

**PUNE DISTRICT EDUCATION ASSOCIATON'S** 

# **ANANTRAO PAWAR COLLEGE**

PIRANGUT. TAL. MULSHI. DIST. PUNE 412 115





# **COURSES-BROUCHURE**



CERTIFICATE, ADD-ON,
SHORT-TERM
&
DIPLOMA COURSES



2020-21

# DIPLOMA AND CERTIFICATE COURSES (2020-21)





# Anantrao Pawar College, Pirangut, Tal. - Mulshi, Dist. - Pune.



Academic Year- 2020-21

Name of the Add-on/ Certificate/ Value added program	•	Diploma in Organic Urban Farming
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

Anantrao Pawar Cullege Pirangut





#### Anantrao Pawar College, Pirangut

Date: 29/09/2020

#### **Important Notice for Students**

All the students enrolled for **Diploma Course: Organic Urban Farming** are hereby informed that the lectures and Practicals of this course will be start from 01/10/2020.

Attendance is compulsory for all the enrolled students.

Coordinator

CPOF. A.M. Shete

Anantrao Pawar Goliege, Pirangui Tal Mushi, Dist. Pine-412415

# DIPLOMA AND CERTIFICATE COURSES (2020-21)

#### A Diploma in Organic Farming

CLASS: Open to all students of the collegeDURATION: 01 YEARCOORDINATOR: Prof Akshay SheteCONTACT NO:8888422298

**Objectives of the Course:** To increasing the employment opportunity for rural youth at village level in organic market as organic grower, stakeholders, and entrepreneurs. To create first generation organic agriculture extension workers, field workers and organic growers at village level.

- To create work force which will help/guide/learn the techniques for doubling farmer's income at village level like reducing input cost/inputs management, multilayer cropping, crop waste management, nutrient management, water management etc.
- To impart skills at village level required for organic farming practices and related marketing economics.

## **Syllabus**

Sr.	Name of the	Course Content(s)	Lectures	s (Hrs)	Intake	Course
No.	Course		T*	PP*		Fee (Rs.)
1	7	Introduction, Concept/ Philosophies, Principles and Need of organic farming.	36	15		100
2	/	Soil health, Conversion to organic with soil health management, Crop management, Nutrient Management and Pest Management and Multilayer cropping system base farm planning.	36	15		À,
3	Organic	Composting and recycling of organic matter in organic Agriculture	36	15	50	3600
4	Farming	On-farm input generation and resource management.	36	15	30	3000
5		Traditional organic input preparation/formulation of Biofertilizer, biopesticides, plant health promoters.	36	15		
6		Economics of organic farming, System.	36	15		
7		Branding of rural products, FSSAI, marketing and packaging of organic produce, Current Government schemes related to organic farming.	36	15		
8	1	Economics of organic farming, System.	36	15	1	

T\*- Theory P\*\*- Practical

#### **Learning Outcomes:**

- Develop critical understanding on various aspects of agronomy.
- The nutrition and application of nutrients to plants.
- The cropping methods and crop rotation
- Realize various weed management practices.

#### **Job Opportunities:**

- Organic Agricultural or Food Scientist
- Organic Agricultural Sciences Teacher Postsecondary

- Organic Farmer or Rancher
- Organic Certifying Agent
- Organic Niche Retailer

POEA

Dr. Sharmila R. Chaudhari Principal

Anantrao Pawar College, Pirangut

"A gap in skills and abilities reveal a golden opportunity"

# SYLLABUS OF DIPLOMA IN ORGANIC URBAN FARMING

As per the guidelines of NSQF it is expected to include 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 credits and 12 Credits for Practical's and Theory.

#### Semester wise Papers and Workload.

	Semester I				Semester II		
Papers	Туре	Credits	Hrs.	Papers	Type	Credits	Hrs
Paper I	Theory	2.4	36	Paper I	Theory	2.4	36
Paper II	Theory	2.4	36	Paper II	Theory	2.4	36
Paper III	Theory	2.4	36	Paper III	Theory	2.4	36
Paper IV	Theory	2.4	36	Paper IV	Theory	2.4	36
Paper V	Theory	2.4	36	Paper V	Theory	2.4	36
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	Hands on	06	180	Hands on	Hands on	06	180
Training	Training			Training	Training		
		30	720	V		30	720
	T	otal Cred	its in a	year 60/ 1440 H	rs.	•	

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



# Diploma in Fruits and Vegetables Drying/ Dehydration Technician:-Outline of the Syllabus

Sen	nester I	Se	mester II
DOT 111: Theory	Core Subject:	DOT 211: Theory	Diseases and Pests of
	Introduction to organic	Paper I	vegetable and Fruits
•	Urban Farming (36		(36 Lectures)
	Lectures)		70
DOT112: Theory	Vegetable Cultivation	DOT 212: Theory	Bio fertilizers and Bio
Paper II	Part-I (36 Lectures)	Paper II	pesticides(36 Lectures)
DOT 113: Theory	Vegetable Cultivation	DOT 213: Theory	Packing, Grading, Direct
			Marketing and organic
Paper III	Part-II (36 Lectures)	Paper III	Certification (36 Lectures)
DOT 114: Theory	Vegetable & Fruits	DOT 214: Theory	Organic Farming
Paper IV	PlantssCultivation Part-	Paper IV	Management(36 Lectures)
	III (36 Lectures)		
DOT 115: Theory	General and	DOT 215: Theory	General Education
Paper V	Environment Education	Paper V	(36 Lectures)
	(36 Lectures)		
DOP 116:	- Practical Based on	DOP 216:	Practical Based on Paper
Practical Paper I	Paper I and II (30 P)	Practical Paper I	II (30P)
DOP 117:	Practical Based on Paper	DOP 217:	Practical Based on Pape
Practical Paper II	III (30 P)	Practical Paper II	I (30 P)
DOP 118: Practical	Practical Based on Paper	DOP 218:	Practical Based on Pape
Paper III	IV and V (30 P)	Practical Paper III	III, IV and V (30 P)



#### Semester: - First (30 Credits)

# DOT 111: Paper: - I: - Core Subject: - Introduction to organic Urban Farming (36 L)

#### Course Outcome: -

- To introduce the student for organic farming.
- To provide the actual practical knowledge of Organic farming.
- To provide knowledge of ancient as well as modern technologies.
- To develop agriculture skill in student.
- To develop self-employability in student.

