



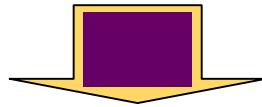
PUNE DISTRICT EDUCATION ASSOCIATION'S

ANANTRAO PAWAR COLLEGE

PIRANGUT. TAL. MULSHI. DIST. PUNE 412 115



COURSES-BROUCHURE



Diploma Course Fruits and Drying /Dehydration Technician



2021-2022



Pune District Education Association's
Anantrao Pawar College, Pirangut,
Tal. - Mulshi, Dist. - Pune.



Academic Year- 2021-22

Name of the Add-on/ Certificate/ Value added program	:	Diploma in Fruits and Vegetable Processing, Drying and Dehydration Technician
Duration	:	One Year

INDEX	
Sr.No.	Document
1	Notice / Brochure (Name of the program,)
2	List of students enrolled (with signature of students)
4	Time-Table (duration)
5	Report (Summary report)
6	Attendance sheet
7	Certificates


Principal
Anantrao Pawar College, Pirangut
Tal. Mulshi, Dist. Pune-412115





**Pune District Education Association's
Anantrao Pawar College, Pirangut**

Date: 29/08/2021

Important Notice for Students

All the students enrolled for **Diploma Course: Fruits And Vegetable Drying / Dehydration Technician** are hereby informed that the lectures and Practicals of this course will be start from 01/09/2021.

Attendance is compulsory for all the enrolled students.

Coordinator

(Prof. Shete A.M.)

Principal
Anantrao Pawar College, Pirangut
Tal. Mulani, Dist. Pune-412115

Diploma in Fruits and Vegetables Drying/ Dehydration Technician: -

(60 Credits i.e. 30 Credits per Semester)



As per the guidelines of NSQF it is expected to include a Skill component of the courses can vary from 60 % to 70% of the total credits, and the balanced credits shall be of general education component. In this syllabus Skill component is of 60% and General Component is of 40% i.e. respectively 18 and 12 Credits for Practical and Theory per semester.

Semester wise Papers and Workload.

Semester I				Semester II			
Papers	Type	Credits	Hrs	Papers	Type	Credits	Hrs
Theory Paper I	Theory	4	60	Theory Paper I	Theory	4	60
Theory Paper II	Theory	4	60	Theory Paper II	Theory	4	60
Theory Paper III	Theory	4	60	Theory Paper III	Theory	4	60
Paper VI	Practical	4	120	Paper VI	Practical	4	120
Paper VII	Practical	4	120	Paper VII	Practical	4	120
Paper VIII	Practical	4	120	Paper VIII	Practical	4	120
Hands on Training	Hands on Training	06	180	Hands on Training	Hands on Training	06	180
		30	720			30	720
Total Credits in a year 60/ 1440 Hrs							


Principal

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Diploma in Fruits and Vegetables Drying/ Dehydration Technician:-

Outline of the Syllabus

Semester I		Semester II	
Theory Paper I DDT 111	Introduction to Preservation of Vegetables and fruits (60 L)	Theory Paper I DDT 211	Pre and Post Treatments (60 L)
Theory Paper II DDT 112	Drying and Dehydration Part-I (60 L)	Theory Paper II DDT 212	Food safety and Additives (60 L)
Theory Paper III DDT 113	Drying and Dehydration Part-II (60 L)	Theory Paper III DDT 213	Packing Grading, Branding and Logistics (60 L)
Practical Paper I DDP 116	Practical Based Buying & grading, dehydration of Vegetables ('30 P)	Practical Paper I DDP 216	Practical Based Buying & grading, dehydration of Fruits ('30 P)
Practical Paper II DDP 117	Uses of different dryers ('30 P)	Practical Paper II DDP 217	Rehydration Different types of Packing material ('30 P)
Practical Paper III DDP 118	Packing And storage ('30 P)	Practical Paper III DDP 218	Nutritive value and storage ('30 P)

Semester: - First (30 Credits)

General Education (12 Credits and 1 Credit = 15 Hrs teaching)

Paper: - I: - Core Subject: - Introduction to Preservation of Vegetables and fruits
(60 Lectures i.e., 4 Credits)

1.	Preservation of fruits and vegetables	05
	Status of vegetable and fruits production in India, scope of vegetable and fruits processing in India,	

	Spoilage of fruits and Vegetables and need of processing, Definition of preservation, Objectives of preservation. Advantages and Disadvantages of preservation	
2	Principles of Preservation	04
	1 Value addition 2 to retard the of microbial activity 3 to enhance shelf life of fruits and vegetables 4 Assure the availability seasonal fruits and vegetables around the year 5 Adding variety to the diet 6 Saving time and energy 7 Improving nutritional value of foods 8 availability of food at an affordable rate during off season.	
3	Methods of preservation	12
	Traditional Methods: - Drying, Cooling, Freezing, Boiling, Heating, Salting, Sugaring, Smoking, Pickling, Lye, Canning, Jellying, Jugging, Burial. Industrial Modern Methods: - Pasteurization, sterilization Vacuum packing, Artificial food additives, Irradiation, Pulsed electric field electroporation, Modified atmosphere, Nonthermal plasma High-pressure food preservation, Bio-preservation, Hurdle technology	
4.	Introduction to Dehydration Process	06
	Introduction, Definition, objectives, scope, general flow sheet for dehydration, Difference between drying and dehydration.	
5.	Pre-drying Treatments	06
	Definition, Objective, need and steps of Pre drying treatment. Blanching, Chemical Process, Sulphuring.	
6	Post-dehydration Treatments	06
	Definition. Need, and Types of treatments: - Sweating, Screening, Inspection and fumigation	
7.	Introduction to Fruits	12
	Definition, Parts of Fruits, Classification, Nutritional status of Fruits, Indian fruits and exotic Fruits	
8.	Introduction to Vegetables	12
	Definition, Parts of Fruits, Classification, Nutritional status of vegetables, Introduction to Indian vegetables, Exotic vegetables,	

References: -

1. *Preservation of fruit and Vegetables*, **Ife Fitz James**, 2003, Bas Kuipers Publisher: Agromisa Foundation, Wageningen,.
2. *Handbook of Food Preservation*, **M. Shafiur Rahman**, Publisher: CRC Press Taylor & Francis
3. *Preservation of Fruits and Vegetables*, **Giridharilal, G. S. Siddappa and G. L. Tandon**, 2007, Indian Council of Agri. Res., New Delhi.
4. *Post-Harvest Technology of Fruits and Vegetables*, **Verma, L.R. and V.K. Joshi** (2000). Indus Publ., New Delhi.



