### University of Mumbai



No. AAMS/(UG)/ 29 of 2022

#### CIRCULAR:-

#### Sub :- Certificate Course in Gardening & Nursery Management

#### Ref :- RB/MU-2022/CR-022/Edn-5/536, dated 13th May, 2022.

All the Principals of the Affiliated Colleges, the Head of the University Department and Directors of the recognized Institutions in Faculty of Science & Technology are hereby informed that the recommendations made by the Board of Studies in Botany at its online meeting held on 24th August, 2021 vide item No. 1 (a) and subsequently passed by the Board of Deans at its online meeting held on 23th September, 2021 vide item No. 6.6 (N) have been accepted by the Academic Council at its meeting held on 10th November, 2021, vide item No. 6.5 (N) and subsequently approved by the Management Council at its meeting held on 30th December, 2021 vide item No. 3 and that in accordance therewith, in exercise of the powers conferred upon the Management Council under Section 74(4) of the Maharashtra Public Universities Act, 2016 (Mah. Act No. VI of 2017) the Ordinance 6753 & 6754 Regulations 9496 to 9499 and the syllabus of Certificate Course in Gardening & Nursery Management has been introduced and the same have been brought into force with effect from the academic year 2022-23, accordingly. (The same is available on the University's website www.mu.ac.in).

MUMBAI – 400 032 6<sup>th</sup> June, 2022 To. (Sudhir S. Puranik) REGISTRAR

The Principals of the Affiliated Colleges, the Head of the University Department and Directors of the recognized Institutions in Faculty of Science & Technology.

#### A.C/6.5 (N)/10/11/2021 M.C/3/30/12/2021

No. AAMS/ (UG) /2-9 - A of 2022

6<sup>th</sup> June, 2022

Copy forwarded with Compliments for information to:-

- 1) The Chairman, Board of Deans
- 2) The Dean, Faculty of Science & Technology,
- 3) The Chairman, Board of Studies in Botany,
- 4) The Director, Board of Examinations and Evaluation,
- 5) The Director, Board of Students Development,
- 6) The Director, Department of Information & Communication Technology,
- 7) The Co-ordinator, MKCL.

(Sudhir S. Puranik) REGISTRAR

#### Copy for information and necessary action :-

- 1. The Deputy Registrar, College Affiliations & Development Department (CAD),
- 2. College Teachers Approval Unit (CTA),
- 3. The Deputy Registrar, (Admissions, Enrolment, Eligibility and Migration Department (AEM),
- 4. The Deputy Registrar, Academic Appointments & Quality Assurance (AAQA)
- 5. The Deputy Registrar, Research Administration & Promotion Cell (RAPC),
- 6. The Deputy Registrar, Executive Authorities Section (EA)
  He is requested to treat this as action taken report on the concerned resolution adopted by the Academic Council referred to the above circular.
- 7. The Deputy Registrar, PRO, Fort, (Publication Section),
- 8. The Deputy Registrar, Special Cell,
- 9. The Deputy Registrar, Fort Administration Department (FAD) Record Section,
- 10. The Deputy Registrar, Vidyanagari Administration Department (VAD),

#### Copy for information:-

- 1. The Director, Dept. of Information and Communication Technology (DICT), Vidyanagari, He is requested to upload the Circular University Website
- 2. The Director of Department of Student Development (DSD),
- 3. The Director, Institute of Distance and Open Learning (IDOL Admin), Vidyanagari,
- 4. All Deputy Registrar, Examination House,
- 5. The Deputy Registrars, Finance & Accounts Section,
- 6. The Assistant Registrar, Administrative sub-Campus Thane,
- 7. The Assistant Registrar, School of Engg. & Applied Sciences, Kalyan,
- 8. The Assistant Registrar, Ratnagiri sub-centre, Ratnagiri,
- 9. P.A to Hon'ble Vice-Chancellor,
- 10. P.A to Pro-Vice-Chancellor,
- 11. P.A to Registrar,
- 12. P.A to All Deans of all Faculties.
- 13. P.A to Finance & Account Officers, (F & A.O),
- 14. P.A to Director, Board of Examinations and Evaluation,
- 15. P.A to Director, Innovation, Incubation and Linkages,
- 16. P.A to Director, Department of Lifelong Learning and Extension (DLLE),
- 17. The Receptionist,
- 18. The Telephone Operator,

#### Copy with compliments for information to :-

- 19. The Secretary, MUASA
- 20. The Secretary, BUCTU.

