ADD ON COURSE

The department of Botany is conducting an add on course on "Terrace Gardening". This is to invite all B.Sc [B.Z.C.] students who are intrested to join.

ABOUT THE COURSE

The Department of Botany is conducting an add course on Terrace Gardening, which is very much helpful to the students. So we invite the students to apply for this course. The course comprise of daily 2 hours for 15 days, with both theory and practical classes.

At the end of the corse an evaluation will be conducted and we will award the certificate which is very much valid.

Intrested students can register their names in the Department of Botany.

G.V.S. SUBRAMANYAM COURSE CO-ORDINATOR

K.V.S. DURGA PRASAD HOD BOTANY

"TERRACE GARDENING"









Add on course

Title: TERRACE GARDENING

SYLLABUS

The department of Botany introduced "Add on Course" program for botany students for the academic year 2021-2022 on "Terrace Gardening".

Course objectives:

- 1. To obtain knowledge on terrace garden maintaining.
- 2. Low cost investment.
- 3. To gain practical knowledge.
- 4. Easy maintaining.
- 5. No need of land requirement.

UNIT- I: Leafy Vegetables

Amaranthus, Spinach, Phoenogracum, Basal and Alternanthera.

UNIT – II: Vegetables

Potato, Brinjal, Tomato, Capsicum, Carrot, Beetroot.

UNIT – III: Fruit yielding plants

Lemon, Sapota, Banana, Mango, Grapes.

UNIT – IV: Medicinal plants

Lemon grass, Aloe Vera, Eclipta, Ocimum, Arva lenata.

UNIT – **V:** Pest control management, Economic importance & Nutritional values of Vegetables, leafy vegetables.

COURSE OUTCOME:

Because of this terrace garden, the students will get more information on, maintaining & their different vegetables in less expenditure & more effective.

TERRACE GARDENING

Department of Botany initiated "Terrace Gardening", Co-ordinator G.V.S. Subramanyam, 20 students participated in this programme. It is an art of creating the greenery on the root top. Generally, 1sq.mt. of terrace garden can give 25 to 50kg of vegetables every year.

A roof garden is that, in which vegetables, fruits, flowers are grown ion terrace, balconies (or) roof of buildings. That is garden is become popular because of increasing pressure on land increasing cost.

Steps for creating terrace gardening

- 1. Take a simple pot (or) container, then mix the compost, soil, coir peat and vermicompost.
- 2. Drill a hole in a recycled container, by using a broken pot (or) a flat stone, cover the drainage hole at the bottom and fill up with the mixture.
- 3. Pour water in the container and wet the soil.
- 4. One can make own organic manure at home using the kitchen waste.

Advantages:

- 1. Reduction of indoor temperature (6-8).
- 2. Lowering of heat absorption of building and insulate the building against heat and cold.
- 3. Increase of oxygen percentage in the air.
- 4. Reduction of soil pollution.
- 5. It is less expensive.
- 6. It improves health.

The tools required for the Terrace Gardening:

Hand hoe, rose can, hand sprayer, gardening hose with sprinkler, bamboo stakes, jute stings, pots and containers, organic manure, river sand, agrochemicals.

Vegetable crops:

Potato, Brinjal, Capsicum, Carrot, Beetroot.

Leafy vegetables:

Amaranthus, Spinach, Phoenogracum, Basal and Alternanthera.

Fruit yielding plants:

Lemon, Sapota, Banana, Mango and Grapes.

Medicinal plants

Lemon grass, Aloe, Eclipta, Ocimum, Arva lanata.

Conclusion:

Terrace Gardening is not only a profitable hobby but also beneficial in terms of physical exercises, better utilization of space, time, environmental sanitation, recycling of house hold waste. There is no need of farming background to start a roof garden and once the garden is established, everyday one hour is enough to maintain the garden with healthier environment.

HINDU COLLEGE, GUNTUR.

DEPARTMENT OF BOTANY

ADD ON COURSE - "TERRACE GARDENING"

16TH - FEBRUARY - 2022 TO 05TH - MARCH - 2022

REGISTRATION FORM

S. No	Name of the student	Roll No	Class	Signature
01	Syed Sameera Sullhona	30£	BSC Bzc	Samuel 1
02.	chilluvuri. Vijaplakshmi	885	BK-BZC	ch vijaya bkuhmi.
63.	Thati seavanthi	308	BSC-BZC	T. skurenthi
04.	Susepatti. Tyothika srilakshi	306	BX - Bzc.	5. Jyothika sailakst
05.	peddakotta keesthi	299	135C-BZC	PKeenthi
06.	N. Iswarya (Nelaturi).	675	BSC - BZC.	nl. Iswarya.
07.	Baisabaina Saikrishma	283	BSC-BXC	B. Sai Kre
08-	Davala · pavankumov	286	BSC-BXC	D. Palan Kuman
09.	Shaik. Teshma	725	Bsc-Bec	& Fighma
10-	A. chandenka	691	Bsc - Bac	Azhendarikan
11.	D. Shanmukhi	701	B8. B2C	Dishanmuthi
12.	Syed Sameeja	727	BSC - BZC	Gyed Campeid
13.	20. vinitha	702	85C- B2C	D. vinitha
14.	Shaik Arifunnisa	723	BSC-BZC	Sk. Rifunrisa
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16.	K. Ananda Raju	710	Bex Bzc	Arrande Raylek
17	S. Siva Raju	722	1350 RZC	S. Siva Refiz.
18.	Shahina shake	726	BSC. BAC	Sh
19.	Shaik- Kulsom	704	BSC BEC	tal

Name of the Institution

HINDU COLLEGE **GUNTUR**

Student's Attendance Register 1 Feb 16th TO Ma 05-7022

CLASS: "TERRACE GARDEN"

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HINDU COLLEGE GUNTUR

DEPARTMENT OF BOTANY



Add on course

Title: TERRACE GARDENING

Assessment procedure

We assess the capability of the students at the end of the course by following procedure. During the programme we have given the material and also a ppt related to the course.