Concept and Definition of organic Urban farming	06
Concept, Definition, Present status at industrial level in India and Maharashtra.	
Need and advantages of organic farming	06
Need of organic farming, Advantages of organic farming, Role of Desi cow in or	rganic
farming and Cow dung and urine based products.	
Importance of Crop rotation	03
Crop Rotation method, Crop Plant use in Crop rotation	
Equipment's of organic urban farming	04
Pots, Racks, Sprayer, Garden tools, Power trailer, Seed Processor, Harvesting Equipment of the Pots, Racks, Sprayer, Garden tools, Power trailer, Seed Processor, Harvesting Equipment of the Pots, Racks, Sprayer, Garden tools, Power trailer, Seed Processor, Harvesting Equipment of the Pots, Racks, Sprayer, Garden tools, Power trailer, Seed Processor, Harvesting Equipment of the Pots, Racks, Sprayer, Garden tools, Power trailer, Seed Processor, Harvesting Equipment of the Pots, Racks, Sprayer, Garden tools, Power trailer, Seed Processor, Harvesting Equipment of the Pots, Racks, Sprayer, Garden tools, Power trailer, Seed Processor, Harvesting Equipment of the Pots, Racks, Sprayer, Pots, Racks, Ra	nent
Selection of Site	03
Components of site selection- soil quality, sunlight, water availability	•
Biology of the plant	04
Morphology and anatomy of plant parts with function, Type of Tissue, Xylem, P	hloem,
Stomata.	
	Concept, Definition, Present status at industrial level in India and Maharashtra.  Need and advantages of organic farming  Need of organic farming, Advantages of organic farming, Role of Desi cow in organing and Cow dung and urine based products.  Importance of Crop rotation  Crop Rotation method, Crop Plant use in Crop rotation  Equipment's of organic urban farming  Pots, Racks, Sprayer, Garden tools, Power trailer, Seed Processor, Harvesting Equipment's of site selection-soil quality, sunlight, water availability  Biology of the plant  Morphology and anatomy of plant parts with function, Type of Tissue, Xylem, P

Ol.	P		
6.	1	Physiology of Plants:-	06
	1	Photosynthesis, Dormancy, Transpiration, Ascent of sap, Plant Growth regu	lators,
		Physiology of Flowering, Stress physiology	
7	1	Role of Abiotic Factors in plant life	04
		Water, Soil, Humidity, Rainfall and Wind	

Plant propogation, Hatman and Koster. Principle and practices

Plant physiology, S.N. Pandey and B.K. Sinha (2014), Vikas Publishing House Pvt.

Ltd. India

A.T.B of Plant Physiology, Verma S.K. and Verma Mohit (2007) S. Chand Publications.

Indian Agriculture Book, Dr. Anirudh Kumar, Indian books periodicals Publications.

Organic Farming, Suresh N. Deshnukh, Agrobios Publications.

## DOT 112: Paper II: - Core Subject: - Vegetable Cultivation Part-I (36 Lectures)

#### Course Outcome: -

- To providing the basic knowledge of vegetable.
- To develop skill of cultivation technique of Organic vegetable.
- To understand actual irrigation method.
- To cultivate vegetable in pots.
- To manipulate the production of vegetables.
- This method useful for small area farming or terrace farming.

1	Basic Practices for Preparation of Plantlet Nursery				
lw ()	Bed Preparation, Control conditions, Nursery, Coco peat, Tray for Seed Germination	1			

	preparation and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of leafy vegetables Part:- I	The gold of the go
	Fenugreek, Coriander, Spinach, amaranths, Dill,	00
3	With reference to Climate and soil, Water, humidity and varieties, Land preparation and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of leafy vegetables Part:- II	09
	Green onion, Cabbage, Lemon Grass	
4	With reference to Climate and soil, Water, humidity and varieties, Land preparation and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of Fruit vegetables	10
	Brinjal, Tomato, Cucumber, Pumpkin, Okra, Chilly	

Organic farming ,Daniel Howard,(2008), Published by Dominant Publisher, New Delhi.

Traditional Organic Farming Practices, E. Somasudaram, D.Ubhaya Nandini (2018), New India Publishing Agency.

Organic farming Component and Management, Dushant Gehlot, , Agrobios Publications Pvt. Ltd.

Organic Urban Farming, Prabal Mallik, The Indian Way, L.L. Somani, Agrotech Publisher Pvt. Ltd.

## DOT 113: Paper III: - Vegetable Cultivation Part-II (36 Lectures)

#### Course Outcome: -

• To providing the basic knowledge of vegetable.



- To develop skill of cultivation technique of Organic vegetable.
- To understand actual irrigation method.
- To understand the method of vegetable cultivation in pots
- To manipulate the production of vegetables
- This method useful for small area farming or terrace farming

1	Land Preparation for Cultivation	05
	Soil type, Soil Nutrients management, Soil Bed Preparation.	05
2	Irrigation system installment and water management	0.5
		05
3	Basin Irrigation, Sprinkler, Drip Irrigation, Nutrition through Irrigation System.	à.
-	With reference to Climate and soil, Water, humidity and varieties, Land	05
	preparation and Planting, Crop understanding, Irrigation, Pest, Disease and	
	Harvesting of underground vegetables:- Part:- I	
	Turnip, Potato, Sweet potato, Ginger, Turmeric	-
1	With reference to Climate and soil, Water, humidity and varieties, Land preparation	05
	and Planting, Crop understanding Indication B. 4 De	05
	and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of	05
	and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of underground vegetables:- Part:- II	US
	and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of underground vegetables:- Part:- II  Onion, Garlic, Carrot, Radish, Beet Root	VS
	and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of underground vegetables:- Part:- II  Onion, Garlic, Carrot, Radish, Beet Root	
 	and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of underground vegetables:- Part:- II  Onion, Garlic, Carrot, Radish, Beet Root  With reference to Climate and soil, Water, humidity and varieties Land	09
	and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of underground vegetables:- Part:- II  Onion, Garlic, Carrot, Radish, Beet Root  With reference to Climate and soil, Water, humidity and varieties, Land preparation and Planting, Crop understanding, Irrigation, Pest, Disease and	
	and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of underground vegetables:- Part:- II  Onion, Garlic, Carrot, Radish, Beet Root  With reference to Climate and soil, Water, humidity and varieties, Land preparation and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of vegetables with Pods:-:- Part:- I	
	and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of underground vegetables:- Part:- II  Onion, Garlic, Carrot, Radish, Beet Root  With reference to Climate and soil, Water, humidity and varieties, Land preparation and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of vegetables with Pods:-:- Part:- I  Cultivation of French Beans, Peas, Drum Stick,	
V	and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of underground vegetables:- Part:- II  Onion, Garlic, Carrot, Radish, Beet Root  With reference to Climate and soil, Water, humidity and varieties, Land preparation and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of vegetables with Pods:-:- Part:- I  Cultivation of French Beans, Peas, Drum Stick,  With reference to Climate and soil, Water, humidity and varieties. Land preparations.	09
V	and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of underground vegetables:- Part:- II  Onion, Garlic, Carrot, Radish, Beet Root  With reference to Climate and soil, Water, humidity and varieties, Land preparation and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of vegetables with Pods:-:- Part:- I  Cultivation of French Beans, Peas, Drum Stick,  With reference to Climate and soil, Water, humidity and varieties. Land preparations.	
V	and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of underground vegetables:- Part:- II  Onion, Garlic, Carrot, Radish, Beet Root  With reference to Climate and soil, Water, humidity and varieties, Land preparation and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of vegetables with Pods:-:- Part:- I  Cultivation of French Beans, Peas, Drum Stick,  With reference to Climate and soil, Water, humidity and varieties, Land preparation and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of	09
V	and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of underground vegetables:- Part:- II  Onion, Garlic, Carrot, Radish, Beet Root  With reference to Climate and soil, Water, humidity and varieties, Land preparation and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of vegetables with Pods:-:- Part:- I  Cultivation of French Beans, Peas, Drum Stick,  With reference to Climate and soil, Water, humidity and varieties. Land preparations.	09

Principles of Organic Farming, P.L. Moliwal, Scientific Publishers Pvt. Ltd.