5. *Tropical and Subtropical Fruits Postharvest Physiology, Processing and Packaging* Publisher: Wiley Editors: Ferhan Ozadali, Jasim Ahmed, Maria Gloria Lobo, Muhammad Siddiq
6. *Handbook of Fruits and Fruit Processing* Jiwan Sidhu, Jozsef Barta, James Wu, M.Pilar Cano. 2012 Publisher: Wiley Author: Jiwan Sidhu, Jozsef Barta, James Wu, M.Pilar Cano Editors: James Wu, Jiwan Sidhu, Jozsef Barta, M.Pilar Cano, Nirmal K. Sinha
7. *Processing Fruits Science and Technology*, Second Edition Hosahalli S. Ramaswamy · 2004 Publisher: CRC Press Author: Hosahalli S. Ramaswamy Editors: Diane M. Barrett, Hosahalli S. Ramaswamy, Laszlo Somogyi

Paper II: - Core Subject: - Drying and Dehydration Part-I (36 Lectures i.e. 2.4 Credits)

1. Drying	12
Objectives of drying, Moisture content and its measurement, Equilibrium moisture content, Heat and mass transfer in drying, Psychrometry, Psychrometric chart and its application for drying process, Sun drying of various fruits and Vegetables, Advantages and Disadvantages of Sun Drying, factors affecting rate of drying, Methods of drying of various food products, Concept of Intermediate moisture foods.	
2. Fundamentals of Drying	06
Moisture and drying rate curves, constant and falling rate periods, Factors affecting rate of drying, normal drying curve, Shelf-life extension requirements for various products, theories, characteristics curve, cooling rate calculations.	
3. Drying:- Methods	08
Methods of drying: - Thermal & non-Thermal/ direct (convective drying) & indirect Drying Nutritional value, Physico-Chemical changes during drying.	
4. Drying:- Equipments	10
Types of Dryers: - Tray Dryers, Tunnel Dryers, Roller or Drum Dryers, Fluidized Bed Dryers, Spray Dryers, Pneumatic Dryers, Rotary Dryers, Batch Dryers. Diagram/Design of dryers, Osmotic dehydration and Freeze Drying Chilling, refrigeration and freezing: Chilling and freezing equipments, cryogenics	
5. Quality parameters of Fruits and Vegetables	08
Quality parameters of fruits and vegetables, Factor effecting composition and quality of fruits and vegetables. Temperature, Light, wind, rains, humidity. (Natural factors) Fertilizers, enzymes, pesticide (Cultural factors)	
6. Importance of fruits and Vegetables in the diet.	04

7.	Different types of spoilages of fresh fruits and vegetables.
	Physical, Chemical, biochemical, Enzymatic.



References:-

1. *An Introduction to Food Dehydration and Drying*: Donald G. Mercer, Ph.D., P.Eng.
2. *Principles Of Drying And Dehydration*: S Murali 2019 Publisher Singapore
3. *Drying*: Abhijit Debnath Published on Nov 2008.
4. *Drying in the Process Industry*: C. M. Van't Land, 2011 John Wiley & Sons, Inc.
5. *Systematics of Fruit Crops* Publisher: New India Publishing Agency Author: Girish Sharma
6. *Handbook of Vegetables and Vegetable Processing* Publisher: Wiley Editors: Mark A. Uebersax, Muhammad Siddiq
7. Publisher: CRC Press Author: E. Özgül Evranuz Editors: E. Özgül Evranuz *Handbook of Vegetable Preservation and Processing*, Y. H. Hui
8. *Microbiology of Fruits and Vegetables* Publisher: CRC Press Editors: Ahmed E. Yousef, Gerald M. Sapers, James R. Gorny
9. *Food Microbiology*, 2 Volume Set Principles Into Practice Format: Hardcover Publisher: Wiley Author: Osman Erkmen, T. Faruk Bozoglu

Paper III: - Core Subject: - Drying and Dehydration Part-II (36 Lectures i.e. 2.4 Credits)

1	Status of Dehydration and Drying Industry in India	06
	Profile of various industries like Natural Dehydrated Vegetables Pvt. Ltd, Urban Veegis, Saipro Bio-tech Pvt. Ltd., Organic Products India, Veerral Agro Tech.	
2.	Dehydrated products available at National and International level.	10
	Fruits (apples, bananas, apricots, peaches, pears, cherries, blueberries) for eating as snacks or chopped in granola and trail mixes, or dried as purees for fruit leather. Vegetables (carrots, mushrooms, onions, peas, beans, tomatoes) for adding to soups, stews, and backpacking meals . Powders, flakes, veggie chips	



3.	Dehydrated food market - growth, trends	12
	Scope of the Report, Key Market Trends, Nutritional Quality, Competitive Landscape, Major Players, Customer Experience Map, Actionable Results, Marketing survey, Marketing planning and strategy.	
4.	Scope in India for Dehydrated food products	08
	• Demand Supply chain, Evaluation of Market in India, Startups, Registration and establishing business.	
5.	Communication Skills	8
	Definition, Communication flow, Types of communication, Active listening, Miscommunication	
6.	Soft Skills	8
	Introduction, The objective, Definitions, Group Work / working with others CV and Applications, Self-assessment Professional practice, Assertiveness Creative problem solving, Mentoring and peer support Information Literacy, Digital Literacy Portfolio management, (Tools for delivery, recording and reflection), Integral Parts of Soft Skills, Outcomes of Soft Skills Development, Personal Developmental Plan (PDP), Activities.	
7.	Environmental studies	8
	Pollution : Definition, Types of Pollution, Causes of Pollution, Food Processing and pollution (04)	
	Biodiversity: - Definition, Types of Biodiversity, Fruit and Vegetables diversity in India. (04)	
	Global warming: - Definition, Factors responsible for global warming, Impact of global warming on Agriculture, Effects of Global warming. (04)	

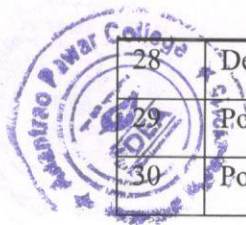
References:-

1. *The Complete Technology Book on Processing, Dehydration, Canning, Preservation of Fruits & Vegetables* (3rd Revised Edition) NIIR Board of Consultants & Engineers (Author)
2. *Food Science and Nutrition* Paperback – 1 August 2018 Sunetra Roday (Author)
3. *Hand book of food dehydration and drying* brand: Eiri books, Product Code: 8186732608
4. *Communication Skill*, Sanjay Kumar, Pushpa Lata, OUP India Publishers Pvt. Ltd.
5. *Professional Communication Skill*, E.K. Jain, S.Chand Publications
6. *Soft Skills Know Yourself & Know The World*, K. Alex, Dr. K. Alex , S. Chand Limited
7. *Text Book of Biodiversity*, K.V.Krushnamurthy, CRC PRESS Publishers.
8. *Biological Diversity and its Conservation*, Dushyant K.Sharma, Daya Publishing House.
9. *Environmental Pollution*, Dr.R.K. Khitoliya, S.Chand Publications.
10. *Air Pollution*, Bhola Gurjar, CRC PRESS Publishers Pvt. Ltd.

