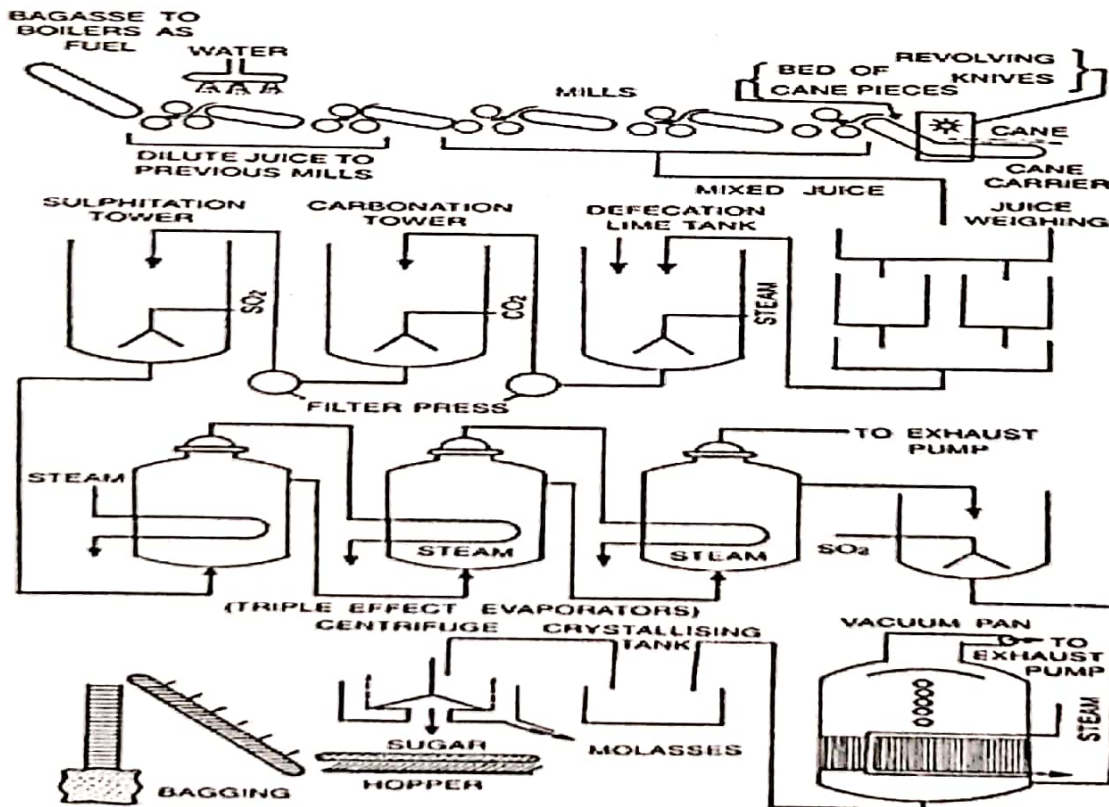
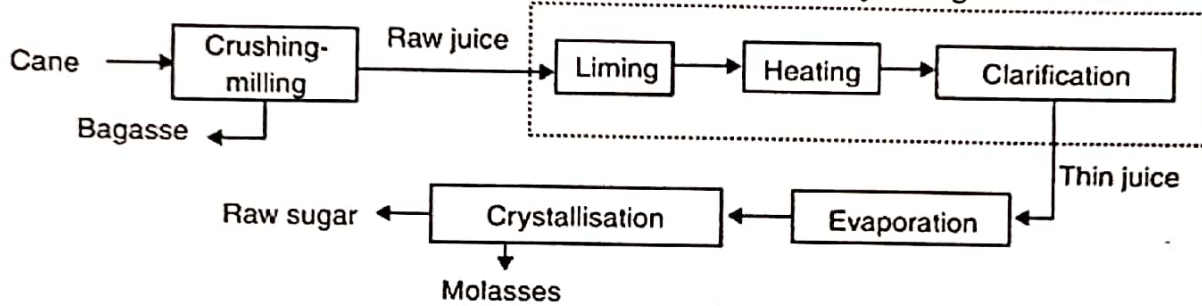


