

# Providence Women's College

College with Potential For Excellence, Re-Accredited with A+ Grade by NAAC

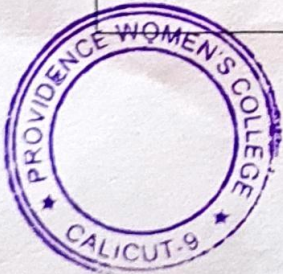
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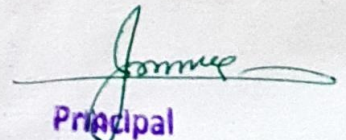


CARMEL HILL  
MALAPARAMBA (P.O.)  
CALICUT - 673 009

The following teachers & students are going to visit Tea & Chocolate factory at Ooty on 18<sup>th</sup> June 2022.

Name	Age	Name	Age
1. Shiji P	42	27. Azwa rena	20
2. Ninikala K	38	28. C. liyana	20
3. Annette Vincent	19	29. Diya biju	20
4. Arza Fathima	20	30. Drishya m	19
5. Aysha Sameer	20	31. Fathima lina sameer	20
6. Devathiertha C	19	32. Gopika k	19
7. Fathima Shahana Tk	20	33. Krishna Aneesh	19
8. Fathimathu Shedha	20	34. Libbeth Rachel	19
9. Johnsiya Sunny	20	35. Nandana c	19
10. K Saranya	19	36. Nandana m	19
11. Krishna Dinesh T	19	37. Sandra maria renny	20
12. Suha Saleem	20	38. Sneharaj ac	19
13. Abigail Rhea	19	39. sree lakshmi	19
14. Amina Barkath	19	40. Theertha pc	20
15. Amrutha R	19	41. Meenakshi previn	20
16. Aysha Rifna	19	42. Anagha alias	19
17. Nandana M	20	43. Teslin george	19
18. Neethusha S	19	44. Kavya manoj	19
19. Sreya M	19	45. Sona santhosh	19
20. Adithya Cv	19	46. Aysha shada	20
21. Aiswarya T	19	47. Neethika sethu	20
22. Amina Afra	19	48. Aswathi pk	19
23. Anaswara Ps	20	49. Fathima haifa jaffer	19
24. Anjali Joseph	19	50. Alia fuad mustafa	20
25. Archana M	19	51. Shilpa p	19
26. Akshaya Kp	19	52. Akhila raj	19
		53. Arunima ts	19



  
Principal

Providence Women's College  
Kozhikode - 673 009






White Tea Black Tea


DEERS



GPS Map Camera



The Te  
The Te



Ooty, Tamil Nadu, India

Dodabetta Road, Mel Koddapmund, Thalayathimund, Ooty,

Tamil Nadu 643002, India

Lat 11.411767°

Long 76.720738°

18/06/22 04:35 PM



# Doddabetta Tea Factory And the Tea Museum



## INDUSTRIAL VISIT CERTIFICATE

This is to certify that students of Department of Commerce  
Providence Women's College, Calicut, Kerala  
visited The Doddabetta Tea Factory and the Tea Museum on 18/06/2022  
They were given first hand information of the entire tea history and processing.  
They participated in a guided factory tour in which the history of tea and the  
different stages of tea processing like withering, crushing, cutting / tearing /  
curling (CTC), shaping, fermentation, drying, cleaning and grading was  
explained to them. The students evinced keen interest in knowing all aspects  
about tea manufacture.

Place : Udthagamandalam

Date : 18/06/2022



  
Authorised Signatory



# REPORT ON INDUSTRIAL VISIT TO BENCH MARK TEA FACTORY

Submitted by :

Nandana . C

Roll No : 54

## Acknowledgement

I take this opportunity to thank our teachers Ninikala ma'am and Shiji ma'am for giving us an opportunity to go for an industrial visit. My gratitude also goes out to Benchmark Tea Factory to visit their industry and guiding us through the various process and machinery used.

## Details of Industrial Visit

The Department of Commerce of Providence Women's College had organized an industrial visit on 18 June, 2022 to Benchmark Tea Factory in Ooty, Tamil Nadu. The visit was organized by HOD of Commerce Ninikala ma'am. And Shiji ma'am was the co-ordinator faculty for the industrial visit. We started travelling from the college campus at 5.30 am in bus.

# Company Profile

## Benchmark Tea Factory

"Benchmark" a Nilgiri tea company founded by "Mr. N. Devarajan" and now managed by "Mr. Rajesh Devarajan" who has involved himself as a most experienced tea maker in variety of Teas.

Benchmark Tea Factory tour is an informative tourism with the aim to make awareness about tea. One can learn about health benefits of teas where manufacturing process is verified. A part of these a chocolate factory, Tea plantation visit, Eucalyptus distillation and sales counters are also being placed inside the factory the view from the factory is scenic.

"Benchmark is the only company with the concept of single origin nilgiri tea. Their tea and garden are fresh and also unblended tea is the only highest hallmark of Benchmark Tea it offers a unique taste of unblended variety of nilgiri tea.



