesh Jha

Problems Encountered and Resources Required: They have been manageable. Faculty had to give one on one mentoring and guidance. At times, external experts were also called for guidance. No additional resources were required.

<u>**Practice 2:**</u>

 Title of the Practice: Student Assisted Research Mentorship (SARM).

Objectives of the Practice: To cultivate and promote social science research and academic writing, to equip students with the necessary skills to effectively investigate socio-political occurrences, to actualize a symbiotic learning relationship between students, to promote communication, participation, and collaboration amongst the student cohort, through mentor-mentee interaction.

 The Context: Research is an integral part of the teaching -learning process. It imbibes creativity and cultivates an inquisitive nature, both of which stimulate the mind to apply the theoretical concepts into practice. In an effort to inculcate the essential skills of research and academic writing among the students and to complement theoretical learning with comprehensive analysis, the Economics Association piloted a Student Assisted Research Mentorship (SARM) program from December 2018.

The Practice: Interested students (mentees) were divided into small teams of either two to four members. Each of them were then allotted a student mentor. A student qualified as mentor if he/she had prior experience in research and academic writing. Such mentor-mentee relationship served to augment the process through peer learning.

Evidence of Success: When the Economics Association organized the Students' Seminar based on the concept of SARM, the external experts complimented the efforts and endorsed the high standards of the papers presented, in addition to the professional qualities evident in them. All of these nine research papers, each of which conformed to high benchmarks of quality, were then compiled into a Research Compendium. Such a compendium was launched

for the first time by the association. This effort by the Economics Association was also highly appreciated by the Academic Audit team. The learning on the part of both the mentors and the mentees was immense.

Problems Encountered and Resources Required: As it was of a first of a kind in peer mentoring, it required mentoring of the student mentors by the teachers in the initial phase. The students had to be oriented to make them understand their responsibilities and the role required of them.

As it was a concept based solely on peer mentoring, it worked in a cyclic phase. No external funding etc was required.