Organic Farming in Rainfed Agriculture, B. Venkateswartu, , Central Research Institute for Dryland.

Organic farming Component and Management Dushant Gehlot, , Agrobios **Publications Pvt. Ltd** 

Organic Crop Production, Ted Goldammer, , Apex Publishers.

Organic Crop Production, S.S. Walia, Scientific Publishers.

## DOT 114: Paper IV: - Vegetable and Fruits Cultivation Part-III (36 Lectures) Course Outcome: -

- To develop the self-employability
- To complete the daily requirement of vegetable requirement by using small spaces of
- To provide the actual practical knowledge of vegetable cultivation
- Also develop the supporting product related to organic farming
- To provide training of apiculture
- To developed new parameter of agriculture employability through Spirulina Culturing, mushroom Cultivation.

1	P	With reference to Climate and soil, Water, humidity and varieties, Land preparation and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of Climbing vegetables:-:- Part:- I	08
		Bitter Gourd, Ridge Gourd, Snake Gourd, Cucumber. Hadga	
2	W	ith reference to Climate and soil, Water, humidity and varieties, Land preparation	
	an	nd Planting, Crop understanding Irrigation B.	08
	Ex	nd Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of cotic vegetables:- Part:- I	
		Cherry Tomato, Zucchini, Broccoli, Lettuce, Color Capsicum, Asparagus, Parsley, Celery, Red Cabbage, Cauliflower	V

	3	With reference to Climate and soil, Water, humidity and varieties, Land preparation and Planting, Crop understanding, Irrigation, Pest, Disease and Harvesting of Fruits Plants-:- Part:- I	08
		Papaya, Ficus, Mango, Jamun, Guava, Sapota.	
4	1	Cultivation of Fruits plant:- Part:- I	04
		Strawberry, Grapes.	
5		Cultivation of Mushrooms- edible and poisonous, culturing and production	03
		Introduction, Types of Mushrooms, Cultivation technology for Oyster	
6		Cultivation of Spirulina	02
		Introduction, Mud pot Cultivation of Spirulina, Benefits of Spirulina	
7	4	Apiculture	03
		Definition, tools required in bee keeping, Harvesting of Honey.	
8		Desi Cow Management and their Product	-
		Milk, Curd, Butter, Ghee, Cow urine based products.	

Traditional Organic Farming Practices, E. Somasudaram, D. Ubhaya Nandini (2018), New India Publishing Agency.

Organic farming Component and Management, Dushant Gehlot, Agrobios Publications Pvt. Ltd.

Apiculture in India, Ankit Khandelwal, Indian Councile of Agriculture Reeasrch. Fundamentals of Beekeeping T.V.Sathe, , Daya Publishing House, New Delhi. Spirulina, B.V.Umesh, The Dabur Research Foundation, Unicorn Publishers. Mushroom Cultivation in India, B.C. Suman, V.P. Sharma, Astral International Pvt. Ltd.

DOT 115: Paper V: - General and Environment Education (36 Lectures)

#### Course Outcome: -

To develop marketing skill in student.



- To develop communication skill in student.
- To develop positive thinking in student.
- To know the agriculture diversity.
- To understand the effect of pollution and its effect on agriculture sector.
- To understand the effect of toxic substances on soil born organisms.
- To aware the student with global warming.

1	Communication Skills	12				
	Self-awareness, Self-management, Social awareness, Relational management, Cohesion clarity, Friendliness, Confidence, En Respect, Listening, Open mindedness, Tone of voice, Asking good qu					
2	Soft Skills	12				
3	Communication, Self- motivation, Leadership, Responsibility, Tear Problem solving, Decisiveness, Ability to work under pressure an management, Flexibility, Negotiation and conflict Resolution.  Environmental studies (12 L)					
	1.Biodiversity	04				
	Definition, Types of Biodiversity, Agro biodiversity and its application.					
	2. Pollution	04				
	Definition, Types of Pollution, Causes of Pollution, Agriculture and pollution					
	3. Global warming					
	Definition, Factors responsible for global warming, Impact of global warming.  Agriculture, Effects of Global warming.	ning on				

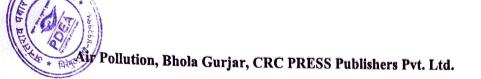
Communication Skill, Sanjay Kumar, Pushpa Lata, OUP India Publishers Pvt. Ltd.

Professional Communication Skill, E.K. Jain, S.Chand Publications.

Text Book of Biodiversity, K.V.Krushnamurthy, CRC PRESS Publishers.

Biological Diversity and its Conservation, Dushyant K.Sharma, Daya Publishing House.

Environmental Pollution, Dr.R.K. Khitoliya, S.Chand Publications.



- 1. DOT 116: Paper VI: Practical Based on Paper I and II (30 P)
- 2. Preparation of pots for cultivation.
- 3. Study of different organic seed quality analysis
- 4. Seed Treatment for vegetables
- 5. Cultivation of Fenugreek in Pots
- 6. Cultivation of Spinach in Pots
- 7. Cultivation of Coriander in Pots
- 8. Cultivation of Amaranths in Pots
- 9. Cultivation of Dill, in Pots
- 10. Cultivation of Chilly in Pots
- 11. Cultivation of Green Onion in Pots
- 12. Cultivation of Cabbage in Pots
- 13. Cultivation of Lemon grass in Pots
- 14. Cultivation of Brinjal in Pots
- 15. Cultivation of Tomato in Pots
- 16. Cultivation of Cucumber in Pots
- 17. Cultivation of Pumpkin in Pots
- 18. Cultivation of Okra in Pots
- 19. Cultivation of Chilly in Pots
- 20. Study method of Crop Rotation.
- 21. Preparation for climbing of climbing vegetables
- 22. Study proper harvesting method of vegetables.
- 23. Study of method use in breaking seed dormancy
- 24. Method of Cow Urine processing
- 25. Study of different tools use in organic farming
- 26. Study of transpiration



- 27. Study of ascent of sap
- 28. Study of different hormones
- 29. Study of measurement growth rate parameter.
- 30. Basic study of installment of Drip irrigation system
- 31. Use of installment of automatic irrigation system

# DOT 117: Paper VII: - Practical Based on Paper III (30 P)

- 1. Bed preparation For Cultivation
- 2. Study of site selection parameter for organic cultivation
- 3. Preparation of Plantlets in Nursery
- 4. Study organic seed processing
- 5. Cultivation of Tumip
- 6. Cultivation of Sweat Potato
- 7. Cultivation of Ginger
- 8. Cultivation of Turmeric
- 9. Cultivation of Onion
- 10. Cultivation of Garlic
- 11. Cultivation of Carrot
- 12. Cultivation of Radish
- 13. Cultivation of Beet
- 14. Cultivation of French been
- 15. Cultivation of Peas
- 16. Cultivation of Drumstick
- 17. Cultivation of Snow Peas
- 18. Cultivation of Kokan wal
- 19. Cultivation of Lemon grass
- 20. Cultivation of Celery
- 21. Cultivation of Red Cabbage



