



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

21-01-2020

Respected Sir,

Sub: Education – BIHER, Selaiyur Tambaram, Educational Tour- Agri.biotech, IBT Students 2019 – 2023, Permission request- regarding.

Greetings from Bharath University. We would like to bring our I B.tech. Agri.Biotech, I B.Tech., IBT (Total 82 students), on one day Industrial Visit to the Accord Distilleries. We would like to fix the date on 28.01.2020. 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 21.01.2020 regarding Industrial visit we permit your students for Industrial visit at wallajabad on 28.01.2020



Registered Office:-

No. 29, Tilak Street, T. Nagar, Chennai- 600 017
Tel: 044 - 2834 6504 / 06. Tele Fax: 044- 2834 1447
IN: U15531TN2010PTC078243 GSTIN: 33AAJCA1966DLX

Factory :-

Distillery : Nambalur Village, Wallajabad Taluk
Kancheepuram District, Tamil Nadu - 631 005
Brewery : Elayansavelive Village, Kovambandulam Post
Via: Madurai, Kancheepuram Taluk & District,
Tamil Nadu - 631 003

Students Industrial Visit Report- Accord Distilleries

The B.Tech 1 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	U19AC001	AKASH
2	U19AC002	APPANA
3	U19AC003	ATCHAYA
4	U19AC005	BHAGAVATHI
5	U19AC006	BHEEMANENI.
6	U19AC008	BOMMIREDDY
7	U19AC009	CHAVALA THARUN
8	U19AC010	CHEMBETI.
9	U19AC011	CHENGALA KIRAN
10	U19AC014	DEGA
11	U19AC015	DEVARRAJU RAJNIKHIL
12	U19AC016	DHISHANTH
13	U19AC017	DIVYA
14	U19AC018	ELURI
15	U19AC019	GAJA SRI
16	U19AC021	GANTA
17	U19AC022	GANTEELA VENU
18	U19AC023	GOVINDARAJU
19	U19AC024	GUDISE
20	U19AC025	GUNTUPALLI
21	U19AC026	HEMALATHA
22	U19AC027	INDUJA
23	U19AC028	JAIKEERTHANA
24	U19AC029	JAYALAKSHMI

12	115AC120	EVINBA SHALOM
13	115AC122	ETAZSHA
14	115AC123	EALTHREDDY JAIGHM
15	115AC124	EVINBA
16	115AC125	ICPPU ROHTH SA
17	115AC126	WAGETH
18	115AC127	WALLA
19	115AC128	WABRU
20	115AC129	WATLA
21	115AC130	WEDNA
22	115AC131	WETHYALA
23	115AC132	WETHYALA
24	115AC133	WETHYALA
25	115AC134	WETHYALA
26	115AC135	WETHYALA
27	115AC136	WETHYALA
28	115AC137	WETHYALA
29	115AC138	WETHYALA
30	115AC139	WETHYALA
31	115AC140	WETHYALA
32	115AC141	WETHYALA
33	115AC142	WETHYALA
34	115AC143	WETHYALA
35	115AC144	WETHYALA
36	115AC145	WETHYALA
37	115AC146	WETHYALA
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85	115AC194	WETHYALA
86	115AC195	WETHYALA
87	115AC196	WETHYALA
88	115AC197	WETHYALA
89	115AC198	WETHYALA
90	115AC199	WETHYALA
91	115AC200	WETHYALA

52	U19AC062	SONTENA BHARAT
53	U19AC063	SURE
54	U19AC064	SWARNA
55	U19AC065	TALARI
56	U19AC068	VASUNTHRADEVI
57	U19AC071	YASHIKA
58	U19AC074	YOGASHARMITHA
59	U19AC075	YUVAGANESH
60	U19AC030	JAYARATHAN
61	U19AC004	AVULA TAGORE VINAY
62	U19AC007	BIKKI RAVI

IBT

S.No	REG.NO	STUDENTS NAME
1	U19BT001	ABHINAYA SRINIVAS OGURI
2	U19BT002	AFRAH NAAZ AYZ
3	U19BT003	AMOORI MADHU
4	U19BT004	DHIYANESHWARI VIOLET M
5	U19BT005	ERLLA SAI PAVAN
6	U19BT006	JOSEPH M
7	U19BT007	KAGITALA BHAVANI VENKAT
8	U19BT008	KAJOL MANDAL
9	U19BT009	KAMERA SIDDARTHA
10	U19BT010	KARRA SAI PRAKASH
11	U19BT011	KAVITAPU TEJASWINI
12	U19BT012	LINGA REDDY JASWANTH REDDY
13	U19BT013	MANIRAJ R

14	U19BT014	MANOJ A T
15	U19BT015	R NYUSH KUMAR
16	U19BT016	PUSULURI PAVAN KUMAR
17	U19BT017	SANJAY R
18	U19BT018	SHILPA S
19	U19BT019	SIRAMSETTY SRI RAMYA
20	U19BT020	SIRIGI REDDY MUNI REDDY