Paper VI: - Practical Based on Paper I& II (30 Practicals)

Practical's on dehydration of fruits and vegetables

1.	Types of Dryers	
2.	Pre-drying Treatments Blanching and Sulphuring	
3.	Drying	
4.	Dehydration of Bitter Gourd	
5.	Dehydration of Cabbage	
6.	Dehydration of Okra	
7.	Dehydration Powders of onion and garlic	
8.	Dehydration of Palak, methi,	
9.	Dehydration of other GLV	
10.	Dehydration of Pudina, Mint, Coriender	
11.	Dehydration of Tubers like arvi, Sweet potato,	
12.	Dehydration of Lotus-roots tapioca	
13.	Dehydration of Pumpkin	
14.	Dehydration of Yam, Ginger/ Haldi	
15.	Dehydration of Potato Flex and chips	
16.	Dehydration of Potato powder	
17.	Dehydration Flex of Tomatoes	
18.	Dehydration Powder of Tomatoes	
19.	Dehydration Powders of other vegetables including tomatoes	
20.	Dehydration of Beans	
21.	Dehydration of Beet	
22.	Dehydration of Brinjal	
23.	Dehydration of Green pea	
24.	Dehydration of Bottle gourd	
25.	Dehydration of Carrot	
26.	Dehydration of Cauliflower	
27.	Dehydration of Chilies	



28	Dehydration of Chilies Flex And Powder	
29	Post-dehydration Treatments:- Sweating/Conditioning	
30	Post-dehydration Treatments:- Weighting Packaging Storage	

Paper VI: - Practical Based on Paper II & III (30 Practicals)

1.	Drying : Sun drying , mechanical drying	
2.	Cooling, Freezing,	
3.	Salting, Sugaring Fruits	
4	Salting, Sugaring Vegetables	
5	Boiling, Solar dehydrating	
6	Smoking, Pickling, Lye,	
7	Canning, Jellying, Jugging, Burial	
8	Pasteurization	
9	Sterilization Vacuum packing,	
10	Artificial food additives, Irradiation,	
11	Pulsed electric field electroporation	
12	Modified atmosphere, Non-thermal plasma	
13	High-pressure food preservation,	
14	Bio-preservation, Hurdle technology	
15	Pre drying treatment, Blanching, Sulphuring.	
16	Chemical Process, Salting & Sugaring.	
17	Sweating of dehydrated Fruits	
18	Sweating of dehydrated Leafy Vegetables	
19	Sweating of dehydrated Fruit Vegetables	
20	Sweating of dehydrated Root Vegetables	
21	Sweating of dehydrated Exotic Vegetables	
22	Sweating of dehydrated Herbs	
23	Screening of dehydrated fruits	
24	Screening of dehydrated Leafy Vegetables	
25	Screening of dehydrated Fruit Vegetables	
26	Screening of dehydrated Root Vegetables	
27	Screening of dehydrated exotic Vegetables	
28	Screening of dehydrated Herbs	

29	Inspection and fumigation Vegetables
30	Inspection and fumigation Fruits



Paper VIII: - Practical Based on Paper IV & V (30 P)

1.	The packing Process for dehydrated vegetables	
2.	Clean and sanitation	
3.	Nontoxic material	
4	Lightweight durable packing material and types	
5	Easily disposable or recyclable	
6	Protective against light, moisture resistant and Airtight packing system	
7	Easily opened and closed, Impermeable to gases and odors, Durable, Low-cost, Tetra Pack	
8	Material used for packing - Plastic bags, Paper bags	
9	Material used for packing- Oxygen absorber, Silicon bags	
10	Machine used for packing- Seal pack machine, Vacuumed pack machine	
11	Spoilage of food Physical type	
12	Spoilage of food Chemical type	
13	Spoilage of food Biochemical type	
14	Spoilage of food Enzymatic type	
15	Introduction to Computers	
16	Windows Operating System	
17	MS Word Part:-I	
18	MS Word Part:-II	
19	MS Word Part:-III	
20	MS Excel Part:- I	
21	MS Excel Part:- II	
22	MS Excel Part:- III	
23	MS Power Point:- Part I	
24	MS Power Point:- Part II	
25	Effective use of ERP for day-to-day records.	
26	Web Browser And E-mail	
27	Introduction to Internet Part:- I	
28	Introduction to Internet Part:- I	
29	Use of Internet for marketing of the produce	

It is expected to opt for 115 Say 120 Hrs. Internship in a semester i.e. Daily 3 hrs. for 30 Days On different Farms.

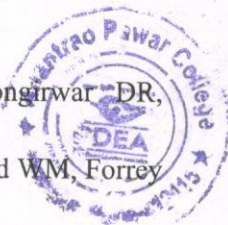
Semester: - Second (30 Credits)

Paper: - I: - Core Subject: - Pre and Post Dehydration Treatments (60 L)

1. Reconstitution of Dehydrated Fruits and Vegetables	06
Rehydrate Dried Food, How to reconstitute, soaking in water, alcohol, chemical,	
2 Osmotic Dehydration	06
Osmotic dehydration process, Uses in dehydrate, Purpose, Mode of Action, Osmotic pressure, difference between osmosis and absorption, mechanism	
3 Pre-dehydration treatment for vegetable and fruit	12
Steam blanching, water blanching, syrup blanching/ dipping, Ascorbic Acid, Honey dip, Commercial acids	
4. Post-dehydration treatment for vegetable and fruit	08
Sweating, Screening, packing,	
5. Other Treatments on fruit & vegetables	08
Fruit juices, syrups, jams and jellies, sauerkraut, pickles, preserves, fruit cocktails, etc. Vegetables refrigeration, and fermentation, canning, pasteurization, freezing, irradiation, and the addition of chemicals.	
5. Waste Management	08
Waste is recyclable, The 5 R's: Refuse, Reduce, Reuse, Repurpose, Recycle. Waste management.	
NABARD loan Food Processing Fund, PM Formalization of Micro Food Processing Enterprises (PMFME Scheme), Finance to food processing industry from Government Banks/ Private Banks.	
6. Proposal writing	06
Structure of a proposal, Steps to writing your own project proposal, Structuring a One-Page Proposal, the law of proposal	
7. Government permission and registration of firm	06
Food Safety and Standards Authority of India (FSSAI), Registrar of Firms (ROF)	

References:

1. *Mass transfer in plant materials in aqueous solutions of ethanol and sodium chloride: equilibrium data.* J Food Process : Biswal RN, Le Maguer M (1989)
2. *Effect of osmotic agents and concentration on fruit quality.* J Food Sci : Bolin HR, Huxsoll CC, Jackson R, Ng KC.



3. *Studies on osmotic dehydration of banana.* J Food Sci Technol. 1977; Bongirwar DR, Sreenivasan A.
4. *Dehydration of membranes coated foods osmosis.* J Sci Food Agric. 1968; Camirand WM, Forrey RR, Popper K, Boyle FP, Stanley WL.
5. *Influence of osmotic dehydration on texture, respiration and microbial stability of apple slices (Var. Granny Smith)* J Food Eng. 2009; Ponting JD.
6. Osmotic dehydration of fruits—recent modifications and applications. *Process Biochem.* 1973; Castelló ML, Igual M, Fito PJ, Chiralt A.
7. *Osmotic dehydration of fruits.* Food Technol. 1966; Ponting JD, Watters GG, Forrey RR, Jackson R, Stanley WL.
8. *Waste Management for the Food Industries* Ioannis Arvanitoyannis 2010 Publisher: Elsevier Science
9. <https://mofpi.nic.in/Schemes/related-schemes-other-agencies> (Download PDF)
10. *Food Processing Industries in India*
11. *Food Marketing and Distribution Selected Readings* 1971 Charles A. Mallowe, Daniel J. McLaughlin Chain Store Age Books

Paper: - II: - Core Subject: -Packing Grading, Branding and Logistics (60 Lectures)

