

# Dempo Charities Trust's

# DHEMPE COLLEGE OF ARTS & SCIENCE Miramar, Panaji-Goa

# Skill development programme for undergraduate students in Biotechnology:

Winemaking and Bakery

Duration: Three months

#### **CourseObjectives:**

1) To train students for self-employment opportunities and promote entrepreneurship.

2) To enhance the practical skills of the students and provide hands-on experience in the field of food biotechnology.

3) To provide integrated learning for the students.

# **CourseContents**:

# Wine Making:

- 1. History of winemaking.
- 2. Types of wine and the process of fermentation for making the wine.
- 3. Hands on training on making wines from following food items:
- a) Pineapple
- b) Banana
- c) Tomato
- d) Beetroot
- e) Rice
- f) Watermelon
- g) Orange
- 4. Importance of tartness, bite and aroma which gives the wines their characteristic flavour.
- 5. Estimation of total and volatile acidity of the wine via titration.
- 6. Process of bottling, packing and storage of the wines.

#### Bakery:

- 1. History of baking and bread making
- 2. Process of baking.
- 3. Hands on training on making following items:

a) Bread (Grissini/Clover Leaf rolls/Baguette/Brioche)

- b) Welsh Cheesecake pastry/Shrewsberry biscuit/Swiss tarts
- c) Muffins (Blueberry/ chocochip/chocolava)
- d) Cake (red velvet/carrot/chocolate/banana cinnamon/carrot walnut/ribbon/vanilla)
- e) Doughnuts (stuffed/chocolate/sugar)
- f) Apple crumble pie/banoffe pie/serradura

#### Learning outcomes:

a) After the completion of this course the students will be able to make wines using different types of fruits, vegetables and rice.

b) They will be able to prepare different types of bakery products.

b) They will be able to self-employ themselves in the areas of wine making and bakery.

# WINEMAKING

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BAKERY

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# Dempo Charities Trust's Dhempe College of Arts and Science Panaji, Goa

# WINEMAKING AND BAKERY REPORT (2018-19)

The Goa State Council for Science and technology along with Department of science and technology funded the Entrepreneurship development program in Winemaking and Bakery at DCT's Dhempe College of Arts and Science for the Academic year 2018- 2019. It was a 3 months certificate course which was conducted from 8<sup>th</sup> July 2018 to 8<sup>th</sup> October 2018. It was a hands-on training programme done to inculcate an interest in self- employment among the students of Final year Bsc.

A total of 30 students of T.Y.B.Sc. from the departments of Chemistry and Biotechnology participated in the course.

The students were briefed about the history of winemaking, types of wine and the process of fermentation for making the wine. The students were taught to make different types of still wines such as grape, pineapple, dates, watermelon, orange etc. The students were also made to understand the importance of tartness, bite and aroma which gives the wines their characteristic flavor. They were trained to estimate total and volatile acidity of the wine via titration. They were also shown the process of bottling, packing and storage of the wines.

In Bakery the students were briefed about the history of baking and bread making and its process. The students were given hands-on training in baking different types of items.

The details of the bakery course are as follows :

Baking course detailsPies:1. Bannofee pie2. Serradura3. Apple crumble pie

Breads: 1. Brioche

- 2. Cloverleaf rolls
- 3. Grissini
- 4. Baguette

Cakes :

- 1. Chocolate cake
- 2. Chocolava cake
- 3. Vanilla cake
- 4. Blueberry/Chocochip muffin
- 5. Red velvet cupcake
- 6. Carrot/carrot walnut cake
- 7. Banana cinnamon bread
- 8. Ribbon cake

**Biscuits:** 

- 1. Swiss tart
- 2. Shrewsbury biscuit
- 3. Welsh cheesecake pastry

Doughnuts:

- 1. Chocolate
- 2. Sugar
- 3. Stuffed

Owing to this course many of our students showed an interest in self-employment. Ms. Manasi Phadte from T.Y.B.Sc. Biotechnology has started her own enterprise from home. She bakes cakes as efficiently as a professional.

The Valedictory function took place on 28<sup>th</sup> March 2019 in the college, in presence of the Chief guest Mr. Deepak Parab, Member Secretaryof GSCST, Principal of Dhempe College of Arts and Science, Dr.VrindaBorker; Administrator, Mr. Rajesh Bhatikar.

All the students of Biotechnology and the teaching staff were present for the same.

















