

**SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S
SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR**
Department of Microbiology
Skill-Based Diploma Course: Fruit Processing & Wine Technology
Session 2017-2018

**List of the Students: Skill Based Diploma Course: Fruit Processing &
Wine Technology Session 2017-2018 (Ist year)**

Sr. No.	Name of Student	Signature
1.	Punam S.Deshmukh	P.Deshm
2.	Rakshanda S.Gajalwar	R.Gajalwar
3.	Rashmi R.Bahekar	R.Bahekar
4.	Rasika R.Nachankar	Rasika.
5.	Renuka R.Kathale	RenukaKathale
6.	Rucha P.Tayade	R.Tayade
7.	Rutuja P.Agarkar	R. Agarkar
8.	Sakshi R.Barad	Sakshi
9.	Sakshi R.Ramtekkar	S.Ramtekkar
10.	Samiksha S.Yawae	S.S.
11.	Samiksha T.Paunekar	S. Paunekar
12.	Sampada P.Tarale	T.Sampada
13.	Sandhaya R.Londhekar	S. Londhekar
14.	Sanskriti S.Kukde	S.Kukde
15.	Shamli S.Deulkar	Shamli. Deulkar
16.	Sharayu M.Wadhulkar	S.Wadhulkar
17.	Sharvari S.Kulkarni	S.Kulkarni.
18.	Sharvari P.Tamhankar	S.Tamhankar



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19	Shivani A. Jarulkar	S. Jarulkar
20	Shivani C. Namjoshi	S. Namjoshi
21	Shraddha R. Gosawmi	Shraddha R. Gosawmi
22	Shraddha R. Bansinge	S. Bansinge
23	Shreya P. Kawalkar	S. Kawalkar
24	Shruti S. Mankar	S. Mankar
25	Shrutika C. Ghate	S. Ghate
26	Sneha S. Nimrad	S. Nimrad
27	Snehal S. Anturkar	S. Anturkar
28	Srushti P. Patre	S. Patre
29	Veena K. Giri	S. Giri
30	Walvia A. Saiman	W. Saiman
31	Aditya P. Bahatkar	A. Bahatkar
32	Akash G. Kadge	A. Kadge
33	Amol V. Wadhavai	A. Wadhavai



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**MARK LIST: First Year Diploma in Fruit processing & Wine Technology
Session 2017-2018**

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.	Punam S.Deshmukh	37	39	56	20	20	20	192
2.	Rakshanda S.Gajalwar	38	38	58	20	20	20	194
3.	Rashmi R.Bahekar	35	39	55	20	20	20	189
4.	Rasika R.Nachankar	34	35	57	20	20	20	186
5.	Renuka R.Kathale	33	36	56	20	20	20	185
6.	Rucha P.Tayade	35	35	57	20	20	20	187
7.	Rutuja P.Agarkar	38	34	58	20	20	20	190
8.	Sakshi R.Barad	38	40	55	20	20	20	193
9.	Sakshi R.Ramtekkar	35	36	56	20	20	20	187
10.	Samiksha S.Yawael	36	40	58	20	20	20	194
11.	Samiksha T.Paunikar	40	39	57	20	20	20	196
12.	Sampada P.Tarale	40	40	55	20	20	20	195
13.	Sandhaya R.Londhekar	35	35	56	20	20	20	186
14.	Sanskriti S.Kukde	36	34	57	20	20	20	187
15.	Shamli S.Deulkar	38	32	58	20	20	20	188
16.	Sharayu M.Wadhulkar	35	34	55	20	20	20	184
17.	Sharvari S.Kulkarni	36	36	56	20	20	20	188
18.	Sharvari P.Tamhankar	37	35	57	20	20	20	189
19.	Shivani A.Jarulkar	39	34	58	20	20	20	191
20.	Shivani C.Namjoshi	36	36	57	20	20	20	189
21.	Shraddha R.Gosawmi	37	36	56	20	20	20	189
22.	Shraddha R.Bansinge	37	38	58	20	20	20	193
23.	Shreya P.Kawalkar	36	35	55	20	20	20	186
24.	Shruti S.Mankar	40	40	55	20	20	20	195
25.	Shrutika C.Ghate	30	34	57	20	20	20	181
26.	Sneha S.Nimrad	32	34	56	20	20	20	182
27.	Snehal S.Anturkar	40	40	58	20	20	20	198
28.	Srushti P.Patre	37	38	55	20	20	20	190
29.	Veena K.Giri	39	34	57	20	20	20	190
30.	Walvia A.Saiman	37	38	56	20	20	20	191
31.	Aditya P.Bahatkar	36	36	57	20	20	20	189
32.	Akash G.Kadge	34	40	58	20	20	20	192
33.	Amol V.Wadhai	35	35	59	20	20	20	189



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**ACTIVITY REPORT: - DIPLOMA COURSE IN FRUIT
PROCESSING AND WINE TECHNOLOGY
Session 2017-2018**

The skill base diploma course syllabus for B.Sc. I, II and III appear students. Total 33 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	Paper II- 40					
3. Seminar 4. Field Visit 5. Project							
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.




