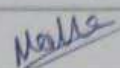
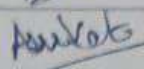

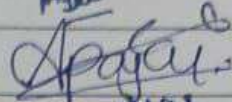

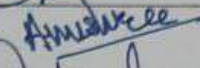
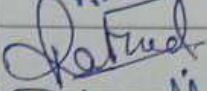
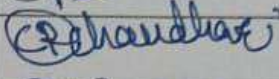
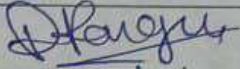
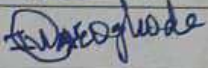
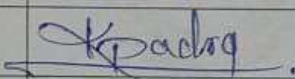
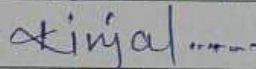

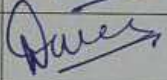
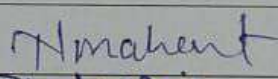
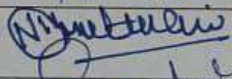
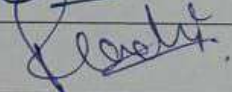
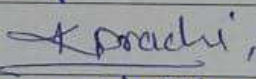
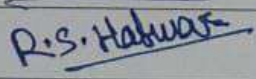


**SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S**  
**SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR**  
**Department of Microbiology**  
**Skill-Based Diploma Course: Fruit Processing & Wine Technology**  
**Session 2021-2022**

**List of the Students: Skill Based Diploma Course: Fruit Processing & Wine Technology Second Year Session 2021-2022**

Sr.No.	Name of Student	Signature
1.	Aishwarya S. Mohatkar	
2.	Aniket S. Adase	
3.	Anjali S. Lokhande	
4.	Ankit M. Pajai	
5.	Anuradha S. Paralkar	
6.	Anushree Muley	
7.	Atharva L. Rathod	
8.	Chetna R. Choudhari	
9.	Dipti M. Rangu	
10.	Isha V. Arghode	
11.	Kalpana S. Patra	
12.	Kinjal S. Kulkarni	
13.	Mahek R. Burchunde	
14.	Muskan Verma	
15.	Neha D. Mahant	
16.	Nikita N. Motwani	
17.	Prachi B. Navghare	
18.	Prachi K. Kapse	
19.	Rajashree S. Hatwar	

20.	Rashmi K. Agashe	<u>RK Agashe</u>
21.	Rohan Deshmukh	<u>Rohan Deshmukh</u>
22.	Saptaparna Roy	<u>S Roy</u>
23.	Sarvesh C. Bagde	<u>SC Bagde</u>
24.	Sharwari D. Halmare	<u>SD Halmare</u>
25.	Shivani S. Deshpande	<u>Shivani S Deshpande</u>
26.	Shreya Zilpe	<u>Shreya Zilpe</u>
27.	Shruti P. Renge	<u>Shruti P Renge</u>
28.	Swati R. Sharma	<u>Swati R Sharma</u>
29.	Teneshwari Hirapure	<u>Teneshwari Hirapure</u>
30.	Utkarsha Tondare	<u>Utkarsha Tondare</u>
31.	Vedanti V. Kali	<u>Vedanti V Kali</u>
32.	Yashoda R. Wade	<u>Yashoda R Wade</u>



*P. Gulhane*  
**Dr. Pranita Gulhane**  
**Department of Microbiology**  
**Science College, Congress Nagar,**  
**NAGPUR.**