1.	Packing of Product	12
	Outline of Pack house, Hygiene and sanitation in Pack house, Packaging materials, Packaging machineries.	
2	Grading	08
	Definition, Importance, Product grading, Benefits of grading, Techniques of grading: - Sorting, Screening, Dehulling, trimming, Destemming	
3	Branding	08
	Meaning, purpose, types, strategies, Logo, Methods of branding, Factors affecting branding.	
4.	Logistics	07
	Supply chain, Transportation, 7R's of logistics, Types of logistics, Functions of logistics.	
5.	Export of Dehydrated fruits and vegetables	07
	Present export scenario of Fruit and vegetables in India,	
6.	Government schemes and agencies supporting food processing	09
	The Agricultural and Processed Food Products Export Development Authority (APEDA) National Horticulture Board (NHB) National Horticulture Mission (NHM) Small Farmer Agri-Business Consortium (SFAC) Development Commissioner Micro, Small and Medium Enterprises (MSME) Pradhan Mantri Kaushal Vikas Yojana (PMKVY). MOFPI Schemes.	
7.	Marketing	09
	ways to attract customers, Advertising, Engaging With Food Bloggers, Participating in Food Festivals, Ways to Get New Customers, reconnect old customers, use of powerful words	



References:

1. *In packed processed foods* Edited : Philip Richardson
2. *Problems Associated with Mandatory Grade Labeling of Food Products at the Consumer level.* Brenda Ann (Curran) Anderson · 1966 Publisher : Cornell Univ.
3. *The Naming Book: 5 Steps to Creating Brand and Product Names that Sell.* Brad Flowers Published : Entrepreneur Media Incorporated/Entrepreneur Press 2020
4. *Recent Packaging and Logistics of Fresh and Processed Foods* Tanweer Alam, Priti Khemariya, Sahar Masud · 2018 Publisher :GRIN Verlag
5. *Enhancing Food Safety The Role of the Food and Drug Administration* National Research Council, Institute of Medicine, Board on Agriculture and Natural Resources, Robert B. Wallace, Food and Nutrition Board, Maria Oria, Committee on the Review of the Food and Drug Administration's Role in Ensuring Safe Food · 2010 Publisher :National Academies Press
6. *Investment Opportunities* Price Waterhouse Associates · 1993 Ministry of Food Processing Industries, Government of India
7. *Indian Banking* R Parameswaran · 2001 S. Chand Limited

Paper III: - Core Subject: - Food safety and Additives (60 L)

1.	Spoilage of dried products, defects, causes, and prevention	06
	Microbial spoilage, Physical spoilage, Chemical spoilage, Appearance of spoiled food. Signs of food spoilage, variety of causes, characteristics of food spoilage. types of spoilage and defects, How to Prevent Food Spoiling.	
2	Food Safety and Standards Regulations	06
	Food safety rules, the fundamental principles for food safety and food hygiene, the 4 cs of food safety (cleaning, cooking, cross contamination, chilling, contact), hazard analysis and risk-based preventive controls (HARPC), food safety modernization act (FSMA), prerequisite program (PRPS), critical control points (CCPS), operational prerequisite programs (OPRPS).	
3	Food additives and preservatives	06
	The different types of food additive and their uses, Examples of Food Additives (Preservatives, Color additives, Flavors and spices, Flavor enhancers, Emulsifiers), Natural preservatives, disadvantages of food additives	
4.	Details of the machineries	06

	Things to Consider in Purchasing Machine & Equipment, Factors that can influence machine choice, Prioritizing your equipment, Regulatory compliance.	
5.	Schedule for drying of fruits	06
	determine the best time to buy, Select drying processes, temperature, storage.	
6.	Schedule for drying of Vegetables	06
	determine the best time to buy, Select drying processes, temperature, storage.	
7	Good Manufacturing Practices (GMP)	06
	Principles of GMP, five key elements, 5 P's of GMP, GMP regulations	
8.	Value Education	08
	<p>Meaning, objectives and need,</p> <p>Constitutional or National values - Democracy, socialism, secularism, equality, justice, liberty, freedom and fraternity.</p> <p>Social Values - Pity and probity, self-control, universal brotherhood.</p> <p>Professional Values - Knowledge thirst, sincerity in profession, regularity, punctuality and faith.</p> <p>Religious Values - Tolerance, wisdom, character.</p> <p>Aesthetic values - Love and appreciation of literature and fine arts and respect for the same.</p> <p>National Integration and international understanding.</p> <p>Broad classification of Human Rights.</p> <p>a. Right to Life, Liberty and Dignity, b. Right to Equality, c. Right against Exploitation d. Cultural and Educational Rights e. Economic Rights f. Political Rights g. Social Rights</p>	
9	Problem solving	06
	Key problem-solving skills, Effective problem-solving process: Define the problem, Generate alternative solutions, Evaluate and select an alternative, Implement and follow up on the solution, Problem solving tools: Fishbone diagrams, Flowcharts, Strategy maps, mental maps, Idea maps, Concept maps, Layered process audit software, Charting software.	
10.	Introduction to IT skills	04
	Introduction to Computers, Windows Operating systems, MS word, Excel, Power Point	
	Internet, E mail, Web browsing, Web designing, ERP, Digital marketing	

References:-

1. *Food Spoilage Microorganisms* 2006. Publisher: Elsevier Science Editor: Clive de W Blackburn
2. *Food processing and preservation* B. SIVASANKAR · 2004, Publisher: PHI Learning
3. *The Chemistry of Food Additives and Preservatives*, Titus A. M. Msagati · 2012, Publisher: Wiley
4. *Food Preservatives*. Grahame W. Gould · 2012, Publisher: Springer US
5. *Industrial Marketing*, Volume 57, Issues 7-12/1972, Publisher: Crain Communications
6. *Food Processing* 2004 Publisher: Techpress (FPI) Limited



7. *Food and Drink - Good Manufacturing Practice A Guide to Its Responsible Management* Institute of Food Science and Technology, Louise Manning · 2012 Publisher: Wiley
8. *Value Education Need of the Hour* Yojana Patil · 2015 Publisher: Create Space Independent Publishing Platform
9. *Critical Thinking Your Guide to Effective Argument, Successful Analysis and Independent Study* Tom Chatfield · 2017 Publisher: SAGE Publications
10. *Problem Solving And Program Design In C, 5/E* Hanly · 2008, Publisher: Pearson Education.
11. *Introduction to Entrepreneurial Skills I* Kayode Asoga-allen · 2016 Publisher: CreateSpace Independent Publishing Platform
12. *Computer Application in Business (Tamil Nadu)* R Parameswaran · 2008 Publisher: S. Chand Limited

Paper VI: - Practical Based on Paper II (30 P)


1.	Types of Dryers	
2.	Pre-drying Treatments Blanching and Sulphuring	
3.	Drying	
4	Dehydration of Bread fruit (Avocado)	
5	Dehydration of Pears	
6	Dehydration of Peaches	
7	Dehydration of Grapes	
8	Dehydration of Apricots	
9	Dehydration of Plums	
10	Dehydration of Berries	
11	Dehydration of Figs	
12	Dehydration of Dates	
13	Dehydration of Papaya	
14	Dehydration of Jamun	
15	Dehydration of Flex and chips of Banana	
16	Dehydration of Banana powder	
17	Dehydration Flex and Chips of Apple	
18	Dehydration Powder of Apple	
19	Dehydration Powders of Mango	
20	Dehydration of flex and slices of Mango	



21	Osmo-dried mango slices	
22	Dehydration of Dates	
23	Dehydration of Kiwi	
24	Dehydration of Lemon	
25	Dehydration of Orange	
26	Dehydration of Mosambi	
27	Dehydration of Pinapple	
28	Dehydration of Pinapple Powder	
29	Post-dehydration Treatments:- Sweating/Conditioning	
30	Post-dehydration Treatments:- Weighting, Packaging, Storage	