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Wine Production Process (Session 2017-18)



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Rashtrasant Tukadoji Maharaj Nagpur University

Exam Name: Skill based Diploma Course First Year Examination, Summer- 2017-18

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. Which of the following is used to tart the taste of high acid concentration?

- a) Sodium citrate
- b) Sodium Benzoate
- c) Ascorbic acid
- d) Tartaric acid

Ans. **Sodium citrate**

2. Which of the following process used as long-time preservation for storing fruits?

- a) Freezing
- b) Boiling
- c) Canning
- d) Sun drying

Ans. **Canning**

3. How is bio-fortification done in fruit plants?

- a) Selective breeding
- b) Pasteurization
- c) Drying
- d) Irradiation

Ans. **Selective breeding**

4. How resins are made from grapes?

- a) Spray drying
- b) Canning
- c) Freezing
- d) Drying

Ans. **Drying**

5. Which of the following component in the grapes is caramelized to get brown colour?

- a) Sugar
- b) Lipid
- c) Protein
- d) Vitamin B

Ans. **Sugar**

6. What is the best processing method to remove toxins?

- a) Freezing
- b) Fermentation
- c) Thermal processing
- d) Pickling

Ans. **Thermal processing**

7. What is the process of drying fruit called?

- a) Dehydration
- b) Hydration
- c) Rehydration
- d) Moisture hydration

Ans. **Dehydration**

8. What is the desirable sugar content of the grapes required for the wine production?

- a) 2-5%
- b) 5-10%
- c) 10-14%
- d) 14-20%

Ans. **14-20%**

9. The process of making malt as soluble as possible by using enzymes adjuncts etc is known as

- a) Brewing
- b) Malting
- c) Mashing
- d) Pitching

Ans. **Mashing**

10. Which of the following organism is used for the fermentation of grapes?

- a) *Rhizopus soti*
- b) *Aspergillus oryzae*
- c) *Lactobacillus vermiformis*
- d) *Saccharomyces cerevisiae*

Ans. ***Saccharomyces cerevisiae***

11. What temperature is maintained during anaerobic fermentation of red wine?

- a) 20-24 °C
- b) 24-27 °C
- c) 27-31 °C
- d) 31-34 °C

Ans. **24-27 °C**

12. Which of the following acid is called as nature's acidulants?

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

Ans. **Citric acid**

13. Which enzyme is used for clarification of fruit juice?

- a) Proteases
- b) Cellulases
- c) Lipase
- d) Ribonuclease

Ans. **Cellulases**

14. Which of the following is added in fortified fruit juices?

- a) Sulphur dioxide
- b) Calcium
- c) Water
- d) Hydrogen peroxide

Ans: **Calcium**

15. Which of the following fruit is affected by grey mold?

- a) Grapes
- b) Apple
- c) Banana
- d) Custard apple

Ans. **Grapes**

16. Which type of soil is required to grow grapes?

- a) Sandy loams
- b) Sandy clay loams
- c) Red sandy soil
- d) All of these

Ans: **All of these**

17. Which of the following is the most used insecticide in grapes production?

- a) Carbamates
- b) Pyrethroids
- c) Imidacloprid
- d) Organophosphates

Ans: **Imidacloprid**

18. What is the causative agent of downy mildew (grapes diseases)?

- a) *Peronospora parasitica*
- b) *Anabaena*
- c) *Azotobacter*
- d) *Klebsiella*

Ans: ***Peronospora parasitica***

19. Which of the following gas is present in sparkling wine which imparts a sparkle effect in it?

- a) Carbon dioxide
- b) Nitrogen
- c) Oxygen
- d) None of these

Ans: **Carbon dioxide**

20. What is the ideal pH for wine fermentation?

- a) 5.1-6.0
- b) 3.0-3.5
- c) Neutral
- d) 8.4-13.1

Ans: **3.0-3.5**



Name of Teacher
Dr. Pranita Gulhane

Rashtrasant Tukadoji Maharaj Nagpur University

Exam Name: Skill based Diploma Course First Year Examination, Summer- 2017-18

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. What grape variety is commonly used to make Chardonnay?