**Mark List: Second Year Diploma in Fruit processing & Wine Technology  
Session 2021-2022**

Sr. No.	Name of Student	Marks Obtained out of 40 Paper I (Theory)	Marks Obtained out of 40 Paper II (Theory)	Marks Obtained out of 60 (Practical)	Marks Obtained out of 20 (Seminar)	Marks Obtained out of 20 (Project)	Marks Obtained out of 20 (Field Visit)	Total Marks Obtained out of 200 (Grand Total)
1.	Aishwarya S. Mohatkar	36	35	55	20	20	20	186
2.	Aniket S. Adase	40	40	55	20	20	20	195
3.	Anjali S. Lokhande	30	34	57	20	20	20	181
4.	Ankit M. Pajai	32	34	56	20	20	20	182
5.	Anuradha S. Paralkar	40	40	58	20	20	20	198
6.	Anushree Muley	37	38	55	20	20	20	190
7.	Atharva L. Rathod	39	34	57	20	20	20	190
8.	Chetna R. Choudhari	37	38	56	20	20	20	191
9.	Dipti M. Rangu	36	36	57	20	20	20	189
10.	Isha V. Arghode	34	40	58	20	20	20	192
11.	Kalpana S. Patra	37	39	56	20	20	20	192
12.	Kinjal S. Kulkarni	38	38	58	20	20	20	194
13.	Mahek R. Burchunde	35	39	55	20	20	20	189
14.	Muskan Verma	34	35	57	20	20	20	186
15.	Neha D. Mahant	33	36	56	20	20	20	185
16.	Nikita N. Motwani	35	35	57	20	20	20	187
17.	Prachi B. Navghare	38	34	58	20	20	20	190
18.	Prachi K. Kapse	38	40	55	20	20	20	193
19.	Rajashree S. Hatwar	35	36	56	20	20	20	187
20.	Rashmi K. Agashe	36	40	58	20	20	20	194
21.	Rohan Deshmukh	40	39	57	20	20	20	196
22.	Saptaparna Roy	40	40	55	20	20	20	195
23.	Sarvesh C. Bagde	35	35	56	20	20	20	186
24.	Sharwari D. Halmare	36	34	57	20	20	20	187
25.	Shivani S. Deshpande	38	32	58	20	20	20	188
26.	Shreya Zilpe	35	34	55	20	20	20	184
27.	Shruti P. Renge	36	36	56	20	20	20	188
28.	Swati R. Sharma	37	35	57	20	20	20	189
29.	Teneshwari Hirapure	39	34	58	20	20	20	191
30.	Utkarsha Tondare	36	36	57	20	20	20	189
31.	Vedanti V. Kali	37	36	56	20	20	20	189
32.	Yashoda R. Wade	37	38	58	20	20	20	193



*Dr. Pranita Gulase*  
Dr. Pranita Gulase

**Department of Microbiology  
Science College, Congress Nagar,  
NAGPUR.**

## ACTIVITY REPORT: DIPLOMA COURSE IN FRUIT PROCESSING AND WINE TECHNOLOGY

### Session 2021-2022

The skill base diploma course syllabus for B.Sc I, II and III appear students. Total 32 students were admitted for the course. Two-year diploma course in FRUIT PROCESSING AND WINE TECHNOLOGY. The examination of course shall comprise of two theory paper of three hours carries 40 marks each and two practical of one hour duration carries 30 marks. Internal assessment for the course based on one seminar 20 marks shall be conducted by university approved teachers, one project 20 marks and one field visit 20 marks. Internal assessment marks should be included in minimum passing marks of the students. Candidates are expected to pass separately in theory, internal assessment and practical examination.

Students require 40% marks in theory for passing including internal marks. Separate passing in practical examination is required, assignment submission is necessary to get internal marks. The structure of syllabus for certificate course along with distribution of marks is also displayed in the following table.

Course	Theory papers and Practical	Marks					Total marks
		Theory	Seminar	Field Visit	Project	Practical	
Diploma course in Fruit processing and Wine technology	1.Theory paper I & II Fruit processing and Wine technology	Paper I-40	20	20	20	60	200
	2.Practicals based on course 3. Seminar 4. Field Visit 5. Project	Paper II-40					
Grand total							200

