



# Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as deemed to be university under section 3 of UGC Act 1956. vide notification No F 9-5/2000-U 3)

*Dr. L. JEYANTHI REBECCA, M.Sc. (Agri. Biotech)., D.Sc. (Japan)*  
*Professor and Head,*  
*Department of Industrial Biotechnology*

To  
Programme coordinator,  
Accord Distillers & Brewers Private Limited  
Wallajabad

Chennai  
25-10-2019

Respected Sir,

Sub: Education – BIHER, Selaiyur Tambaram, Educational Tour- Agri.biotech, IBT  
Students 2018 – 2022, Permission request- regarding.

Greetings from Bharath University. We would like to bring our II B.tech. Agri.Biotech, II B.Tech., IBT (Total 72 students), on one day Industrial Visit to the Accord Distilleries. We would like to fix the dates on 30.10.2019 Two staff members will be accompanying them. I request you to kindly acknowledge this official communication at the earliest.

Thanking you,

Yours sincerely

Dr. L. Jeyanthi Rebecca

E-mail- hodbiobharath@gmail.com

Phone-9444649109



# Accord Distillers & Brewers Private Limited

To,

The Head of the Department,  
Department of Industrial Biotechnology,  
BIHER.

Madam,

Sub: Req for Industrial visit – Reg

Referred to letter dated 25.10.2019 regarding Industrial visit we permit your students for Industrial visit at wallajabad on 30.10.2019

**Head Office:-**

1st Street, T. Nagar, Chennai- 600 017  
2834 6504 / 06. Tele Fax : 044- 2834 1447  
531 TN2010PTC078243 GSTIN: 33AAJCA1966DIZX

**Factory :-**

**Distillery :** Nathanallur Village, Wallajabad Taluk  
Kancheepuram Diistrict, Tamil nadu – 631 605  
**Brewery :** Elayanarvellore Village, Kavanthandalam Post  
Via – Magaral, Kancheepuram Taluk & District,  
Tamil nadu – 631 603

## **Students Industrial Visit Report- Accord Distilleries**

The B.Tech II year students of IBT and ABT, BIHER had visited the various units and known about following processes

Saccharification of the starch

Steam Distillation unit

Distillation pots

Solvent Distillation unit

### **Detailed report of the Industrial visit**

#### **Saccharification of the starch**

The flour is mixed with water in the mash tun. The mash is brought to a boiling point by direct addition of steam, after which the mash is cooled down to approximately 69°C. Through the addition of malt-germinated barley, the saccharification process is induced and it continues for about 1 hour at a temperature of 61°C. The mash is then cooled down to 30°C and pumped into fermentation tanks.

#### **Steam Distillation unit**

The fermented mash is pumped into a condenser, where it is pre-heated before reaching the top of the distillation columns. Each of the two copper distillation columns is about 6 metres high and contains as much as 15 plateaus, which provide for an equal distribution of the mash and the steam injected below. The heating of the fermented mash causes the alcohol to evaporate (boiling point 79°C). The rising steam, used to pre-heat the mash, takes with it the volatile components, which are cooled down in the first condenser. The second cooled water condenser cools them to room temperature. The residue or draft flows from the bottom of the columns into tanks. These residues are natural and nutritious waste products that are used as fodder for cattle. The phlegm (first distillation) contains about 57% volume of alcohol and flows into a measurement tank located in a sealed area

#### **Distillation pots**

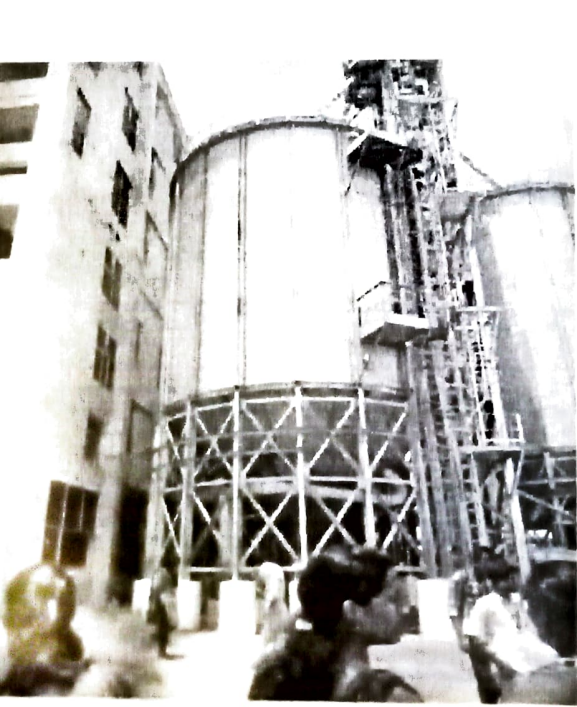
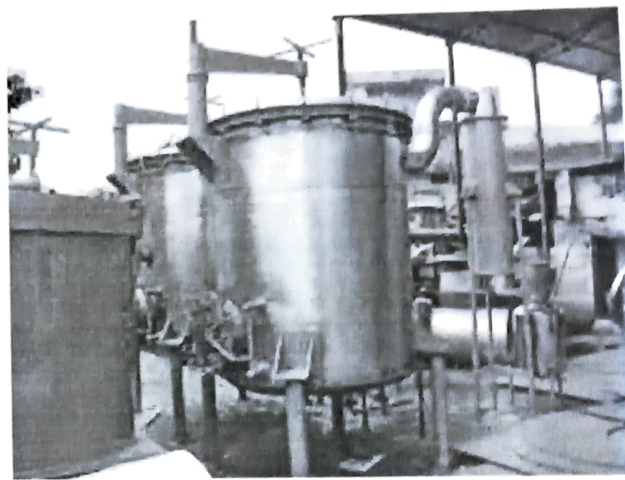
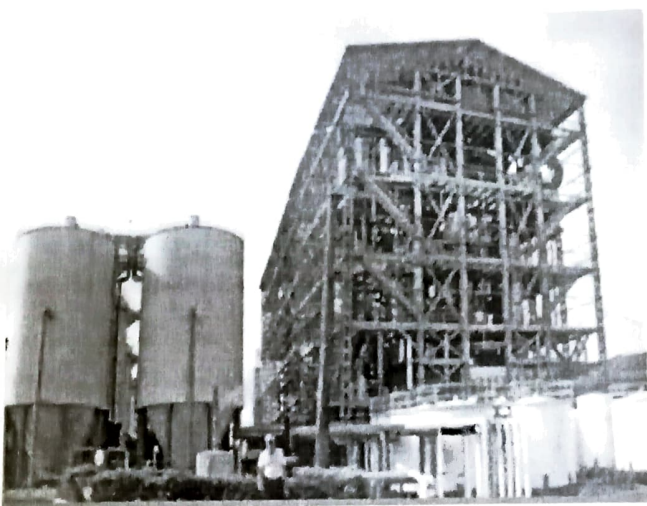
A pot still is a type of distillation apparatus or still used to distill flavoured liquors such as whisky or cognac, but not rectified spirit because they are bad at separating congeners. Pot stills operate on a batch distillation basis (as opposed to a Coffey or column stills