Paper VII: - Practical Based on Paper II (30 P)

1.	Clean , sanitation and Packing	
2.	Lightweight , Nontoxic packing material	
3.	Easily disposable or recyclable	
4.	Moisture resistant	
5.	Airtight Protective against light	
6.	Easily opened and closed	
7.	Impermeable to gases and odors	
8.	Packing for dehydrated fruits and vegetables	
9.	Products obtained from Dried Vegetables	
10.	Waste Management	
11.	Waste Management	
12.	Waste Management	
13.	Waste Management	
14.	Manufacturing industries in Maharashtra and India.	
15.	Products obtained from Dried Fruits	
16.	Fruit Leathers Mango Vadi	
17.	Fruit Leathers Jack Fruit Vadi	
18.	Fruit Leathers Ginger candy	
19.	Instant upma	
20.	Instant Sheera	



21.	Instant Masalabhat	
22.	Instant Dhokla	
23.	Instant Idli-chatni	
24.	Instant Kheer	
25.	Other Preservation methods Papad	
26.	Freezing vegetables & Fruits	
27.	Pickles	
28.	Jam Mix fruit	
29.	Jam Single fruit	
30.	Jelly	

Paper VIII: - Practical Based on Paper II (30 P)

1.	Preparation of Masalas :- Part I:- Onion-Garlic, Kolhapuri and Garam.	
2.	Preparation of Masalas:- Part II:- Goda, Malvani and Chat.	
3.	Preparation of Masalas:- Part III:- Sambar, Chole, Pavbhaji and Panipuri .	
4.	Rehydration of dehydrated leafy vegetables:- :- Part I	
5.	Rehydration of dehydrated fruit vegetables:- :- Part II	
6.	Rehydration of dehydrated root vegetables:- :- Part III	
7.	Rehydration of dehydrated exotic vegetables:- :- Part IV	
8.	Rehydration of dehydrated fruits:- Part I	
9.	Rehydration of dehydrated fruits:- Part II	
10.	Rehydration of dehydrated fruits:- Part III	
11.	Preparation of fruit leather with Single fruit	
12.	Preparation of fruit leather with mix of fruit pulp	
13.	Introduction to packaging materials	
14.	Introduction to packaging machineries	
15.	Introduction to Computers	
16.	Windows Operating System	
17.	MS Word Part:-I	
18.	MS Word Part:-II	
19.	MS Word Part:-III	
20.	MS Excel Part:- I	
21.	MS Excel Part:- II	

22.	MS Excel Part:- III	
23.	MS Power Point:- Part I	
24.	MS Power Point:- Part II	
25.	Effective use of ERP for day-to-day records.	
26.	Web Browser And E-mail	
27.	Introduction to Internet Part:- I	
28.	Introduction to Internet Part:- I	
29.	Use of Internet for marketing of the produce	
30.	Digital marketing and Branding	



Sd/-
Principal

Anantrao Pawar College, Pirangut
Tal. Mulshi, Dist. Pune 412115

METHODS OF EVALUATION, PASSING, AND EVALUATION CRITERIA:- 2021-22

The evaluation of students will be done on three parameters:-

- Internal assessment
- Practical Examination
- Semester End/ University examination

For university examination, question papers will be set for seventy marks (three hours duration). Evaluation will be done on a continuous basis, three times during each semester. Internal assessment will be of 30 marks.

The colleges need to adopt any three out of the following methods for internal assessment:-

- Written examination
- Quiz
- Presentations
- Projects
- Assignments
- Tutorials
- Oral examination

STANDARD OF PASSING.

A candidate is required to obtain 40% marks in Internal Assessment, Practical Examination and Semester End University Examination.

It means that passing separately at internal assessment, practical examination and semester end university examination is compulsory.

Theory Papers: Paper I,II & III - (Total Marks: 100)

Question Paper Format (Semester-I& II End Exam)

Time: Three Hours

Total Marks: 70

- Attempt any **three out of five** - 15 Marks
- Attempt any **three out of five** - 15 Marks
- Attempt any **two out of four** - 20 Marks
- Attempt any **four out of six** - 20 Marks

Internal Evaluation- Total- 30 Marks (Applicable to both Semester I & II)

- Written Test (on prescribed texts)- **10 Marks**
- Project/Group Discussion/Tutorial/Home Assignment/Seminar/Participation in a Classroom Activity- **20 Marks**


Practical Papers: Paper IV,V & VI (Total Marks: 150)


Internal Evaluation- Total- 100 Marks (Applicable to both Semester I & II)

- Project- **50 Marks**
- Participation in a Classroom Activity- **20 Marks**
- Tutorial/Home Assignment/Seminar - **30 Marks**

Semester End Exam (Semester-I& II) Total- 50 Marks

- Questions on Project/ Presentation/Home Assignment/Tutorial - **50 Marks** **Time: One Hour**
 - Attempt any **three out of five** - 15 Marks
 - Attempt any **three out of five** - 15 Marks
 - Attempt any **two out of four** - 20 Marks


Co-ordinator


अनंतराव पवार महाविद्यालय, पिंपरी
ता. मुळशी, जि.पुणे-४१२११५.



पुणे जिल्हा शिक्षण मंडळाचे

अनंतराव पवार महाविद्यालय, पिरंगुट ता.- मुळशी जि. पुणे- ४१२११५

उपस्थिती अहवाल : डी.व्होक फ्रुट्स अंड व्हेजीटेबल ड्रायिंग / हायड्रेशन टेक्निशियन (शैक्षणिक वर्ष : २०२१-२२)

विद्यार्थ्यांचे नाव	दिनांक																						
	०१/०१/२२	०२/०१/२२	०३/०१/२२	०४/०१/२२	०५/०१/२२	०६/०१/२२	०७/०१/२२	०८/०१/२२	०९/०१/२२	१०/०१/२२	११/०१/२२	१२/०१/२२	१३/०१/२२	१४/०१/२२	१५/०१/२२	१६/०१/२२	१७/०१/२२	१८/०१/२२	१९/०१/२२	२०/०१/२२	२१/०१/२२	२२/०१/२२	२३/०१/२२
१) आल्बर्ट प्रदिक्ष सेजरी	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A	pratiksha S.A
२) आल्बर्ट निशा वरुण	Alb	Alb	Alb	Alb	Alb	Alb	Alb	Alb	Alb	Alb	Alb	Alb	Alb	Alb	Alb	Alb	Alb	Alb	Alb	Alb	Alb	Alb	Alb
३) अरेकर शुभदा मशवण	B	B	B	B	A	B	B	A	B	B	B	B	B	B	A	B	A	B	A	B	A	A	B
४) चांदगुडे स्वप्नील दत्तात्रय	Sw	Sw	Sw	Sw	Sw	Sw	Sw	Sw	Sw	Sw	Sw	Sw	Sw	Sw	Sw	Sw	Sw	Sw	Sw	Sw	Sw	Sw	Sw
५) मेझाग किर्ती नारायण	Kirti	Kirti	Kirti	Kirti	Kirti	Kirti	Kirti	Kirti	Kirti	Kirti	Kirti	Kirti	Kirti	Kirti	Kirti	Kirti	Kirti	Kirti	Kirti	Kirti	Kirti	Kirti	Kirti
६) आगराळ मुनिक्ष प्रिण्ट	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha	pratiksha
७) अरो सार्धक किशोर	MSK	MSK	MSK	MSK	MSK	MSK	MSK	MSK	MSK	MSK	MSK	MSK	MSK	MSK	MSK	MSK	MSK	MSK	MSK	MSK	MSK	MSK	MSK
८) बानेकर श्रीपाद श्याम	Banekar	Banekar	Banekar	Banekar	Banekar	Banekar	Banekar	Banekar	Banekar	Banekar	Banekar	Banekar	Banekar	Banekar	Banekar	Banekar	Banekar	Banekar	Banekar	Banekar	Banekar	Banekar	Banekar
९) उभे कजल विसन	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe	Kbhe
१०) कदम पुजा सेजरी	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam
११) शुभाळ आरती किय	Arati	Arati	Arati	Arati	Arati	Arati	Arati	Arati	Arati	Arati	Arati	Arati	Arati	Arati	Arati	Arati	Arati	Arati	Arati	Arati	Arati	Arati	Arati
१२) बुधकर वैष्णव डीपज	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar	Budhkar
१३) कंधार गुरुजी अनंता	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar	Kandhar