- 22. Study Ecological factor affecting plant growth
- 23. Study of pH meter handling, measurement of pH by using pH paper.
- 24. Study Cup anemometer and rainfall measurement instrument.
- 25. Study of soil sampling method.
- 26. Study of installment of Drip Irrigation System
- 27. Study installment Sprinkler irrigation system.
- 28. Preparation of Beds
- 29. Study of Soil nutrition management.
- 30. Study of recycling of plastic buckets for pot

# DOT 118: Paper VIII: - Practical Based on Paper IV and V (30 P)

- 1. Study of multilayered racks
- 2. Study different pots use in organic pot farming
- 3. Cultivation of Bitter Guard in Pots
- 4. Cultivation of Ridge Guard in Pots
- 5. Cultivation of Snack Guard in Pots
- 6. Cultivation of Cherry Tomato in Pots
- 7. Cultivation of Zucchini in Pots
- 8. Cultivation of Broccoli in Pots
- 9. Cultivation of Lettuce in Pots
- 10. Cultivation of Color Capsicum in Pots
- 11. Cultivation of Asparagus in Pots
- 12. Cultivation of Parsley in Pots
- 13. Cultivation of Celery in Pots
- 14. Cultivation of Strawberry
- 15. Cultivation of Papaya
- 16. Cultivation of ficus.
- 17. Study of packaging of Exotic Vegetables.
- 18. Study of Preservation technique of Exotic Vegetables



- 19. Different bio pesticide use in Exotic Vegetable disease management
- 20. Cultivation of Spirulina.
- 21. Study of construction of ponds for Spirulina cultivation
- 22. Cultivation of Button mushroom
- 23. Cultivation of Oyster mushroom
- 24. Study of construction of low budget shade and racks for mushroom cultivation
- 25. Methods of packaging mushroom
- 26. Culturing of honey bees
- 27. Study of processing of honey bees
- 28. Study of preparation of Cow Milk product- Curd, Butter Milk, Butter, Ghee.
- 29. Study of preparation of Cow urine product- different Gomutra Ark, packaging
- 30. Study pollutant- Water, Soil, Air

#### • Internship:-

It is expected to opt for 180 Hrs. Internship in a semester i.e. Daily 06 hrs. for 30 Days On different Farms.



# Semester: - Second (30 Credits)

DOT 211: Paper: - I: - Core Subject: - Diseases and Pests of vegetable and Fruits (36 L)

## Course Outcome: -

- To learn about disease causing pest.
- To understand the method of studying plant diseases.
- To classify the plant diseases and its pests.
- Familiarize with some common plant diseases of India.
- Gain knowledge on Host parasite interaction process.
- To know about the preventing measures of plant diseases.

ASS 19	00
1.0	03
Eurodamentals of diseases of vegetable and fruits.	
Fundamentals of diseases of vegetier	

-		* Williams
	Introduction, Terminology	1 1 m
2	Methods of studying Plant diseases.	06
	Macroscopic Diseases, Microscopic Diseases, Culture Technique, Media Types, Me	dia
	Preparation, Pure culture method, Serial Dilution	
3	Fungal Diseases	04
	Club root of Crucifer, Leaf Curl of Tomato, Leaf spot of Termeric	
4	Bacterial Diseases.	04
	Citrus Canker, Bacterial Soft rot in Tomato, Bacterial spot in cucurbits	
5	Mycoplasma plant diseases.	02
	Little leaf of Brinjal	
6	Nematodal Plant diseases	02
	Root knot diseases of vegetables	
7	Viral plant diseases.	05
	Introduction to virus as a plant pathogen, Tomato mosaic, Cucumber mosaic	
	Watermelon mosaic	
8	Non parasitic diseases.	05
	Impact of abiotic couses- Temprature, Soil Ph, Air pollutants, poor O2, Poor light,	
	Nutritional difficiency, Herbicidal injury.	
	Black heart disease of Potato, Khaira disease of Rice.	
9	Principles of plant disease control.	05
	Biological Control, Chemical Control, Physical Control	

Plant Pathology, George N. Agrios, Elsvier Publications.

Fundamentals of Plant Pathology, Dr. J.N. Sharma,

Plant Pathology Pathogens and Plant Diseases, Dr.P.B. Pandey, S.Chands Publications.

Principles of Plant Pathology, G.P. Jagtap, Agrobios Publications.

Practical Plant Pathology, Vijay Yadav, New India Publishing Agency.

Plant Pathology, R.S.Mehrotra, , MC GRAW HILL Publications.

# DOT 212: Paper: - II: - Bio fertilizers and Bio pesticides (36 Lectures)

#### Course Outcome: -

• Preparation of bio fertilizers by using microorganisms like fungi, bacteria, algae

- Role of mycorrhiza in growth of crop plants.
- Green mannuring, compost preparation and their field application.
- Recycle of biodegradable wastes
- To understand the role cow in organic farming.
- Preparation of bio pesticide by using different plant material
- To understand the integrated pest management.

#### Bio fertilizers (18 L)

R10	fertilizers (18 L)	03			
1	Introduction to Bio fertilizers				
	Definition, Scope in India and Importance	04			
2	Types of Bio fertilizers  Firstian Biological phosphate solubilizing, Organization and Discount Control of the	ganic			
	Biological nitrogen Fixation, Biological phosphate solutions	9			
	compost, Animal waste base bio fertilizers	0.2			
3	Manures 03				
	FYM, Compost, Green manure, Vermiculture				
4	Advantages of Bio fertilizers	03			
_	Impact of Fungi, Bacteria, algae base fertilizer to improve nutritional val	ue of			
	soil	06			
5	Indian scenario of Bio fertilizers				
	Institutes and industries involved in Bio fertilizer Production				

## Bio pesticides (18 L)

DIU	pesticides (18 L)	03			
1	Introduction to Bio pesticides				
	Definition, Scope in India and Importance	6			
		04			
2	Types of Bio pesticides	rie posticido			
	Plant base Bio pesticide, Fungi base Bio pesticide, Bacteria base bio pesticide,				
	Physical Natural Material as Bio pesticide				
	Physical Natural Material as 220 p	02			
3	Nano Bio pesticides				
	Plant derived Nano pesticide for agricultural pest control, Recent trends, Future				
	aspect.	00			
4	Advantages of Bio pesticides	02			
<del>-</del>	Effectiveness of bio pesticide against various crop diseases				
	Concept of residue free farming				
	16				

		130					
5	Mass production technology of bio-pesticides	06					
	Mass production of Neem based and various plant based bid	pesticide-					
	Production Technology, Basic Instrument, Machinery  Mass production of Fungi based bio pesticide- Production Technology, Basi						
	Instrument, Machinery						

Biofertilizers for Sustainable Agriculture and Environment, Bhupander Giri, Springer Publications.

Biofertilizers in Agriculture and Forestry Subha Rao N.S., MEDITECH Publications.

Biofertilizers, Dr.P.Hyma, Random Publications.

Biofertilizers and Biopesticides, Dr. Shalini Suri, Aph Publishing Corporations.

Biopesticide and Biofertilizers, Krishnendu Acharya, Techno Word Publications.

Biofertilizers and Organic Farming, Himadri Panda, Gene Tech Books Publishers.