- a) Merlot
- b) Sauvignon Blanc
- c) Chardonnay
- d) Cabernet Sauvignon

Ans: c) Chardonnay

2. Which of the following countries is renowned for producing Resling wine?

- a) Italy
- b) France
- c) Germany
- d) Spain

Ans: c) Germany

3. Which process give some white wine their sparkling character?

- a) Secondary fermentation
- b) Malolactic fermentation
- c) Barrel aging
- d) Carbonic maceration

Ans: a) Secondary fermentation

4. Which of the following characteristic aroma often associated with red wine?

- a) Citrus
- b) Cherry
- c) Pear
- d) Green apple

Ans: b) Cherry

5. Which red wine is known for its light to medium body, with flavors of red berries and earthy undertones?

- a) Cabernet Sauvignon
- b) Syrah
- c) Pinot Noir
- d) Malbec

Ans: c) Pinot noir

6. Which wine region is famous for producing rich, full bodied red wine made from Sangiovese grape variety?

- a) Bordeaux, France
- b) Napa Valley, USA
- c) Tuscany, Italy
- d) Rioja, Spain

Ans: c) Tuscany, Italy

7. What is the primary grape variety used in making Sauternes, a sweet white wine from France?

- a) Semillon
- b) Chardonnay
- c) Muscat
- d) Riesling

Ans: a) Semillon

8. What is typical flavor profile of dry rose wine?

- a) Sweet and fruity
- b) Crisp and refreshing
- c) Bold and tannic
- d) Earthy and oaky

Ans: b) Crisp and refreshing

9. From which region province rose wine, known for its pale pink color primarily originate?

- a) Italy
- b) France
- c) Spain
- b) California

Ans: b) France

10. What is the ideal serving temperature for rose wine?

- a) 45-50 °F
- b) 55-60 °F
- c) 65-70 °F
- d) 40-45 °F

Ans: a) 45-50°F

11. Which region in France is famous for producing Champagne, a renowned type of sparkling wine?

- a) Bordeaux
- b) Burgundy
- c) Champagne
- d) Alsace

Ans: c) Champagne

12. What is the minimum amount of time Champagne must be aged on its lees (dead yeast cells) to qualify as vintage Champagne?

- a) 6 months
- b) 12 months
- c) 18 months
- d) 24 months

Ans: b) 12 months

13. Which grape variety is commonly used to make prosecco, a popular Italian sparkling wine?

- a) Chardonnay
- b) Pinot Noir
- c) Glera
- d) Sauvignon Blanc

Ans: c) Glera

14. Which wine making method involves letting red grape skins come in contact with grape juice for a short period to achieve rose color?

- a) Carbonic maceration
- b) Saignee method
- c) Malolactic fermentation
- d) Barrel ageing

Ans: b) Saignee method

15. Which of the following white wine is known for floral and fruity aroma?

- a) Pinot Grigio
- b) Gewurztraminer
- c) Chenin Blanc
- d) Viognier

Ans: b) Gewurztraminer

16. What is the primary microorganism responsible for fermentation in wine production?

Bacteria

a) Mold

b) Yeast

c) Virus

d) Algae

Ans: b) Yeast

17. Which of the following is NOT a product of fermentation in fruit processing?

a) Vinegar

b) Fruit juice

c) Cheese

d) Alcoholic beverages

Ans: b) Cheese

18. In wine production, what does fermentation convert sugars into?

a) Proteins

b) Alcohol and carbon dioxide

c) Water

d) Vitamins

Ans: b) Alcohol and carbon dioxide

19. Which factor is crucial in controlling during fermentation to achieve production?

a) Color of grapes

b) Soil pH

c) Temperature

d) Humidity

Ans: c) Temperature

20. What type of fermentation is commonly used in the production of alcoholic beverages like wine?

a) Aerobic fermentation

b) Anaerobic fermentation

c) Acetic fermentation

d) Lactic fermentation

Ans: b) Anaerobic fermentation



Name of Teacher
Dr. Pranita Gulhane



Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

[Established by Government of Central Provinces Education Department by Notification No. 513 dated the 1st 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. *Punam Deshmukh*

awarded with Certificate on successful completion of the course titled

Fruit Processing and Wine Technology

session *2017-18*

under *Jeevan Shikshan Abhiyan* conducted for

45 hours from *25.09.2017* to *17.11.2017* by the *Board of Lifelong*

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

S.S.E.S. Am't's Science College Congress Nagar, Nagpur, 440012.

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

Total Credits Earned : 01

[Signature]

Principal
SSES Am't's Science College
Congress Nagar, Nagpur-12

[Signature]

Course Co-ordinator
SSES Am't's Science College
Congress Nagar, Nagpur-12

[Signature]

Director
Board of Lifelong Learning
and Extension, RTMNU, Nagpur