Teacher

Principal

Anant Rao Pawar College, Pirangut
Tal. Mulshi, Dist. Pune - 412115.

Pune District Education Association's
Anantrao Pawar College, Pirangut.



Tal- Mulshi, Dist.Pune-412115

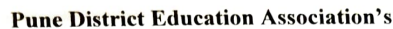
Presenty Report : Diploma in Fruits & veg. Drying / Dehydration Technician

(Academic Year- 2021-22)

		Date																				(Academic Year-2021-22)									
Student Name		20/01/22	02/02/22	04/02/22	05/02/22	07/02/22	08/02/22	09/02/22	11/02/22	12/02/22	14/02/22	15/02/22	16/02/22	17/02/22	18/02/22	21/02/22	22/02/22	23/02/22	24/02/22	25/02/22	26/02/22										
1	Alhat Pratiksha S.	Pratiksha S.A.	Pratiksha S.A.	Pratiksha S.A.	Pratiksha S.A.	Pratiksha S.A.	Pratiksha S.A.	Pratiksha S.A.	Pratiksha S.A.	Pratiksha S.A.	Pratiksha S.A.	Pratiksha S.A.	Pratiksha S.A.	Pratiksha S.A.	Pratiksha S.A.	Pratiksha S.A.	Pratiksha S.A.	Pratiksha S.A.	Pratiksha S.A.	Pratiksha S.A.	Pratiksha S.A.										
2	Athale Nisha B.	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB	AB										
3	Bhaskar Shubhada Y.	Shubhada Y.	Shubhada Y.	Shubhada Y.	Shubhada Y.	Shubhada Y.	Shubhada Y.	Shubhada Y.	Shubhada Y.	Shubhada Y.	Shubhada Y.	Shubhada Y.	Shubhada Y.	Shubhada Y.	Shubhada Y.	Shubhada Y.	Shubhada Y.	Shubhada Y.	Shubhada Y.	Shubhada Y.	Shubhada Y.										
4	Chundgude Swapnil D.	Swapnil D.	Swapnil D.	Swapnil D.	Swapnil D.	Swapnil D.	Swapnil D.	Swapnil D.	Swapnil D.	Swapnil D.	Swapnil D.	Swapnil D.	Swapnil D.	Swapnil D.	Swapnil D.	Swapnil D.	Swapnil D.	Swapnil D.	Swapnil D.	Swapnil D.	Swapnil D.										
5	Meshram Kirti N.	MK	MK	MK	MK	MK	MK	MK	MK	MK	MK	MK	MK	MK	MK	MK	MK	MK	MK	MK	MK										
6	Amale Pratiksha V.	Pratiksha V.	Pratiksha V.	Pratiksha V.	Pratiksha V.	Pratiksha V.	Pratiksha V.	Pratiksha V.	Pratiksha V.	Pratiksha V.	Pratiksha V.	Pratiksha V.	Pratiksha V.	Pratiksha V.	Pratiksha V.	Pratiksha V.	Pratiksha V.	Pratiksha V.	Pratiksha V.	Pratiksha V.	Pratiksha V.										
7	Masare Sushant K.	SK	SK	SK	SK	SK	SK	SK	SK	SK	SK	SK	SK	SK	SK	SK	SK	SK	SK	SK	SK										
8	Barakae Sheipad S.	Sheipad S.	Sheipad S.	Sheipad S.	Sheipad S.	Sheipad S.	Sheipad S.	Sheipad S.	Sheipad S.	Sheipad S.	Sheipad S.	Sheipad S.	Sheipad S.	Sheipad S.	Sheipad S.	Sheipad S.	Sheipad S.	Sheipad S.	Sheipad S.	Sheipad S.	Sheipad S.										
9	Ubhe Kalyan K.	Kalyan K.	Kalyan K.	Kalyan K.	Kalyan K.	Kalyan K.	Kalyan K.	Kalyan K.	Kalyan K.	Kalyan K.	Kalyan K.	Kalyan K.	Kalyan K.	Kalyan K.	Kalyan K.	Kalyan K.	Kalyan K.	Kalyan K.	Kalyan K.	Kalyan K.	Kalyan K.										
10	Kadam Pooja S.	Pooja S.	Pooja S.	Pooja S.	Pooja S.	Pooja S.	Pooja S.	Pooja S.	Pooja S.	Pooja S.	Pooja S.	Pooja S.	Pooja S.	Pooja S.	Pooja S.	Pooja S.	Pooja S.	Pooja S.	Pooja S.	Pooja S.	Pooja S.										
11	Dhumal Arati V.	Arati V.	Arati V.	Arati V.	Arati V.	Arati V.	Arati V.	Arati V.	Arati V.	Arati V.	Arati V.	Arati V.	Arati V.	Arati V.	Arati V.	Arati V.	Arati V.	Arati V.	Arati V.	Arati V.	Arati V.										
12	Budhkar Vaishnavi S.	Vaishnavi S.	Vaishnavi S.	Vaishnavi S.	Vaishnavi S.	Vaishnavi S.	Vaishnavi S.	Vaishnavi S.	Vaishnavi S.	Vaishnavi S.	Vaishnavi S.	Vaishnavi S.	Vaishnavi S.	Vaishnavi S.	Vaishnavi S.	Vaishnavi S.	Vaishnavi S.	Vaishnavi S.	Vaishnavi S.	Vaishnavi S.	Vaishnavi S.										
13	Kandhare Pooja A.	Pooja A.	Pooja A.	Pooja A.	Pooja A.	Pooja A.	Pooja A.	Pooja A.	Pooja A.	Pooja A.	Pooja A.	Pooja A.	Pooja A.	Pooja A.	Pooja A.	Pooja A.	Pooja A.	Pooja A.	Pooja A.	Pooja A.	Pooja A.										

Teacher

Principal



Tal- Mulshi, Dist.Pune-412115

Presently Report : Diploma in Fruits & Veg. Drying / Dehydration Technician.