# DOT 213: Paper III: - Core Subject: - Packing, Grading, Direct Marketing and organic Certification (36 L)

#### Course Outcome: -

- To understand the proper process of packaging of vegetables.
- To understand the how to increases self-life of vegetable.
- To understand the supply chain between producer to customer.
- Use a vocabulary of marketing term correctly.

- Demonstrate the ability to critically evaluate a marketing program from customer and marketing practitioner viewpoints, including Consideration of ethical implications.
- Communicate clearly, in an organized fashion, the concept of marketing in both oral and written work.
- Demonstrate an understanding of how marketing fit with the other business disciplines within an organization.

		06
1.	Packing Packing	
	Need of packing types, importance, Pack house, Martials used in packing	05
2.	Fruit and Vegetable Packaging	05
	Methods and materials used for Fruit and vegetable packing	
3.	Fruit and Vegetable Grading	05
	Introduction, Importance, Methods used.	
4.	Introduction to Directing Marketing	06
	Definition, Advantages, types, SoP used	
5.	Advances of Direct Marketing	. 06
	Methodology of Direct Marketing, Characteristics of direct marketing, com	ponents of
	direct marketing, Functions of Directing marketing.	
6.	Success stories of Direct marketing in Agriculture	04
	1. Abhinav Farmers Club	
	2. Mahaorganic farmer Group	
	3 Krushi samrudhi organic farmer Group	04
7.	Organic Certification	04
	Concept, Agencies, Necessity, Certification process, standards used	

Organic farming Component and Management, Dushant Gehlot, Agrobios Publications Pvt. Ltd.

Organic Farming and Marketing in India, Abhay Joshi, LAMBERT Academic Publishing.

An Economic Analysis of Organic Farming in Tamilnadu, Sridhar V., LAMBERT Academic Publishing.

# The Organic Farmers Business Handbook, Richard Wiswall, Chelsia Green Publishing Co.

# Green \*\*

## DOT 214: Paper IV: - Organic Farming Management (36 Lectures)

#### Course Outcome: -

- To understand the agriculture related funding agencies.
- To learn about different government subsidy based scheme related to organic farming.
- To learn about low budget organic farming.
- To providing knowledge of farm and crop management.
- To provide knowledge of labor work and time management.
- To understand the relationship management of farmer and customer.

1.	Funding Agencies	05				
	District co-operative Banks, Government Banks, Rural Banks, NABARD, K	rushi				
	Finance.					
2.	Different Schemes for organic farming	05				
	District agencies, State government schemes, Central government sch	ieme,				
	Agriculture Dept. Scheme, Subsidy based scheme.					
	Poly house, Poly tunnel, Shade Net House, Construction and management 04					
	Government scheme, Low Budget Construction, Poly house Paper, mates					
3.	Low Budget Organic Farming Models	04				
	Shade net, Biogas plant, Reduction of production cost, Low cost Infrastructure budget instrument and machinery.	, Low				
4.	Worker and working management					
	Worker training, skill development in worker, Time management in Wo	rking,				
	Development of uniformity in worker.					
5.	Vegetable production Management and control	06				

PRES			
P. Inda No.		Vegetable production, quantity production, Costumer Demand, Continuity	in
		production, Quality Control, how to improve production.	
6.	Reg	ular Customer Demand and supply Chain management	06
		Different Marketing app, Marketing Order acceptance, Basket Method, Supply ch	nain,
		feedback management.	

Organic farming Component and Management Dushant Gehlot, , Agrobios Publications Pvt. Ltd.

Relevance of Organic Farming, B.L. Jana, Avishkar Publishers, Jaipur.

Dr. Smita Diwase, Indian Agriculture and Agri Business Management, Scientific Publishers (India).

Objective Agribusiness Management, Shakti Panigrahy, Scientific Publishers (India).

Agri Business Management, Dr. J.S. Amarnath, Satish Serial Publishing House.

## DOT 215: Paper V: - General Education (36 Lectures)

#### Course Outcome: -

- To develop digital literacy skill.
- To access various tools and applications for learning and skill development.
- To operate variety of hardware and software independently and troubleshoot common problems.
- To create a variety of digital products using appropriate tools and applications and managing digital sources.
- Practice safe, legal and ethical means using ICT.

- By using critical thinking to analyze the elements/facts of a specific situation/Problem and support conclusion with fact.
- To develop Freedoms, Respect, Trust, Reasonability, Forgiveness in students.

1.	ICT skills	18			
	Basic Information about Computer, Projector, Notepad, Microsoft Office	Word,			
	Microsoft Office Excel, Microsoft Edge, Microsoft Power Point, Microsoft	Store,			
	Microsoft outlook, Microsoft Publisher, Google Docs, Mail, APPS, Dif	ferent			
	Marketing Software, Different Search Engines				
2.	Critical Thinking	06			
	Critical Thinking Skill, Observations, Analysis, Inference, Communication, Po	int of			
	view, Purpose, Assumption, Concepts, Inference, Information, Implication	and			
	consequence, Questions, Synthesis.				
3.	Problem Solving	06			
	Problem Solving Skill, Analytical Skill, Innovative and creative thinking, A late	ral			
	mindset, Adaptability and Flexibility, Level headedness, Initiative, Resilience.				
4.	Value education	06			
	Freedoms, Respect, Trust, Reasonability, Forgiveness, Reuse and recycle, Doing ye				
	best, Share and care.				

ICT in Education, Dr. Vanaja M, Neelkamal Publications
Dr.Arulsamy, Application of ICT in Educations, , Neelkamal Publications
Information and Communication Technology, Durgesh Kumar Mishra, Springer Publications.

Information Communication Technology, Antonio Cartelli, Information Science Refrence Publications.

Peace and Value Educations, Dr. Debashish Paul, Rita Publications.



## DOT 216: Paper VI: - Practical Based on Paper II (30P)

- 1. Introduction to different microorganisms used in bio fertilizer production.
- 2. Isolation of Phosphate solubilizing micro-organisms from rhizosphere.
- 3. Isolation of Rhizobium from root nodules of leguminous crop Isolation and purification of *Azotobacter* from soil.
- 4. Isolation and purification of Beijerinckia form soil.
- 5. Isolation of Azospirillum.
- 6. Isolation Blue Green Algae from soil
- 7. Isolation of organic matter decomposing microorganisms
- 8. Mass multiplication of Rhizobium, Azotobacter, and Azospirillum inoculum
- 9. Production and application of Blue Green Algae
- 10. Production of Azolla Biofertilizers
- 11. Methods of application of Biofertilizers
- 12. Standards for commercial production of Biofertilizers- Quality control of Biofertilizers
- 13. Analysis of organic manures-organic carbon, total NPK and C: N ratio
- 14. Fertilizer analysis-Urea, Ammonium sulphate, Pottassium nitrate, Murate of potash and Rock phosphate for their respective nutrients
- 15. Study of materials required for vermicomposting
- 16. Study of requirements for vermicomposting
- 17. Preliminary treatment for composting material
- 18. Preparation of vermin beds
- 19. Setting up of a vermin wash unit
- 20. Harvesting and economics of vermin composting
- 21. Study of Green manure processing
- 22. Desi cow milk and waste base product.
- 23. Preparation of Jivamrut
- 24. Analysis of nutritional value of different bio fertilizer.