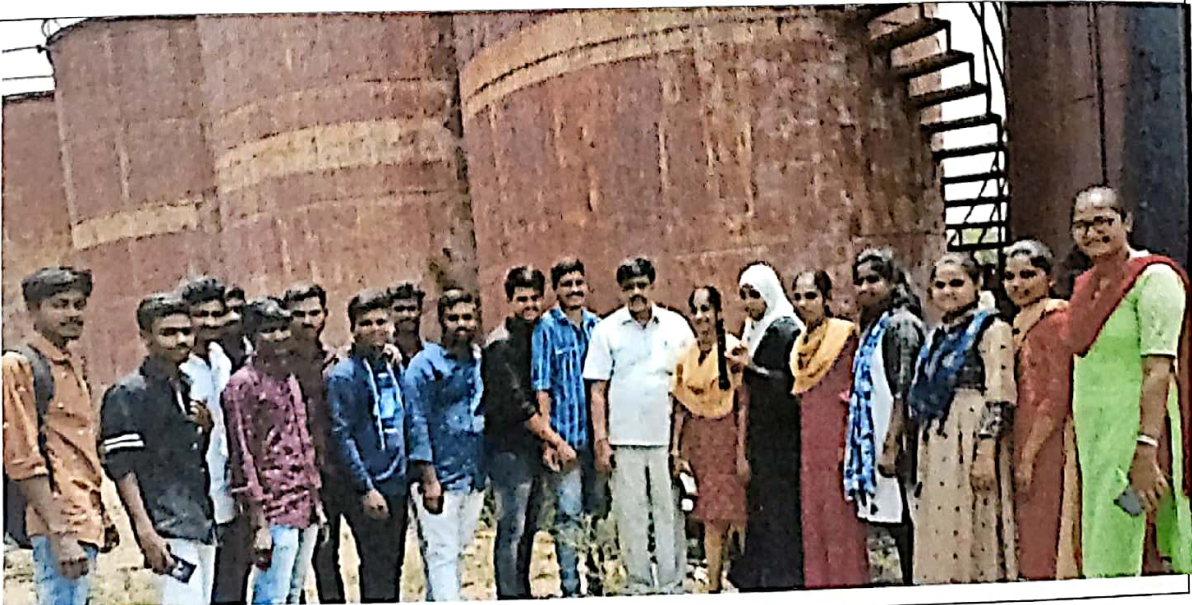
GDC NARSAPUR, MEDAK DISTRICT
DEPARTMENT OF CHEMISTRY
Details of Field work / Field Survey
(Academic Year: 2021 – 2022)

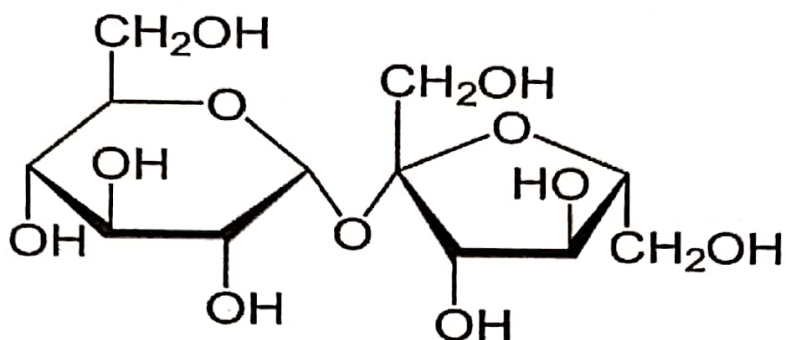
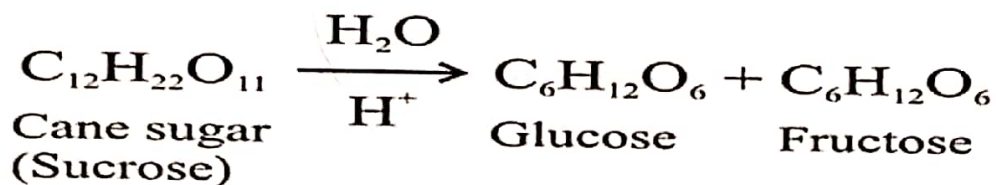
The Department of Chemistry has organised a field trip for this academic year (2021-2022). On May 31, 2022, the final year students (MPC, MCCs and BZC) of GDC Narsapur visited **Jivika Sugar Parivar Plant Private Limited**, Sitharampur, Narsapur Mandal, and Medak District. On this field trip, students have learned how to prepare sugar from sugarcane.

Sucrose is a molecule composed of two monosaccharides, namely glucose and fructose. This non-reducing disaccharide has a chemical formula of $C_{12}H_{22}O_{11}$. In a $C_{12}H_{22}O_{11}$ molecule, the fructose and glucose molecules are connected via a glycosidic bond. This type of linking of two monosaccharides called glycosidic linkage. Sucrose has a monoclinic crystal structure and is quite soluble in water. It is characterized by its sweet taste. Six main steps involved in manufacturing cane-sugar. The steps are:

1. Extraction of the Juice
2. Clarification of Juice
3. Concentration & Crystallization
4. Separation of Crystals
5. Refining of Sugar
6. Recovery of Sugar Molasses.








Structure of Sucrose

Our Chemistry lecturer, Mr. L. Narender Sir, and College Principal, Dr. P. Damodar Sir helped to attend this field trip. We are also very thankful to the Sugar factory management for providing this good opportunity.

Student names:

1. B. Maneesha, 2. G. Sampurna, 3. K. Babu Rao, 4. K. Mahesh, 5. S. Naveen, 6. S. Deepika,
7. B. Maheshwari, 8. G. Supraja, 9. K. Laxmi, 10. G. Vikram, 11. J. Rajendar, 12. M. Saikiran,
13. G. Anand Kumar, 14. M. Naveen, 15. N. Ajay, 16. P. Bhanu Prasad, 17. Shahin Begum,
18. Ch. Vijay, 19. S. Nikhitha, 20. G. Aravind, 21. S. Vaishnavi.


Signature of the Lecturer