(Academic Year-2021-22)

Presenty Report : Diploma															(Academic Year)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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Teacher

Principal

Principal
Anantao Pawar College, Pirangut
Tal. Warananagar, Dist. Pune - 412115



पुणे जिल्हा शिक्षण मंडळाचे
अनंतराव पवार महाविद्यालय, पिरंगुट

ता.- मुळशी जि. पुणे- ४१२११५

वार्षिक अहवाल : डी.व्होक फ्रुट्स अँड व्हेजीटेबल ड्रायिंग / डिहायड्रेशन टेक्निशियन

(शैक्षणिक वर्ष: २०२१-२२)

शैक्षणिक वर्ष २०२०-२१ पासून UGC-NSQF च्या योजनेअंतर्गत महाविद्यालयात फ्रुट्स अँड व्हेजीटेबल ड्रायिंग/ डिहायड्रेशन टेक्निशियन हा कोर्स सुरू करण्यात आला आहे. शैक्षणिक वर्ष २०२१-२२ हा कोर्स पूर्ण करण्यात आला आहे. या योजनेअंतर्गत महाविद्यालयातील विद्यार्थ्यांना कौशल्यावर आधारित शिक्षण मिळावे तसेच त्यांना रोजगाराच्या व स्वयंरोजगाराच्या संधी उपलब्ध व्हाव्यात या उद्देशाने महाविद्यालयात हा कोर्स सुरू करण्यात आला. हे महाविद्यालय ग्रामीण भागातील आहे. तसेच या महाविद्यालयात येणारे विद्यार्थी बहुतांश ग्रामीण भागातील आहेत. बहुतांश विद्यार्थ्यांची उपजीविका शेती या व्यवसायावरती अवलंबून आहे म्हणून त्यांना शेतीच्या माध्यमातून रोजगार उपलब्ध व्हावा तसेच शेतीवर आधारित उद्योग व्यवसायांची ओळख व्हावी त्यामधून त्यांची आर्थिक परिस्थिती सुधारण्यास परिणाम होईल हे ध्येय समोर ठेवून हा कोर्स महाविद्यालयात सुरू करण्यात आला. तसेच मुळशी तालुका पुणे शहरापासून जवळ असल्याकारणाने शेतीमालाला चांगल्या प्रकारची बाजारपेठ उपलब्ध आहे. फ्रुट्स अँड व्हेजीटेबल ड्रायिंग / डिहायड्रेशन टेक्निशियन या कोर्सेसच्या माध्यमातून शेती तंत्रज्ञान व शेतमाल प्रक्रिया कशी करावी यांचे मार्गदर्शन करण्यात येत आहे. या शैक्षणिक वर्षात या कोर्सला एकूण १७ विद्यार्थ्यांनी प्रवेश घेतला.

या कोर्स अभ्यासक्रम महाविद्यालयातील शिक्षक व उद्योग क्षेत्रात कार्यरत असलेल्या व्यक्तींच्या मार्गदर्शनाखाली पूर्ण करण्यात आला. या कोर्सला महाविद्यालयातील श्री. अक्षय शेते व एस.एन. डी.टी. महाविद्यालयाचे फूड सायन्स या विषयाचे निवृत्त प्राध्यापक श्री.एस. एम नाइकरे व श्रीमती. अरुणा हेरेकर यांनी अध्यापनाचे कार्य केले. हा अभ्यासक्रम १८० सैद्धांतिक, ९० प्रात्यक्षिके तासिका व प्रत्यक्ष प्रशिक्षण अशा मार्फत प्रथम व द्वितीय असा प्रत्येक सत्राचा अभ्यासक्रम पूर्ण करण्यात आला. अभ्यासक्रमास प्रवेशित झालेल्या १७ विद्यार्थ्यांपैकी १२ एवढ्या विद्यार्थ्यांनी दोन्ही सत्रांच्या परीक्षा दिल्या.

हा कोर्स पूर्ण करण्यासाठी बी. व्होक चे प्रमुख डॉ. प्रवीण चोळके व महाविद्यालयाच्या प्राचार्य डॉ. शर्मिला चौधरी यांचे बहुमोल मार्गदर्शन लाभलेया कोर्सेचे समन्वयक म्हणून श्री अक्षय शेते यांनी काम पाहिले.

समन्वयक

अनंतराव पवार महाविद्यालय, पिरंगुट
ता. मुळशी, जि.पुणे-४१२११५.

**Pune District Education Association's
Anantrao Pawar College, Pirangut**

Tal.- Mulshi Dist. Pune- 412115



**Annual Report: D.Voc Fruits and Vegetable Drying / Dehydration
Technician**

(Academic Year: 2021-22)

From the academic year 2020-21 under the scheme of UGC-NSQF Diploma in Fruits and Vegetable Drying/ Dehydration Technician course has been started in the college. Under this scheme, this course was started in the college with the aim of providing skill based education to the students of the college and providing those opportunities for employment and self-employment. This college is in a rural area. Also, most of the students coming to this college are from rural areas. Since the livelihood of most of the students depends on agriculture, this course was started in the college with the aim that they should get employment through agriculture and get to know agriculture based industries and businesses which will affect their economic situation. Also Mulshi Tehsil is close to Pune city so good market is available for agricultural produce. Through the Fruits and Vegetable Drying / Dehydration Technician courses, guidance is being given on how to process agricultural technology and produce. Total students 17 enrolled in this course in this academic year.

This course was completed under the guidance of the faculty of the college and the persons working in the industry. This course was taught by Prof. Akshay Shete and S.N. D.T. Retired Professor of Food Science of the College Prof. S. M Naikare and Smt. Aruna Herekar did the teaching work. This course was completed through 180 hours of theory, 90 hours of practical training and practical training for each semester. Out of 17 students admitted to the course, 12 students appeared in both the semester exams. Out of these 12 students passed. The annual result of this course is 100%.

To complete this course, Head of B.Voc and the Vice-Principal of the college Dr. Praveen Cholke, Prof. Akshay Shete worked as the coordinator of the course under the valuable guidance of Hon'ble Principal Dr. Sharmila Chaudhari.

Co-ordinator

Principal

**Anantrao Pawar College, Pirangut
Tal. Mulshi, Dist Pune 412115**

SAVITRIBAI PHULE PUNE UNIVERSITY

(formerly University of Pune)

GANESHKHIND PUNE 411 007



Passing Certificate

This is to certify that -

Smt. ADHALE NISHA BABAN

Mother's Name:-KAMAL

has appeared for the

D.VOC. (F.V.D/D.T)

examination held in month of April 2022 and declared to have passed the examination with 'A+' grade.

This is further to certify that she is eligible for the aforesaid Degree Certificate, whenever she applies for the same at the University Convocation.

Passing Certificate issued by Savitribai Phule Pune University shall be treated as the Provisional Degree Certificate till the candidate gets his/her degree certificate in the ensuing Convocation ceremony.

Seat No. : 2302

P.R.No. : 2021242172

College code: 0866

Mahesh Kakade
Director

DATE : 20 MARCH 2023

Board of Examinations & Evaluation

SAVITRIBAI PHULE PUNE UNIVERSITY

(formerly University of Pune)

GANESHKHIND PUNE 411 007



Passing Certificate

This is to certify that -

Smt. ALHAT PRATIKSHA SAMBHAJI

Mother's Name: -LATA

has appeared for the

D.VOC. (F.V.D/D.T)

examination held in month of April 2022 and declared to have passed the examination with 'A' grade.

This is further to certify that she is eligible for the aforesaid Degree Certificate, whenever she applies for the same at the University Convocation.

Passing Certificate issued by Savitribai Phule Pune University shall be treated as the Provisional Degree Certificate till the candidate gets his/her degree certificate in the ensuing Convocation ceremony.