- 25. Bio fertilizers packaging method and storage.
- 26. Bio fertilizer Certification and marketing
- 27. Study of preparation of Dashparni Ark
- 28. Preparation Neem Kernel Powder.
- 29. Neem Kernel aqua extraction.
- 30. Preparation of different plant extract for biopesticide.

#### DOT 217: Paper VII: - Practical Based on Paper I (30 P)

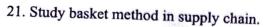
- 1. Study of different types media use in plant pathology.
- 2. Preparation of media for isolation of plant pathogens.
- 3. Study of Identification of pathogens.
- 4. Study of mites.
- 5. Study of fruit flies.
- 6. Study of aphids.
- 7. Study of Nematodes.
- 8. Study of insects.
- 9. Study of Termites and their effect of fruits plants.
- 10. Study of pathogen habitat.
- 11. Study of seed borne diseases.
- 12. Study air borne diseases.
- 13. Study of soil borne diseases.
- 14. Study of seed health testing method.
- 15. Study of Steak plate culturing method.
- 16. Study of Pour plate culturing method.
- 17. Study of spread plate culturing method.
- 18. Study of Serial dilution method.
- 19. Study of fungal diseases in vegetable plant
- 20. Study of Bacterial diseases in vegetable plant
- 21. Study of Viral diseases in vegetable plant
- 22. Study of Mycoplasma diseases in vegetable plant



- 23. Study of Non Parasitic disease in vegetable plant.
- 24. Study on structure of plant pathogen laboratory.
- 25. Study of laboratory instrument use in plant pathology.
- 26. Study of soil sampling.
- 27. Study of different Agriculture Dept. helping farmer to plant health.
- 28. Study of Crop insurance.
- 29. Study of different instrument use in plant protection.
- 30. Study of role of plant pathology Consultant.

# DOT 218: Paper VIII: - Practical Based on Paper III, IV and V (30 P)

- 1. Study of basic information about computer part.
- 2. Study of Microsoft Office Word
- 3. Study of Microsoft Office Excel
- 4. Study of Microsoft Power Point
- 5. Study of Microsoft Store
- 6. Study of Microsoft outlook
- 7. Study of Microsoft Publisher
- 8. Study of Google Docs
- 9. Study of different Mail system
- 10. Study of different marketing APPS,
- 11. Different Search Engines
- 12. Study of Funding Agencies.
- 13. Study application of different Schemes for organic farming.
- 14. Study of building low budget biogas construction.
- 15. Study of instrument use in vegetable quality testing
- 16. Study of different electronic media use in marketing
- 17. Study of customer feedback analysis.
- 18. Study farm management system
- 19. Study of role farm supervisor
- 20. Study of residue reduction management system



- 22. Study of cold storage vehicle, their related scheme of government.
- 23. Study of vegetable order accept and dispatch of vegetable management.
- 24. Study of proposal writing for funding agencies.
- 25. Study of different Poly house structuring
- 26. Study of Poly house polythene paper, Shad nets, Steel and Wood support material
- 27. Study of group farming and their registration method.
- 28. Study of different scheme for group farming
- 29. Study of centralize system management in group farming
- 30. Study of GST

#### • Internship:-

It is expected to opt for 180 Hrs. Internship in a semester i.e. Daily 6 hrs. for 30 Days On different Farms.

भ्राजार्य अनंतराव पंचार महाविद्यालय,पिरंगुट ता. मुळशी, जि.गुणे-४१२११५.





## D.Voc. Organic Urban Farming :Student List( Academic Year:2020-21)

SR.NO.	NAME OF STUDENT	CATEGORY	GENDER	SIGNATURE
1	ALHAT PRATIKSHA SAMBHAJI	SC	F	Ants
2	BANEKAR SHRIPAD SHYAM	ОВС	М	Same
3	BHOR KIRAN KALURAM	Open	М	30.95
4	BUDHKAR PRIYANKA SHAILAJ	Sc	F	Carolina C
5	BUDHKAR VAISHNAVI SHAILAJ	Sc	F	BVS
6	CHAFEKANADE SNEHA BABRUVAN	NT-B(OBC)	F	Coco
7	CHANDGUDE SWAPNIL DATTATRAY	Open	М	ON.
8	CHAVAN SANDEEP GUJJU	SC	М	POCTOT
9	CHAVAN TRUPTI SANDIP	OPEN	F	Farancing.
10	DHAGE SHRUSHATI ASHOK	OBC	F -	Thuse &
11	DAUNDKAR SACHIN KERBHAU	Open	M	7
12	DHUMAL ARATI VIJAY	OPEN	F	A N
13	FATANGADE DATTATRAY MANIKRAO	OBC	М	thouse
14	GATADE SHAILENDRA DHONDIRAM	Open	М	224450
15	GHULE DURGA LAXMAN	Open	F	4
16	HAGWANE SHIVANI ARUN	Open	F	19
17	HAROLE AMAR RAMCHANDRA	Open	M	H.A.R.
18	KADAM POOJA SANJIV	OPEN	F	P. S. Kardam
19	KANDHARE RUTUJA ANANTA	OPEN	F.	pin
20	KHANEKAR KIRTI MARUTI	OPEN	F	40902
21	KHOPKAR SHREYAS KHEMRAJ	OPEN	М	Northros
22	KOKATE TEJAL RAJENDRA	ST	F	Kate 1. Th.
23	KUMBHAR KALYANI UMESH	OBC	F	Kumbark 1
24	MARATHE SARTHAK KISHOR	OPEN	М	Wik.
25	MORE SHRIKANT GANGADHAR	SC	М	moge.8.6
26	MORE UMESH CHANDRAKANT	OPEN	М	1
27	NAGARGOJE DILIP RAMDAS	OBC	М	Corinkon
28	NARWADE MAYUR BHIVA	Open	M	Haralems.
29	NAWALE GAURAV KAILAS	Open	М	Janas -
30	NAIK YOGESH VITTHAL	ST	М	लाइन्ट्या.
31	OVHALE TUSHAR CHABAN	OPEN	M	Geshal.
32	OZARKAR SURAJ NATHU	Open	М	The Marie of the Control of the Cont
33	OZARKAR PRANALI ANIL	Open	F	THE NO
33	UZARRAR FRANKLI ANIL	Орсп		

HINGULA

भिज्य अनंतराव पदार प्रहीवद्यालय, पिरंग्ट ता. मुळशी, जि.पुणे-४१२११५



# ANANTRAO PAWAR COLLEGE, PIRANGUT

D.Voc. Organic Urban Farming :Student List( Academic Year:2020-21)

	NAME OF STUDENT	CATEGORY	GENDER	SIGNATURE
SR.NO.		OPEN	M	Tatel.
34	PATIL TEJAS SHIVAJI	OPEN	MAY	Dela.
35	PAWAL DNYANESHWAR BHIMRAO	OPEN	M	Bla
36	PAWAL SACHIN NARHARI	OPEN	M	1 De vile
37	PAWALE NEHA SANTOSH	OPEN	F	
38	PAWAR VARSHA DILIP	OPEN	F	Veryar
39	SANAS SHRUTIKA SANJAY	OPEN	F	Should for
40	SATAV ROHIT BHARAT	OBC	M	
	UDHAN SATISH GANPATRAO	OPEN	М	Sidhow
41	VAVALE SHWETA ROHIDAS	OPEN	F	David