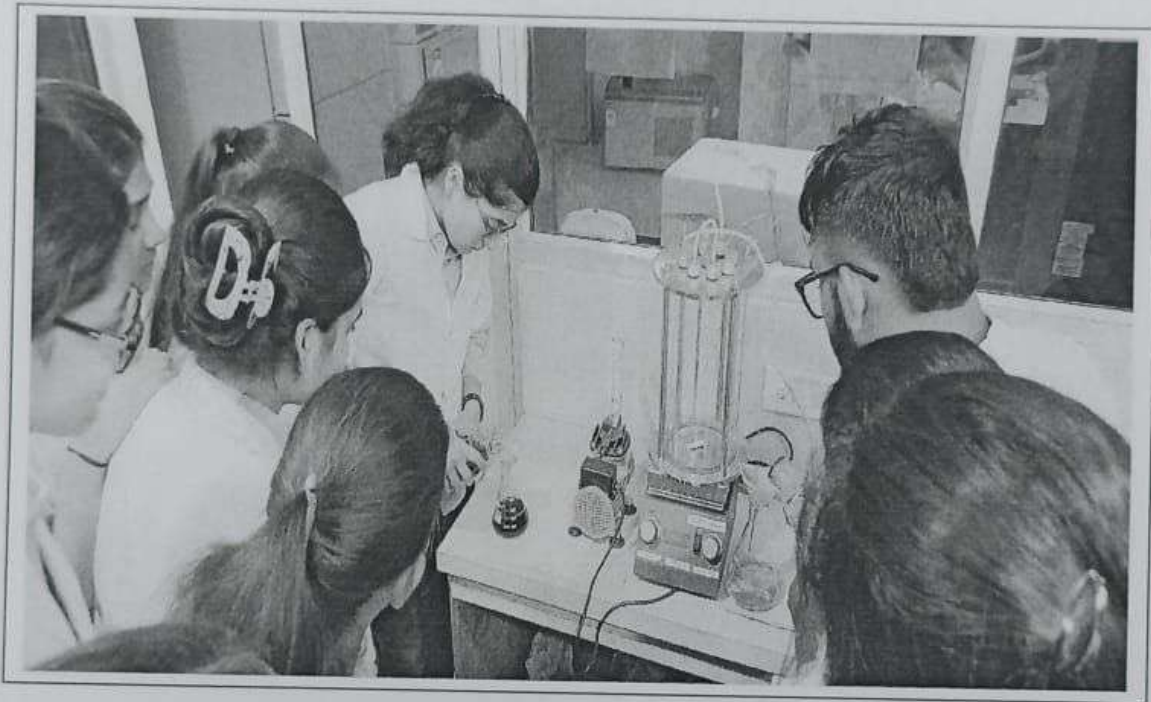
\*Internal assessment - Based on student's attendance and performance during unit test exam and assignment/field work.

Based on assignment plus activity conducted for Fruit Processing & Wine Technology the Internal Assessment marks are given for theory and practical. Objective mode of examination was conducted.



*f. Gulhane*  
Dr. Parvita Gulhane

**Department of Microbiology**  
**Science College, Congress Nagar,**  
**NAGPUR.**



Production of Wine from Red Grapes & Oranges (Session 21-22)



*Dr. Parvita Gulhane*

Department of Microbiology  
Science College, Congress Nagar,  
NAGPUR.

# Rashtrasant Tukadoji Maharaj Nagpur University

**Exam Name:** Skill based Diploma Course Second Year Examination, Summer- 2021-22

**Name of Subject:** Fruit Processing & Wine Technology

**Medium:** English

**Paper:** I

**Marks Obtained:**

**Centre Name:** Science College Congress Nagar, Nagpur

**Name of Student:**

**Class:**

**Group:**

**Duration:** 1hr

**Max Marks:** 40

**Note:**

- 1) Each Question Carries 2 Marks.
- 2) Each Question is Compulsory.
- 3) No Negative Marking

1. Landscape architecture is now recognized by international bodies namely

- a) International labor organization.
- b) International federation of landscape architects (IFLA)
- c) ASLA- American society of landscape architecture
- d) All the above

**Ans: d) All the above**

1. ----- provides color to the building, and it helps to provides the balance in the height of the building visually

- a) Landscaping
- b) Horticulture
- c) Sericulture
- d) Pesiculture

**Ans: b) Horticulture**

2. Regular soil is most suitable for the cultivations of

- a) Groundnut
- b) Cotton
- c) Tobacco
- d) None of the above

**Ans: b) Cotton**

3. Which of the following food items can be used as natural food preservatives?

- a) Venegar, ginger, apple and banana.
- b) Garlic, lemon, sugar and vinegar.
- c) Garlic, apple , salt and tamarind.
- d) Ginger, garlic, banana and tamarid.