Seat No. : 2301

P.R.No. : 2021242171

College code: 0866

Mahesh Kakade
Director

DATE: 20 MARCH 2023

Board of Examinations & Evaluation

SAVITRIBAI PHULE PUNE UNIVERSITY

(formerly University of Pune)

GANESHKHIND PUNE 411 007



Passing Certificate

This is to certify that -

Smt. BHAREKAR SHUBHADA YASHWANT

Mother's Name:-NANDA

has appeared for the

D.VOC.(F.V.D/D.T)

examination held in month of April 2022 and declared to have passed the examination with 'A+' grade.

This is further to certify that she is eligible for the aforesaid Degree Certificate, whenever she applies for the same at the University Convocation.

Passing Certificate issued by Savitribai Phule Pune University shall be treated as the Provisional Degree Certificate till the candidate gets his/her degree certificate in the ensuing Convocation ceremony.

Seat No. : 2303

P.R.No. : 2021242166

College code: 0866

Mahesh Kakade
Director

DATE : 20 MARCH 2023

Board of Examinations & Evaluation

SAVITRIBAI PHULE PUNE UNIVERSITY

(formerly University of Pune)

GANESHKHIND PUNE 411 007



Passing Certificate

This is to certify that -

Shri CHANDGUDE SWAPNIL DATTATRAY

Mother's Name:-SUVARNA

has appeared for the

D.VOC.(F.V.D/D.T)

examination held in month of April 2022 and declared to have passed the examination with 'A' grade.

This is further to certify that he is eligible for the aforesaid Degree Certificate, whenever he applies for the same at the University Convocation.

Passing Certificate issued by Savitribai Phule Pune University shall be treated as the Provisional Degree Certificate till the candidate gets his/her degree certificate in the ensuing Convocation ceremony.

Seat No. : 2304

P.R.No. : 2021242153

College code: 0866

Mahesh Kakade
Director

DATE : 20 MARCH 2023

Board of Examinations & Evaluation

SAVITRIBAI PHULE PUNE UNIVERSITY

(formerly University of Pune)

GANESHKHIND PUNE 411 007



Passing Certificate

This is to certify that -

Shri AMRALE PRATIKSHA VITHHAL

Mother's Name:-SUVARNA

has appeared for the

D.VOC.(F.V.D/D.T)

examination held in month of April 2022 and declared to have passed the examination with 'A+' grade.

This is further to certify that he is eligible for the aforesaid Degree Certificate, whenever he applies for the same at the University Convocation.

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Seat No. : 2305

P.R.No. : 2021242163

College code: 0866

Mahesh Kakade

Director

Board of Examinations & Evaluation

DATE: 20 MARCH 2023

SAVITRIBAI PHULE PUNE UNIVERSITY

(formerly University of Pune)

GANESHKHIND PUNE 411 007



Passing Certificate

This is to certify that -

Shri BANEKAR SHRIPAD SHAM

Mother's Name:-SHUBHANGI

has appeared for the

D.VOC.(F.V.D/D.T)

examination held in month of April 2022 and declared to have passed the examination with 'A' grade.

This is further to certify that he is eligible for the aforesaid Degree Certificate, whenever he applies for the same at the University Convocation.

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Seat No. : 2307

P.R.No. : 2021242152

College code: 0866

Mahesh Kakade
Director

DATE: 20 MARCH 2023

Board of Examinations & Evaluation

SAVITRIBAI PHULE PUNE UNIVERSITY

(formerly University of Pune)

GANESHKHIND PUNE 411 007



Passing Certificate

This is to certify that -

Smt. UBHE KAJAL KISAN

Mother's Name:-KAMAL

has appeared for the

D.VOC.(F.V.D/D.T)

examination held in month of April 2022 and declared to have passed the examination with 'A+' grade.

This is further to certify that she is eligible for the aforesaid Degree Certificate, whenever she applies for the same at the University Convocation.

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Seat No. : 2308

P.R.No. : 2021242157

College code: 0866

Mahesh Kakade
Director

DATE : 20 MARCH 2023

Board of Examinations & Evaluation

SAVITRIBAI PHULE PUNE UNIVERSITY

(formerly University of Pune)

GANESHKHIND PUNE 411 007



Passing Certificate

This is to certify that -

Smt. KADAM POOJA SANJIV

Mother's Name:-USHA

has appeared for the

D.VOC.(F.V.D/D.T)

examination held in month of April 2022 and declared to have passed the examination with 'A+' grade.

This is further to certify that she is eligible for the aforesaid Degree Certificate, whenever she applies for the same at the University Convocation.

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Seat No. : 2309

P.R.No. : 2021242162

College code: 0866

Mahesh Kakade
Director

DATE : 20 MARCH 2023

Board of Examinations & Evaluation

SAVITRIBAI PHULE PUNE UNIVERSITY

(formerly University of Pune)

GANESHKHIND PUNE 411 007



Passing Certificate

This is to certify that -

Smt. DHUMAL ARTI VIJAY

Mother's Name:-POOJA

has appeared for the

D.VOC.(F.V.D/D.T)

examination held in month of April 2022 and declared to have passed the examination with 'A' grade.

This is further to certify that she is eligible for the aforesaid Degree Certificate, whenever she applies for the same at the University Convocation.

Passing Certificate issued by Savitribai Phule Pune University shall be treated as the Provisional Degree Certificate till the candidate gets his/her degree certificate in the ensuing Convocation ceremony.

Seat No. : 2310

P.R.No. : 2021242164

College code: 0866

Mahesh Kakade
Director

DATE: 20 MARCH 2023

Board of Examinations & Evaluation

SAVITRIBAI PHULE PUNE UNIVERSITY

(formerly University of Pune)

GANESHKHIND PUNE 411 007



Passing Certificate

This is to certify that -

Smt. KANDHARE RUTUJA ANANTA

Mother's Name:-KUNDA

has appeared for the

D.VOC.(F.V.D/D.T)

examination held in month of April 2022 and declared to have passed the examination with 'A' grade.

This is further to certify that she is eligible for the aforesaid Degree Certificate, whenever she applies for the same at the University Convocation.

Passing Certificate issued by Savitribai Phule Pune University shall be treated as the Provisional Degree Certificate till the candidate gets his/her degree certificate in the ensuing Convocation ceremony.

Seat No. : 2311

P.R.No. : 2021242169

College code: 0866

Mahesh Kakade
Director

DATE : 20 MARCH 2023

Board of Examinations & Evaluation

SAVITRIBAI PHULE PUNE UNIVERSITY

(formerly University of Pune)

GANESHKHIND PUNE 411 007



Passing Certificate

This is to certify that -

Smt. GURKI SRUSHTI MALLESH

Mother's Name:-GAURAKKA

has appeared for the

D.VOC. (F.V.D/D.T)

examination held in month of April 2022 and declared to have passed the examination with 'A+' grade.

This is further to certify that she is eligible for the aforesaid Degree Certificate, whenever she applies for the same at the University Convocation.

Passing Certificate issued by Savitribai Phule Pune University shall be treated as the Provisional Degree Certificate till the candidate gets his/her degree certificate in the ensuing Convocation ceremony.

Seat No. : 2312

P.R.No. : 2021242159

College code: 0866

Mahesh Kakade

Director

Board of Examinations & Evaluation

DATE: 20 MARCH 2023