White the second

अनंतराव पवार महाजिद्यालय,पिरंगट ता. मुळशी, जि.पुणे-४१२११५

# विद्यार्थी उपस्थिती( शैक्षणिक वर्ष २०२०-२१) Course: D.VOC Organic Urban Farming



7:02 Ø <b>Ø 0 B •</b>	ର <b>ସା</b> ଲା ଲା ପ	7:38 〇 0 8 27 •	s Ho all al D
Close Participants (7)		Close Participants (7)	
Waiting(1)		Prof. A.M. Shete (Host, me)	<b>7</b> ( )
PB Priyanka Budhkar	Joining	S Swapnil	<b>z</b> í 🏮 )
Participants(6)		AJ Adesh Jadhav	
Prof. A.M. Shete (Host, me)	<b>/</b> § >	KS Kiran S Inamdar	M &
Kiran S Inamdar	<b>%</b> ( <b>%</b> ( )	Kranti Inamdar	M X
Kranti Inamdar	<b>%</b> (\$\sum_{\pi} \)	Priyanka Budhkar	M X
PO Pranali Ozarkar	<b>Z</b> ( <b>X</b> >	VB Vaishnavi Budhkar	ya X
S Swapnil	<b>7</b> ( <b>1</b> /2 >		
VB Vaishnavi Budhkar	<b>M</b> 🥻 >		

Invite

Mute All

Invite

Mute All

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

## Anantrao Pawar College, Pirangut.

Tal- Mulshi, Dist.Pune-412115

Presenty Report : D	10C	00	gar	ric	Urk	oar	· fa	rm	ina									Or	200	
	Date		7	2	2	7	7	6	7		2	7	2	7	(Aca	demi	c Yea	$\frac{20}{2}$	202	
Student Name	410	12	0	110	10	0 (7)	100	70	12	113	=	=	10	70	10	10	0	101	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	-
	10	to	140	150	90	Ho	8	8	2	170	13/10	88	5	20	750	4	28	27	30/6	=
Allat Poratiksha S.	Albat?	Mhat		Allatia	Alhali	Albe	Whate	Blade	Ala	Palhal	Parate	Albate	Wats	A	hate	That	The	3 Total	Shall I	rates
Banekar Shripad shyar	Ban	Bon	AB	w	A	A	Bm	Bon	A	Bin	Borr	A	ane	A	Bm	A	m	Box	A B	W.
Bhor kiran kalurama	TRS	माय	<b>b</b> 0	ARS	9173)	gre gre	FR.	STR.	3how	377	JAPS	AR)	AR)		API)	क्रिक	5 9	RJ.	क्रीर्ध	1741.
Budhkar Vaishnavi S.			A	2/8	31/8	A	318	BUS	0018	BB	BUS	BUS	BB	A .	348	ACB	18	380	113 B	18
Budhkar Poiyonkys.	Boon	BP-5	A	BON	88	A	Bor	Bu	BP	Box	Ber	<b>6</b>	0-	A	Rom	Sp.	BDC	A BE	<u> </u>	3 P
CHatekande Eneha B. (	OUD (	08	- (8	30kg	098	DIE!	600	OS.	Pose	Colo	Cook	COSS	1000	<b>8</b> . /	gu (	9	di	9	98 C	38
Chandgude Swapnil	2 god	July	Due	A		A	Die	Que	Dis.	Daro	Busin	A	A-	A	Perte	par	A	A	A !	1
Charan Sandeep 6.	1 2	hun	Thousand .		away	A	Schwa	<b>\\\</b>	glive	A	ame	1	A	Chell		Dur	100	Je vote	A	_
Charan Truph S. =	- 11	etgen	AZ	tolo,	Valo	A	doelo	ORE	epal	Tipol	exele	dotto	-ejasti	A	etely	AC	lown	130	ntua	200
Dhage Shrushti Ashok	Doge	Rage	AI	Logg	Dage	1	plage	phos	hage	BA	Dhage	Dhage	A	Pra	ges D	nagel	AD	000	Drage	SA
Daudstor Sachin K.	3 0					D		8. (	$\mathcal{D}^{s}$ (	D) (		DS.	087	88	108	4	230	00	030	5
Dhumal Arti vijay	<b>Q</b>	20	20	D (		9	1	<b>D</b>	00)		(0)	0	0	0			A (			
Fatangade Dattatray	200 8 To	1180	-mi	TOPS of	TOO	Wen	until	MEIST	นาราท	5	4527213	VY21-1	1500	1	(h202)	WIN	A	FILL	-	4-1013
				,								1	-				-	^	0	

eacher CShate A.M.

Anantrao Pawar College, Pirangut

Tal Mulshi Dist. Pune - 412

## Anantrao Pawar College, Pirangut.

Tal- Mulshi, Dist.Pune-412115

Presenty Report : D.VO	<b>C</b> !	Org	an	ic l	)rbor	fa	rmin	9						(	Acad	emio	Year	202	0-2		
Student Name	Bat	huleko	hillotha	2110/50	4119199	710 Pd	12110180	h[10] 60	1 0 12	4014	1310 14	1810112	1910114	2000	£ .	7	hillolige	411016	3010110		
Gatade Shailandra	81	3	13	A.	31	A	A	R	A	w	A	Yb 4	B	A	W,	A	R/	kly/	Ar )	A	
Ghwe Durga Laseman	A	1	-1	X	A	A	1 X	A	X	A	A	X	1	A	A	V	n	1	MI		
Hagwanie shi vaji lam	As	10	8		F	J.	Pul	M	1	Mid	Ren	19/	34	1	A	1	dif	A	MA P	†	
Ham le Amar fandu	H.A	y. Wi	A	A	HF	AA.	A	PIA	A	PA	V	HA	A	H	1	A	A	MA	7 1	l	_
kadaro progy	p.c.	roden	19	W V	DV			pril	W	A	wh		x844	,			.40		u		
Komolhorre fujula	put	Ped 1	1.	u por	١,		pur	<u> </u>			pute		_	_	why	_	•			put	λ.
Khomekar Kisti	KA	pinh	A	TIME?	chti		P)di	Rivis	t'm	End	Cirtis	to D	Ent?	CM3	Eistig	civi)	Kirti.	Entite	CISB 1	و المدن	~~
khopkar shreyas	Herry	Sport of the series	A	estrette.	dry			bhene		A	Shreyo	greya	comp	A	shocks	7 13	Det C	3000	more	amy	ous.
Kokate Telah	24	tobet	A	Colots	hotour	work	adont	Kokate				-		• /	doll	A	dode	cotos	stale,	death	
Kumbhar Kalyani	Car	Flumb	yo'	rumbh	clemb	COUNT	Kurab	Kum			cumb har	cumbha	cunbl	**************************************	mbhe	Ay	yobb	والمسلا	White of	make Ma	
			0	BK		M	19K		ME	A	BE	A	100K	BEY	BŁ		10k		MK.	KIK.	
More 8mikant	HOS	a Bic						_				Man.	9	, , ,					MG.		
more unes.	for	Times	+ .	woun	Maro	morell	Merce	now	nore	· A	morell	more	man	MA	more	H MO	rey.	mores	. mane	" mar	eU.
10 TS+ -	. 1																	()	ul /	/	