Students attending the theory and practical work, they gone through the given material, attended to an exam which we have conducted at the end of the course comprising of 30 marks with the duration of one hour, after the completion of the exam we evaluated the capability of the students and awarded the certificates.

Question paper

- 1. Give the Scientific name of Spinach and its importance
- 2. What are the uses of Terrace gardening?
- 3. Mention any two plants cultivated in Terrace gardening?
- 4. What are the vitamins present in carrot?
- 5. Write any two medicinal values of Aloe vera?
- 6. What are the manures used in terrace gardening?
- 7. What is our National fruit name?
- 8. Give any two nutritional values of leafy vegetables.
- 9. Which soils are suitable for Terrace gardening?
- 10. Mention about any two diseases commonly occur in terrace gardenting?
- 11. What are the preventive measures to control the diseases?
- 12. What are the problems faced by terrace gardening?
- 13. What are the tools used in terrace gardenting?
- 14. What are the commonly growing plants in Terrace gardening?
- 15. What are the advantages of terrace gardening?

KEY

1. Give the Scientific name of Spinach and its importance

- Spinacia oleracea
- It supports the immune system, in the human beings

2. What are the uses of Terrace gardening?

- Terrace gardening reduces the impurities in the air.
- You can include some rear plants which will help to increase the oxygen levels around.
- Organic farming is a great method to grow your vegetables, fruits, and herbs on the terrace.
- It brings one great joy in eating vegetables and fruits straight from your garden.

3. Mention any two plants cultivated in Terrace gardening?

- Bitter Gourd
- Snake Gourd
- Bottle Gourd
- Onion Leeks
- Lady's Fingers
- Lime
- Tomatoes
- Drumstick
- Mint
- Ginger
- Greens
- Tulsi

4. What are the vitamins present in carrot?

- Carrots are a fair source of B vitamins, like niacin and B6, which help our bodies use energy from foods.
- B vitamins are important for growth and healthy skin, hair, nerves and muscles.
- Carrots are also a fair source of vitamin C, which keeps our gums, teeth and skin healthy.

5. Write any two medicinal values of Aloe vera?

 Traditionally, this medicinal plant has been employed to treat skin problems (burns, wounds, and anti-inflammatory processes). Moreover, Aloe vera has shown other therapeutic properties including anticancer, antioxidant, antidiabetic, and antihyperlipidemic.

6. What are the manures used in terrace gardening?

- Compost manure for balcony gardening.
- Worm Castings Worm castings are an excellent choice for the entire growing season.
- Quick and slow-release nutrients will help with all the growing stages, and beneficial bacteria will help plants absorb nutrients.

7. What is our National fruit name? add a note on uses.

- Mango.
- Mango is rich in vitamins, minerals, and antioxidants, and it has been associated with many health benefits, including potential anticancer effects, as well as improved immunity and digestive and eye health.
- Best of all, it's tasty and easy to add to your diet as part of smoothies and many other dishes.

8. Give any two nutritional values of leafy vegetables.

- You get a good amount of vitamin A, vitamin K, vitamin E, vitamin C, betacarotene, folate, vitamin B1, B2, B3, B5 and, B6 from these vegetables.
- High mineral content– Minerals like iron, magnesium, potassium, zinc, calcium, phosphorus, and sodium can be added naturally to your diet by eating green leafy veggies.

9. Which soils are suitable for Terrace gardening?

- The ideal soil for your terrace garden should neither be too compacted nor too light.
- The soil should have a balanced texture, crumbly soil that can retain the moisture is good for the plants.
- Feed your soil with organic compost regularly.

10. Mention about any two diseases commonly occur in terrace gardenting?

Plant Diseases :1. Leaf Spots · 2. Blossom End Rot · 3. Blight · 4. RUST · 5. TREE GALL · 6. Verticilium Wilt.

11. What are the preventive measures to control the plant diseases?

- Clean and sanitize trellises each year.
- Remove infected plants and plant tissues to prevent the spread of pathogens to healthy plants.
- Only remove diseased leaves when plants are dry, and no rain is forecasted.
- Identify diseases using tools like What's Wrong with My Plant or Ask Extension.

12. What are the problems faced by terrace gardening?

- One of the most common issues faced by terrace gardeners is drainage problems.
- Poor drainage can lead to waterlogging, which can cause root rot in plants and create an ideal environment for pests and diseases.
- It can also lead to water runoff, which can damage the structure of the terrace.

13. What are the tools used in terrace gardenting?

• Planters, Potting Media, Fertilisers, Watering Can/Pump Trowels, Gloves, Pruners, Bio-Pesticide, Creeper/Climber Support, Drip Irrigation Kit.

14. What are the commonly growing plants in Terrace gardening? Best Terrace gardening plants

- Sunflowers
- Lavender
- Daylilies
- Rose of Sharon
- Montana Moss juniper
- Donkey's Tail.

15. What are the advantages of terrace gardening?

- Building a terrace garden helps in keeping your home cool, it is great for the people living in tropical areas.
- All the plants growing on your terrace will create a micro-environment and will lower the temperature of the place.
- So while you enjoy the wholesome home-grown food you also save up on big bills from ACs.



HINDU COLLEGE, GUNTUR DEPARTMENT OF BOTANY



Certificate of Participation

This certificate is presented to

Studying _____ class has successfully participated in the Add - on course named "TERRACE GARDENING" conducted by Department of Botany during the academic year 2021- 2022.

G.V.S. SUBRAMANYAM

Convenor of the Course

P. M. PRASAD

Principal