## **UNIVERSITY OF MUMBAI**



# Syllabus for the CERTIFICATE COURSE IN GARDENING AND NURSERY MANAGEMENT

(Introduced with effect from the academic year 2022-23)

AC-10/11/2021 Item No. 6.5 (N)

#### UNIVERSITY OF MUMBAI



#### Syllabus for Approval

Sr. No.	Heading	Particulars
Ê	Title of the 0.6753 Course	Certificate Course in Gardening and Nursery Management
2	Eligibility for 0 6754 Admission	XII <sup>th</sup> Pass
3	Passing Marks	40%
4	Ordinances / Regulations ( if any)	
5	No. of Years / Semesters	Six Month
,	Level *	Certificate/Diploma/UG/PG (Strike out which is not applicable)
,	Pattern	Semester/Yearly (Strike out which is not applicable)
	Status	Revised/New / ( Strike out which is not applicable)
	To be implemented from Academic Year	From Academic Year:2022-2023

Signature Chairman of Bos Name of BOS Chairman: Dr-Rajendra Shirde

Dr. Anuradha Majumdar Dean, Science and Technology

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#### **University of Mumbai**

#### ordinance, Regulations and Syllabus related to the

#### CERTIFICATE COURSE IN GARDENING AND NURSERY MANAGEMENT

Ordinance: 6753 Title of Course

'Certificate Course in Gardening and Nursery Management'

Ordinance: 6754 Eligibility

A candidate for being eligible at admission to the Certificate Course in 'Gardening and Nursery Management' must have passed XII standard examination in any stream from Maharashtra State Board of Higher

Education or as equivalent thereto.

**Regulation: 9496** Duration of Course

The duration of Certificate Course in Gardening and

nursery management will be of six months.

**Regulation : 9497** Intake Capacity:

40 candidates in one batch

**Teachers:** Post Graduate in Botany,

M-Phil, Ph.D. and retired.

Government Qualification Senior Officers and experts from Industries,

and as per the norms laid down by the University of Mumbai.

**Regulation: 9498** Fees

S. N.	Heads	Amount (Rs.)
1.	Tuition Fee	3500
2.	Registration Fee	200
3.	Admission Processing Fee	100
4.	Examination Fee	700
5.	Laboratory Fee	1500
6.	Mark Sheet	50
7.	Study Material & Updating	600
8.	Library Fee	200
9.	Identity Card	50
10.	Onsite Demonstration Charges	200
11.	Computer / Internet Fee	200
12.	Vice Chancellors Fund	20
13.	Student Welfare	20
14.	University Sports & Cultural Activities	20
15.	Disaster Relief Fund	10
16.	Group Insurance	30
17.	Miscellaneous	100
	Total Fees:	7500

**Regulation:** Examination

The examination of the Certificate Course will be held in ONE part - at the end of course.

**Regulation : 9499** Standards of Passing of Examination

To pass this six-month Certificate Course in Gardening and nursery management the candidate must obtain a minimum of 40% marks overall, in respective paper at the end of term exam.

Less than 40 % - Fail 40 % to 50 % - Pass

51 % to 59 % - Second Class 60 % to 74% - First Class 75 % & above - Distinction

**Regulation:** Pedagogy (Instructional System)

The instructional system for CCA is based on theoretical lectures, Laboratory Practicals and field based visits, Audio – video program, case studies, group work, assignments, project and presentation. The course envisages active participation approach of the students.