Pripapal
Anantrao Pawar College, Piranes

Mulshi Dist. Pune - 412

14

#### Anantrao Pawar College, Pirangut.

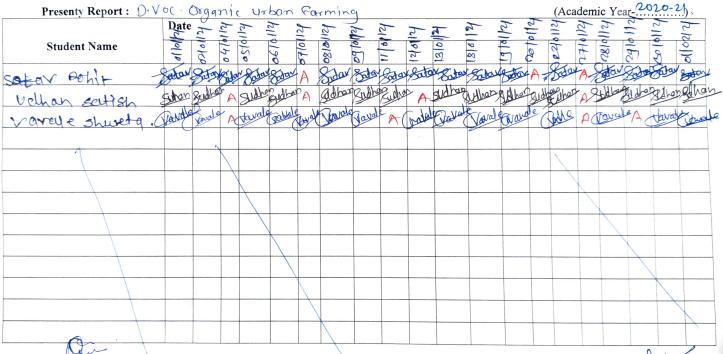
Tal- Mulshi, Dist.Pune-412115

Presenty Report:	Voc. Organic Urban Farming	(Academic Year 2020-2).
	Date 21101	
Student Name	1- 4 2 8 8 E E E E E E E E E E E E E E E E E	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
nagargode silip.	Transita Comment of the Comment of t	AND THE PROPERTY OF THE PROPER
Harmoade Mayor	MARKE NAMED ANSWED NOTHER A NOTHER NAMED NAMED AND N	MINNE MARCH NOW A NAME A NAME NOW
nawale gyrav.	Govern Gund Gund Gund Govern Govern Govern Govern Govern	Mich Gana Gund Grand Gana Gana Gana
Hair Youesh	मार्क्स नार्कित् नार्कित नार्क	क्षा A नाईकृष A नाईकृष त नाईकृष्य नाईकृष नाईकृष
orhal tuhar	Blod Fall A Fortagand A France Fare Total Blod	by hal Bright A Canal A Carra Carra Carra Carra Carra
oxankar sural.	ANTONIA DE LA CONTRACTOR DE LA CONTRACTO	A potroca A potroca A potroca A potroca A
ozarkar franali	Large Layor Carlow Control Control Control Control Control	arter Conta Janta (Janea A Canta Cantar Dan Can
patil T cjas.	Ruhi Juhi Jahi Jahi) Jahi Jahi Jahi Pahi Pahi Pahi Pa	The Ruh Pah Pah Pah A Pah 1962
poulate onyswars.	Day Day Market M	will A Park A Prod A Ped Jade Pull A
Paulule Sachin Neho		and Russe Stude Deals Purele A Burele
Pawale Helber Sachin	Son Broker Ser Sugar Ser Ser A	See See See 80 80 See Ste Man Ste
pawar rangh q	N. M. Maria Maria Maria Company ( Virginia Company Maria Company) ( )	para Teans Pour Paux Pour Dava Dava
seung soutika,	Antigonal South Shout to Small South matter A	mutil Small matter Smaller Smaller Smaller
Teacher		Ameipal
Shete A.	$n \cdot $	Anantrao Pawar College, Piranget

Anantrao Pawar College, Piranget Mulshi Dist Pune - 4121

#### Anantrao Pawar College, Pirangut.

Tal- Mulshi, Dist.Pune-412115



(Shete A.m.)

Principal Principal

ial. Mulshi Dist. Pune - 41211-

# पुणे जिल्हा शिक्षण मंडळाचे अनंतराव पवार महाविद्यालय, पिरंगुट ता.- मुळशी जि. पुणे- ४१२११५



वार्षिक अहवाल :डी.व्होक ऑरगॅनिक अर्बन फार्मिंग (शैक्षणिक वर्ष: २०२०-२१)

शैक्षणिक वर्ष २०२०-२१ पासून UGC-NSQF च्या योजनेअंतर्गत महाविद्यालयात ऑरगॅनिक अर्बन फार्मिंग हा कोर्स सुरू 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 विद्यार्थांची 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. ऑरगॅनिक अर्बन फार्मिंग या कोर्सेसच्या माध्यमातून शेती तंत्रज्ञान व रसायनमुक्त शेती कशी करावी यांचे मार्गदर्शन करण्यात येतं आहे. या शैक्षणिक वर्षात या कोर्सला एकूण विद्यार्थ्यांनी प्रवेश घेतला.

या कोर्स अभ्यासक्रम महाविद्यालयातील शिक्षक व उद्योग क्षेत्रात कार्यरत असलेल्या व्यक्तींच्या मार्गदर्शनाखाली पूर्ण करण्यात आला. या कोर्सला महाविद्यालयातील श्री. अक्षय शेटे व अभिनव फार्मर्स क्लबचे प्रमुख श्री. ज्ञानेश्वर बोडके व श्रीमती विशाखा बुरटे 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 ४२विद्यार्थ्यांपैकी २७ एवढ्या विद्यार्थ्यांनी दोन्ही सत्र परीक्षा दिल्या यापैकी २६ एवढे विद्यार्थी उत्तीर्ण झाले.या कोर्सचा वार्षिक निकाल १६.२९ % आहे.

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 शेटे यांनी काम पाहिले.

समन्वयक

प्राचिम् अनंतराव पवार महाश्विद्यालय,पिरंगट ता. मुळशी, जि.पुणे-४१२११



#### Anantrao Pawar College, Pirangut

Tal.- Mulshi Dist. Pune- 412115

Annual Report: D.Voc Organic Urban Farming

(Academic Year: 2020-21)

D.VOC Diploma in Farming course has been started in the college under the scheme of UGC-NSQF from the academic year 2020-21. 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 Organic Urban Farming courses, agricultural technology and how to do chemical-free farming are being guided. A total of 42 students took admission 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 head of Abhinav Farmers Club Mr. Dnyaneshwar Bodke did the work of teaching. This course was completed through 180 hours of theory, 90 hours of practical training and practical training for each semester. Out of 42 students admitted to the course, 27 students appeared in both the semester exams, out of which 26 students passed. The annual result of this course is 96.29%.

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-ordinater

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 -

Shri CHANDGUDE SWAPNIL DATTATRAY

Mother's Name: -SUVARNA

has appeared for the

D. VOC. (ORG. URBAN FARMING)

examination held in month of April 2021 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.

Seat No.

: 1104

P.R.No. : 2021189876

College code: 0866

Mahesh Kakade Director **Board of Examinations & Evaluation** 

DATE: 16 MARCH 2022



(formerly University of Pune)

GANESHKHIND PUNE 411 007





# **Passing Certificate**

This is to certify that -

Smt. OZARKAR PRANALI ANIL

Mother's Name: -SUJATA

has appeared for the

D. VOC. (ORG. URBAN FARMING)

examination held in month of April 2021 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.

Seat No. : 1105

P.R.No. : 2021189845

College code: 0866

Mahesh Kakade Director Board of Examinations & Evaluation