**Ans: b) Garlic,lemon, sugar and vinegar.**

4. Which crop have the natural dormancy period.

- a) Bulb crops
- b) Roots crops
- c) Tuber crops
- d) All the above

**Ans: d) All the above**

6 The fruits which are harvested by hand

- a) Apple
- b) Citrus
- c) Tomato
- d) All the above

**Ans: d) All the above**

7. Principle method to dehydrate coffee beans extract.

- a) Tunnel drying
- b) Drum drying
- c) Spray drying
- d) None of above

**Ans: c) Spray drying**

8. Ripening of fruit requires.

- a) Hormone
- b) Enzymes
- c) Co<sub>2</sub>
- d) Oxygen

**Ans: b) Enzymes**

8. CA storage stands for.

- a) Controlled atmosphere
- b) Centrally air conditioned
- c) Completely air conditioned
- d) None of the above

**Ans: a) Controlled atmosphere**

10 In soft drink flavor is stable to which temperature.

- a) 20 o C
- b) 38 o C
- c) 45 o C
- d) 54 o C

**Ans: b) 38 o C**

11. What is the form of membrane lipids in fruits and vegetable that are resistant to chilling.

- a) Semifluid
- b) Fluid
- c) Rigid
- d) Solid

**Ans: a) Semifluid**

12. The pH of fruits tissue is generally

- a) <5
- b) >5
- c) >7
- d) Neutral

**Ans: a) <5**

13. Which organic acid present in apple.

- a) Malic acid
- b) Citric acid
- c) Tartaric acid
- d) Benzoic acid

**Ans: a) Malic acid**

14. Fresh fruits and vegetable an apple orange and carrots, keep best at temperature.

- a) Below freezing
- b) Above freezing
- c) At freezing
- d) 20o

**Ans: b) Above freezing**

15. Carrots are rich in ...

- a) Vitamin B
- b) Vitamin C
- c) Vitamin A
- d) Vitamin D

**Ans: c) Vitamin A**

16. What is the citrus fruit production in India?

- a) 14million tonnes
- b) 24 million tonnes
- c) 34 million tonnes
- d) 44 million tonnes



**Ans: a) 14million tonnes**

17. Which of the following citrus fruits are most commonly grown in India?

- a) Mandarin
- b) Lime
- c) Lemon
- d) Grapefruit

**Ans: a) Mandarin**

18. Which citrus fruit is used to make the drink Limca?

- a) Lime
- b) Lemon
- c) Mandarin
- d) Both a & b

**Ans: d) Both a & b**

19. Which citrus fruit is used to make the citrus by-product Pectin?

- a) Grapefruit
- b) Lemon
- c) Lime
- d) Both a & b

**Ans: d) Both a & b**

20. What is the largest citrus fruit producing State in India?

- a) Maharashtra
- b) Tamil Nadu
- c) Karnataka
- d) West Bengal

**Ans: a) Maharashtra**



Name of Teacher  
Dr. Pranita Gulhane

**Rashtrasant Tukadoji Maharaj Nagpur University**

**Exam Name:** Skill based Diploma Course Second Year Examination, Summer- 2021-22

**Name of Subject:** Fruit Processing & Wine Technology

**Medium:** English

**Paper:** II

**Marks Obtained:**

**Centre Name:** Science College Congress Nagar, Nagpur

**Name of Student:**

**Class:**

**Group:**

**Duration:** 1hr

**Max Marks:** 40

**Note:**

- 1) Each Question Carries 2 Marks.
- 2) Each Question is Compulsory.
- 3) No Negative Marking

1. Which of the following is NOT a citrus fruit?

- a) Mandarin
- b) Kumquat
- c) Pomelo
- d) Persimmon

**Ans: d) Persimmon**

2. Which is the largest citrus by-product industry in India?

- a) Citrus fiber
- b) Citric acid
- c) Orange peel oil
- d) Orange pomace

**Ans: b) Citric acid**

3. Which of the following is not a by-product of citrus fruits?

- a) Citric acid
- b) Orange pomace
- c) Orange peel oil
- d) Citron

**Ans: d) Citron**

4. Which of the following substances is found in high quantities in banana fruit?

- a) Carotene
- b) Fructose
- c) Vitamins
- d) Minerals

**Ans: b) Fructose**

5. What is the process of concentrating citrus fruit pulp called?

- a) Fermentation
- b) Distillation
- c) Pressurization
- d) Carbonation

**Ans: b) Distillation**

6. Which of the following temperature ranges is ideal for grape cultivation?

- a) 0-10°C
- b) 15-25°C
- c) 30-35°C
- d) 40-50°C

**Ans: b) 15-25°C**

7. What is the minimum annual rainfall required for grape cultivation?

- a) 100-200 mm
- b) 300-500 mm
- c) 600-800 mm
- d) 1000-1200 mm

**Ans: c) 600-800 mm**

8. Which climate condition is most suitable for grapevine growth?

- a) Arid
- b) Tropical
- c) Temperate
- d) Polar

**Ans: c) Temperate**

9. Which of the following is NOT a climatic requirement for successful grape cultivation?

- a) High humidity
- b) Well-drained soil
- c) Long hours of sunlight
- d) Frequent frost

