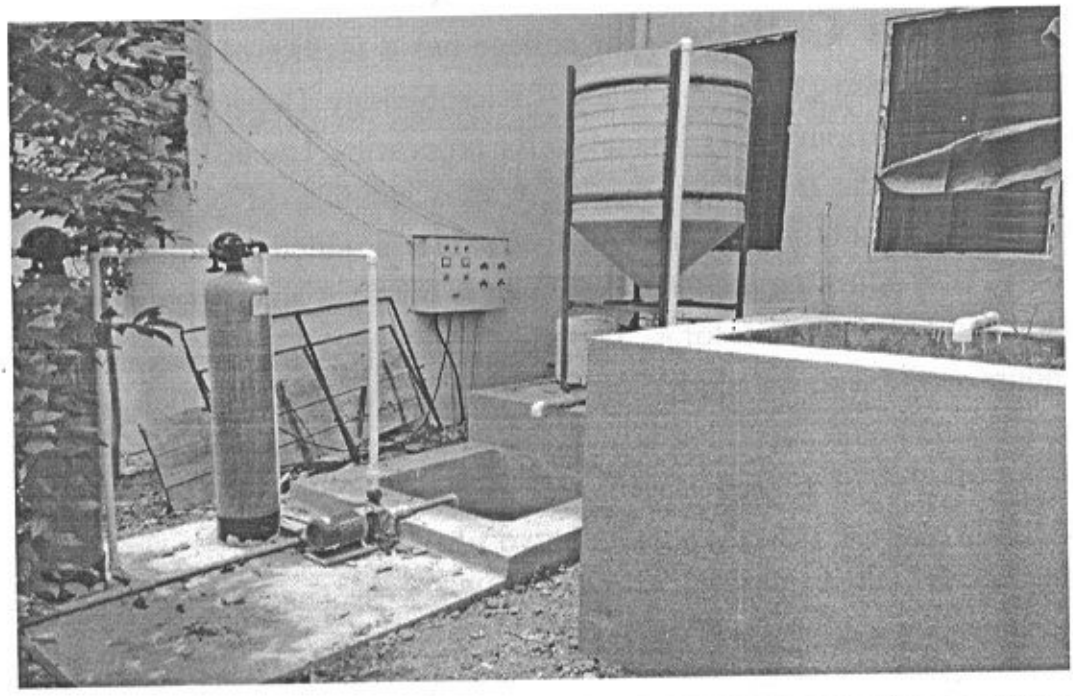
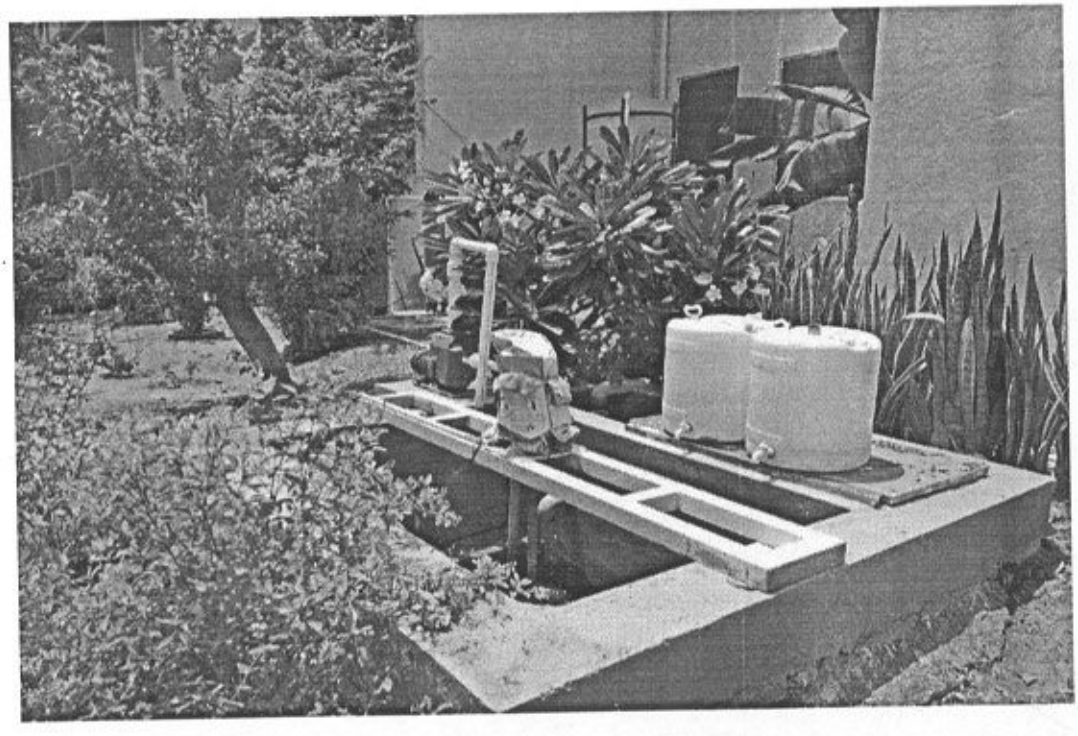
- **ETP Plant in College** –Our college has a facility of ETP plant for effluent from chemistry,Botany ,Zoology ,microbiology Department Effluent collecting tank filled completely it is taken for processing.The effluent is stirred with overhead electric motar and mixing with a solution of potash alumfor coagulation.Then a solution of calcium hydroxide is added to adjust the pH between 6-7.After adjusting the pH the effluent is lifted in an overhead tank for coagulation and sedimentation for 4- 5 hours.
- After 5 hours settlement, the sludge settled down at the bottom which is taken in a separating tank and supernant liquid flowed down in another tank. Here it mix with the solution of sodium oxy chloride as germicide.
- Now this liquid allow to pass through with two filters successively
- which having activated charcoal as molecular sieves. Thus the out coming water is collected in a another tank and use for gardening