# Process of Tea Manufacturing

Tea manufacture is the process of transformation of freshly plucked green tea leaves to black tea. There are several distinctive processes that take place in the manufacture of black teas.

Plucking : The green leaf is harvested on a regular basis at intervals ranging from 5 days to 8 days from each field. The plucking of the soft two leaves and the bud is generally undertaken by well trained women, because of the agility of feminine hands. The manufacture begins from the time leaf is plucked in the field, and to ensure it retains its freshness, the leaf is sent to factories from the fields three to four times a day.

Withering : - No sooner it is received at the factory, the leaf is weighted and spread on troughs. Withering is a process, where conditioned air is circulated between the leaves, initially to remove any surface moisture and thereafter to concentrate and

Chemically breakdown the tea juices. It takes 10 hours to 14 hours for the physical and chemical changes to take place and bring the leaf to soft and rubbery condition suitable for the next stage of manufacture.

Rolling :- The purpose of rolling is primarily to break up the leaf cells into compartments and to mix up the chemical components of the leaves with the enzymes. Various type of rollers are used to achieve this objective. The first roll is often very gentle and known as the 'pre-conditioning roll'. The main action of the pre-conditioning roll has been found to be the gentle expression of the leaf juice on to the surface of the twisted particles. Subsequent rolling is programmed to achieve a thorough breakdown of the leaf cells. A considerable amount of heat is generated by friction during the rolling process, but care must be exercised to ensure that temperature does not exceed  $35^{\circ}\text{C}$  because undesirable chemical and enzyme



reactions could occur at higher temperature.

Fermentation :- Once the leaf is sifted through the roll Breaker, it is spread out on an even surface and left to allow oxidation. The Process of fermentation represents a series of complex chemical reactions which begin at the moment when the leaf is broken in the rollers. The breaking up of cells which causes the mixing up of the enzymes with the other chemical compounds within the cell results in a number of reactions; the most important being the oxidation of Polyphenols. An additional reaction that occurs during fermentation is the formation of some flavour compounds.

Drying :- The Process of firing removes most of the leaves moisture and stops fermentation by destroying the enzymes. Further the flavour of the tea is 'balanced' during firing because some of the less desirable low boiling compounds are removed thus accentuating the presence of more useful higher boiling compounds.



Grading :- The dried tea leaves are sorted into particle sizes by sending them through sifters that sift them through different meshes. This helps to categorise the teas into the different grades - Dust, Pekoe, BOP etc.

Packing :- Teas are very hygroscopic and rapidly absorb moisture. When sufficient quantities of teas are collected, they are either packed into plywood tea chests or packs of various forms for direct distribution.

Images of certain process are following

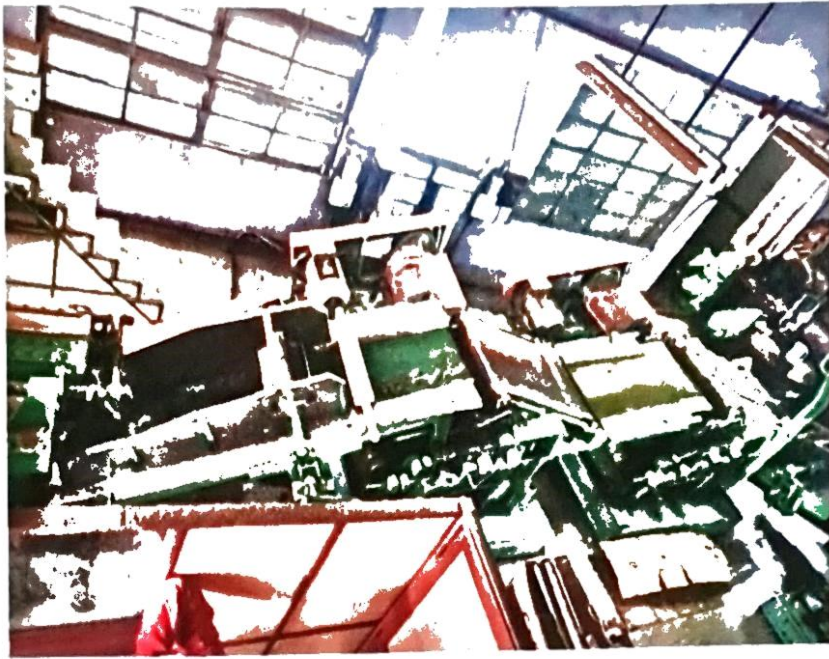


Withering



Crushing





cutting / beating /  
curdling (CTC)



Fermentation



Drying





# Conclusion

We learned about making of tea powder with the help of machines. All students took up necessary information about the Benchmark tea Factory. Students enjoyed the industrial visit and understood various processes in the factory.



Head of The Department

**NINIKALA. K**  
Asst. Professor  
Dept. of Commerce  
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Tour Co-ordinator

Shiji P  
Asst. Professor  
Dept. of Commerce  
Providence Women's  
College.