which operate on a continuous basis). Traditionally constructed from copper, pot stills are made in a range of shapes and sizes depending on the quantity and style of spirit desired. Spirits distilled in pots top out between 60 and 80 percent alcohol by volume (ABV) after multiple distillations.

### **Solvent Distillation unit**

The solvent distillation process uses the **steam** from the waste to energy process as energy to power the solvent recovery stills. Spent solvents are re-manufactured and sold back into industry for their original solvent properties

Students visited almost all units in industries and gained knowledge



STUDENTS NAME LIST

ABT

S.No	Roll. No	Name
1	U18AC001	PRIYANKA S
2	U18AC002	KOGUL K
3	U18AC003	AASHIQ T P
4	U18AC004	EGALA SRI VARSHA
5	U18AC005	GUNJI AMRUTHA VARSHINI
6	U18AC006	HARIHARAN D
7	U18AC007	SABARINATHAN V
8	U18AC009	PACHAIYAPPAN P
9	U18AC010	BRINDHA B
10	U18AC011	LOGAPRIYA M
11	U18AC012	KAKANI SHELCY JONES
12	U18AC014	BHAVANI K
13	U18AC015	SUMAN KUMAR PANIGRAHI
14	U18AC016	AGAMUGILAN B
15	U18AC018	RAYALA UJWALA
16	U18AC019	PAGADALA VIDYA
17	U18AC020	CHANDRIKA C
18	U18AC022	RAVU AKHITHA
19	U18AC023	JAMMI SUBBARAO
20	U18AC024	KALYANAPU VINEETHA
21	U18AC025	KIRAN L
22	U18AC026	KARAN L
23	U18AC027	SAIKIRAN K
24	U18AC028	KONDAPURAM PARVATHI

25	U18AC029	KETHU POOJITHA
26	U18AC030	PACHA SANTHI
27	U18AC031	BHARATHI S
28	U18AC032	KRISHNA SWAMY C
29	U18AC033	BOLNEDI TAGORE
30	U18AC034	KEERTHANA S
31	U18AC036	ASHLINE BEATRICE ALEXANDER
32	U18AC037	AYELIN BEATRICE ALEXANDER
33	U18AC038	GUDDU SINGH
34	U18AC039	ANUSHA V
35	U18AC040	PALAGIRI MOUNIKA
36	U18AC041	PULIPAKA PRIYANKA TIRUPATI
37	U18AC042	KARTHICK P
38	U18AC043	G MANOJ
39	U18AC044	KARTHIK RAJ S
40	U18AC045	VENGATESH S
41	U18AC046	SHAIK ASMA SULTANA
42	U18AC047	RASALA KADIRI PRASAD
43	U18AC048	AAMIR AHAD MIR
44	U18AC049	BODDAKAYALA SATYA GAYATHRI LAHARI
45	U18AC050	NETHAGANI JYOTHIRMAI
46	U18AC051	MALAYALAM SALEEM
47	U18AC052	STEPHEN SAPAM
48	U18AC053	SHAIK SHARMEELA
49	U18AC054	RAMNATH REDDY Y
50	U18AC055	IMMARAJU ANUDEEPIKA

51	U18AC057	KAVIYARASI S
52	U18AC059	SHIVANI P
53	U18AC060	NAGINENI BHANU SAI RAMYA
54	U18AC061	KARAPU SRAVANI
55	U18AC062	VELTHURU SAI DIVYA
56	U18AC063	MEESALA HARSHITHA

### IBT

S.No	REG.NO	STUDENTS NAME
1	U18BT001	HARIPRIYA J
2	U18BT002	YESHWANTH S
3	U18BT003	HARIKRISHNAN S
4	U18BT004	ROGITH KUMAR A
5	U18BT005	KAAVIYAA R G
6	U18BT007	M MADHAN MOHAN
7	U18BT009	SOWNTHARYA P
8	U18BT010	ANSAL V S
9	U18BT011	POOJA KARNI B
10	U18BT012	ALLE RAHUL
11	U18BT013	TRIDEV HALDAY
12	U18BT015	BELLAM BHUVANESWARI
13	U18BT016	KAVIARASI P
14	U18BT017	RAVI SRI SAI NANDINI
15	U18BT501	ANCIN FUJITHA R