Effluent treatment plant

Operation mechanism

A. The waste water coming from Chemistry and Zoology laboratories is collected in effluent collecting tank. When effluent collecting tank is filled completely, it is taken for processing. The effluent is stirred with overhead electric motor, mixing with the solution of potash alum for coagulation and solution of calcium hydroxide to adjust *pH* between 6-7 using *pH* paper.

B. After adjusting the *pH*, the effluent is lifted in an overhead tank, for coagulation and sedimentation for 4 to 5 hours.

C. After 5 hour settlement, the sludge settle down at the bottom which is taken in a separate tank and supernatant liquid is flowed down in another tank; mixed with the solution of sodium oxychloride as germicide.

D. Later on, this liquid is allowed to pass through with two filters successively, one having activated charcoal and another having molecular sieves. Thus, the out coming treated water is collected in a tank and used for gardening.

Note: Before passing the germicide containing liquid, two filters are backwashed after two days one after another and used.

Head
DEPARTMENT OF CHEMISTRY
Tuljaram Chaturchand College
Baramati (Dist.Pune)

Date	Operations	sign.
5/8/2014	Effluent treated.	
20/8/2019	Effluent treated	
3/9/2019	"	
23/9/2019	Effluent treated	
4/10/2019	Effluent treated	
18/10/2019	Effluent treated	
2/11/2019	Effluent treated	
21/11/19	"	
5/12/19	"	
19/12/19	Effluent treated	
8/1/2020	Effluent treated	
24/1/2020	Effluent treated	
7/2/2020	Effluent treated	
27/2/2020	Effluent treated	
11/3/2020	Effluent treated	

The plant is operated in Alternate day. 45

Date	operations	Sign.
14/09/2018	Effluent treated.	
10/10/2018	Effluent treated.	
25/11/2018	Effluent treated	
5/12/18	Effluent treated	
27/12/18	—11—	
5/1/2019	Effluent treated	
20/1/2019	—11—	
4/1/2019	Effluent treated	
23/1/2019	Effluent treated	
15/2/2019	Effluent treated	
14/3/2019	Effluent treated	
17/4/2019	Effluent treated	
19/6/2019	Effluent treated	
6/6/2019	Effluent treated	
23/7/2019	Effluent treated	

The plant is operated in Alternate day.

Page No.
Date

Date	Operations.	Sign
15/05/2017	Plant operated.	
28/06/2017	Plant operated.	
22/07/2017	Effluent treated.	
19/08/2017	plant operated.	
30/09/2017	Plant operated.	
10/10/2017	Effluent treated.	
30/11/2017	Effluent treated.	
25/12/2017	plant operated	
15/01/2018	Effluent operated.	
20/02/2018	Effluent operated.	
30/03/2018	Plant operated.	
18/04/2018	Plant operated.	
28/05/2018	Effluent treated.	
27/06/2018	Effluent. treated.	
15/07/2018	Effluent treated.	
30/08/2018	plant operated	