7.3 Institutional Distinctiveness

7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority, and thrust

Response:

Centre of Excellence in a Rural Area:

Our college is located in the rural area of Eruvessi Village and Panchayath, Taliparamba Taluk, Kannur District, Kerala. Within a radius of 30 km, we don't have any other engineering college.

Our college is a brainchild of Thalachery Archdiocese, started in the year 2002 with an aim to serve the rural society. During inception, college had 3 B.Tech. degree programs and presently it offers 10 B. Tech and 2 M. Tech programs with an approved yearly intake of 720 students, with a total approximate strength of 2450 students.

We have about 80% of students from rural area and our college bus operates to a radius of 60 km from our college. Scholarships from the Government for meritorious, BC, MBC, SC & ST are being distributed to eligible students. Our college management also offers scholarships for needy students from rural areas to encourage them to complete their engineering education. Each department has their own department association's student chapter and affiliation from their respective National, International Professional associations, societies and institutions. This gives an opportunity to expose our students to their activities and become a part of them. This creates a good professional attitude in students and increases their employment possibilities.

A good solar field, solar water heaters for hostels, a bio gas plant, an excellent rain water harvesting and storing system, an efficient water treatment plant, a hygienic water purification unit, a pleasant greenery environment in 2/3 area of the campus, well maintained as a part of the Environmental Sustainability development procedures in our campus.

In addition to this, various programs are given to the society in connection with NSS, Unnath Bharath Abhiyan (UBA) activities etc.

<u>A helping hand for Rural women</u>: Village women economic empowerment through low cost IoT Based Hatchery Unit distribution.

The major source of income of villagers is either farming or business related to agricultural products. The COVID-19 pandemic made a drastic drain in the economic status of the villagers. This activity supported the village women for finding revenue through poultry farming. This low-cost incubator is capable of producing 100 chicks from a single unit and will be able to make an income of up to 30000 per month.

Texpo22

A science and technical exhibition, "Texpo 22" was conducted at Govt. Technical High school, Naduvil, on 29th October 2022. The students of our college demonstrated various technical projects. The villagers and the nearby school students visited the stall.

THRIVE: Tribal Higher Education and Interactive Ventures for Excellence

The THRIVE (Tribal Higher Education and Interactive Ventures for Excellence) programme is a project organized and coordinated by District Development Commissioner, Kannur. It is designed to ignite the aspirations and career goals of tribal students in Model Residential School, Pattuvam and to provide them with opportunities for growth and development. This programme focused on delivering high-quality, relevant, and interactive educational content with the help of nearby colleges, NGOs and other institutions. Through virtual classrooms and hands-on learning experiences, students will develop the skills and knowledge needed to succeed in the modern workforce. Vimal Jyothi has got an opportunity to be one of the coordinating members of THRIVE project. All volunteers from our college interacted with the charming personalities present at the school. We found the students to be skillful and talented, and had discovered the potential of the students and that could help these young minds unlock their full potential.

Pen booths assembling and distribution

Most of us use ball pens and just throw them out after use or sometimes in the middle if we can't write smoothly with them. The problem is its disposable nature because of its cheap price. Plastic pens are a part of the throw-away culture that we have been developing unknowingly over the last

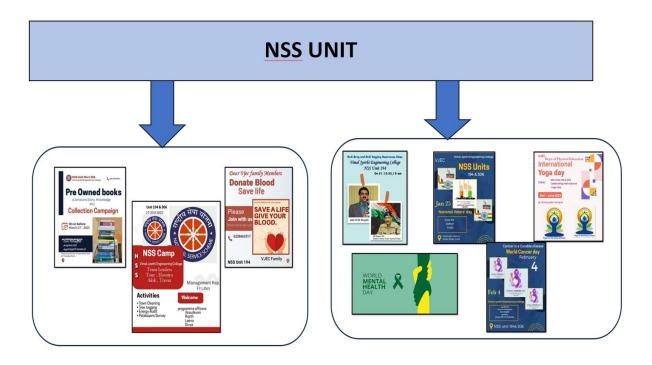
several years. About hundreds of Billion pens find their way to landfills or water bodies every year, causing environmental pollution. We took the initiative to place pen booths (August 2021) in every class room to collect these unused pens instead of throwing them on the campus.

Covid Buster

We used the procedure to test the body temperature of the students/ people as a screening test for COVID- 19. One method to measure a person's surface temperature is the use of "no-touch" or non-contact temperature assessment devices. We developed a low cost IoT (August 2021) based device to measure the temperature and record the same in the cloud. This can be installed in the schools/ hospitals in the villages to avoid direct human intervention from the temperature screening process.

Social Awareness and Practice through National Services Scheme (NSS)

The students are first aware of NSS activity in the first year through various activities. Every year in the month of April, Charity Pilgrim was organized for the first-year students. Almost 10-12 orphanages and old age homes were visited and interacted with the inmates. Students along with staff and management contribute to them. Visiting elderly individuals in their homes can expose technical students to real-world challenges faced by seniors, such as mobility issues, vision problems, hearing loss, and memory problems. This can help students develop empathy and understanding for the unique needs of this population. Thereafter, they start working on various live NSS projects such as blood donation, tree plantation, awareness of Plastic wastes, Tree tagging, cancer awareness programs, no drugs campaign, yoga day, preowned book collection campaign, mental health awareness programs etc. A residential camp, in the month of December was organized in the nearest rural area. The social awareness to cleanliness, pollution, water conservation, energy audit etc was the primary objectives of the camp. Digital literacy among common people, Water testing, Soil testing, Different panchayath level surveys etc were considered and gave technical support with the help of various departments in the college.



Outcomes & Achievements:

Mahotsav & Expo organized under Unnat Bharat Abhiyan, a flagship program of the Ministry of Education on 17th - 18th March 2023 at IIT Delhi. Our "Low cost Egg Hatching Unit" project was chosen for presentation at the IIT Palakkad project expo, and it was subsequently displayed at the "UNNATI' Mahotsav & Expo" project exhibition.

Seventeen students from and two staff members from Mechanical Engineering Department, Vimal Jyothi Engineering College participated in the SIEP E-bike challenge conducted by ISIE India at Galgotia University. The event took place from April 14, 2023, to April 18, 2023. To participate in the event, the students fabricated an electric bike and transported it to Galgotia University in Greater Noida. We were the only participant from KTU affiliated college Kerala. This shows the encouragement for students innovativeness and the support by the college for such learning based activities.

The hard work and service of the NSS volunteers led to social awareness about pollution, the necessity of water conservation, 3-R concept of plastics, energy audit, etc. The students have been exposed to various social problems. The students are made aware of their social responsibilities and commitments. It also helped to build up the attitude towards selfless service to society. Also

helped in the life skill development and thus developing socially responsible engineering practitioners.