**Ans: a) High humidity**

10. Which season is crucial for grapevine flowering and fruit set?

- a) Winter
- b) Spring
- c) Summer
- d) Autumn

**Ans: b) Spring**

11. Which factor is essential for grape ripening and sugar accumulation?

**a) Low temperature**

- b) High humidity
- c) Short days
- d) Excessive rainfall

**Ans: a) Low temperature**

12. Which climatic factor affects grape flavor and aroma development?

- a) High humidity
- b) Long daylight hours
- c) Cool nights
- d) Strong winds

**Ans: c) Cool nights**

13. Which soil type is most suitable for vineyard establishment?

- a) Clay
- b) Sandy
- c) Loamy
- d) Peaty

**Ans: c) Loamy**

14. What is the ideal pH range for soil in a vineyard?

- a) pH 3-4
- b) pH 5-6
- c) pH 7-8
- d) pH 9-10

**Ans: b) pH 5-6**

15. Which of the following soil characteristics is NOT desirable for grape cultivation?

- a) Good drainage
- b) High organic matter content
- c) High salinity
- d) Deep root penetration

**Ans: c) High salinity**

16. What is the primary purpose of soil preparation in a vineyard?

- a) Increase soil compaction
- b) Reduce soil fertility
- c) Improve soil structure
- d) Encourage soil erosion

**Ans: c) Improve soil structure**

17. Which fungal disease commonly affects grapevines, causing brown lesions on leaves and fruit, and is often controlled using sulphur sprays?

- a) Downy mildew
- b) Powdery mildew
- c) Anthracnose
- d) Botrytis bunch rot

**Ans: b) Powdery mildew**

18. What is the primary method for controlling downy mildew in grapevines?

- a) Copper sprays
- b) Sulfur sprays
- c) Neem oil application
- d) Synthetic pesticides

**Ans: a) Copper sprays**

19. Which insect pest causes damage to grape leaves by skeletonizing them and can be controlled using *Bacillus thuringiensis* (Bt)?

- a) *Grape phylloxera*
- b) *Grape leafhopper*
- c) *Grapevine moth*
- d) *Grape berry moth*

**Ans: b) Grape leafhopper**

20. Which bacterial disease affects grapevines, causing yellowing and wilting of leaves, and is commonly managed through pruning and removing infected plant material?

- a) Pierce's disease
- b) Crown gall
- c) Bacterial leaf scorch
- d) Red rot

**Ans: a) Pierce's disease**



Name of Teacher  
Dr. Pranita Gulhane



## Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

[Established by Government of Central Provinces Education Department by Notification No. 515 dated the 1<sup>st</sup> of August, 1923 & presently a State University governed by Maharashtra Public Universities Act, 2016 (Mah. Act No. VI of 2017)]

### University Skill Development Centre (under Board of Lifelong Learning and Extension)

## Certificate

No. ....

Shri/Smt./Ku. Aniket Adase is

awarded with Certificate on successful completion of the course titled

Fruit Processing and Wine Technology in

session 2021 - 22 under **Jeevan Shikshan Abhiyan** conducted for

45 hours from 17.12.2021 to 11.02.2022 by the **Board of Lifelong**

**Learning & Extension** in collaboration with Department of Botany,

**S.S.E.S. Amt's Science College Congress Nagar, Nagpur, 440012.**

He/She has passed the Examination with ..... A Grade

Total Credits Earned : 01

**Principal**  
SSES Amt's Science College  
Congress Nagar, Nagpur-12

**Course Co-ordinator**  
SSES Amt's Science College  
Congress Nagar, Nagpur-12

**Director**  
Board of Lifelong Learning  
and Extension, RTMNU, Nagpur