**Regulation:** Course Evaluation

Project work and presentation: 20 % Field, Visit and Report writing: 10 % Practical Exam / Viva etc : 30 % End-term test : 40 %

**Regulation:** Course Timing

Two days in a week (4 hours a day)

The fees for the course are proposed to be Rs. 7500. With the intake capacity of 40 candidates the amount to be collected will be Rs. 3,00,000.00. The recurring expenses are estimated to be Rs. 1,75,000.00.

The sinking fund for collective expenditure of the center like publicity for the courses, purchase of the implements, fertilizers, composting units, shade net development etc. will be Rs. 95,000.00.

#### **University of Mumbai**

#### Ordinance, Regulations and Syllabus related to the

## CERTIFICATE COURSE IN GARDENING AND NURSERY MANAGRMENT'

**Total Hours: 120 hours** 

#### PAPER I: Introduction of Garden designing

**(25 hours)** 

- 1. Definition and Principles of Gardening.
- 2. Types of Gardens
- 3. Lay out of garden and Principles of Garden Designing
- 4. Types of Ornamental plants
- 5. Methods of Propagation

#### PAPER II: Garden development and maintenance

**(25 hours)** 

- 1. Water and soil management
- 2. Identification of pests and diseases: Symptoms
- 3. Fertilizers : Types ,Organic fertilizers
- 4. Pesticides: Type, Biopesticides
- 5. Cutting and pruning

#### PAPER III: Nursery management.

**(25 hours)** 

- 1. Introduction and scope.
- 2. Nursery development
- 3. Propagation and maintenance
- 4. Product Sale management
- 5. Mother stock maintenance

#### **PAPER IV: Practical component.**

**(45 hours)** 

- 1. Lay out designing
- 2. Garden visits: Case study
- 3. Plantation
- 4. Water management
- 5. Pests and disease identification and sustainable management
- 6. Theme gardens and actual development
- 7. Field visit

#### **References:**

- 1. A Naturalist's guide to Garden Flower of India, 2021, Pradeep Sachdeva and Vidya Tonbram
- 2. Handbook of Gardening, Gopal Swami Aingar, 1975
- 3. Nischin Bonsai Serries, Quarterly magazine by Nikunj and Jyoti Parekh
- 4. Tukai Exotics: india plants.com
- 5. Flora of Sahyadri, Volume 1 and 2 by Shriknat Inganhallikar
- 6. Chand Hirwaicha, 2005, Suniti Deshmukh
- 7. Hirawal, 2001, Suhas Walawalkar
- 8. Handbook of Horticulture, CPWD
- 9. Complete Gardener's manual, The Royal Horticultural Society.
- 10. Fundamentals of Soil, V. N. Sahai
- 11. How to get rid off Garden pests and diseases, Practical problem solver, Andrew Mukaloski

## New ordinances 6753 & 6754 relating to the Certificate Course in Gardening and Nursery Management

#### i. Necessity of starting this course:

Gardening and Nursery management needs scientific and systematic knowledge of plants, water management and pests and fertilizers management. Considering the changing scenarios Of Climate Change changes are needed to be done with sustainable solutions about ecosystem management and economical development. Indian plant species have great diversity and potential in the field Gardening. Landscape designing and Nursery management has scope for youth to raise start up projects through its Various aspects like — designing, maintenance and development of Gardens ,pesticides, potteries and fertilizers. Rare plant species can be conserved and endemic horticultural crops can be introduced in the market and popularized for economical development of Nation.

- ii. UGC has recommended to start skill based courses under B. Voc. and other heads to generate employment/self-employment with regional biogeographical consideration. National Skill QualifiGation Framework is encouraging colleges to start such courses.
- iii. Course is to be commenced from year 2022 -23
- iv. Permanent faculties may not be adequate. Institute has to arrange visiting faculty and expertise on temporary basis which can be good opportunity for fresher as well as skilled masters in respective fields.
- v. Duration: 6 months. As these are practical based courses 6 months duration is necessary to train and assess the skills. Can be compressed into three months by increasing weekly hours. But routine examination schedules and availability of infrastructure should not be disturbed.
- vi. Intake capacity: 40. Minimum 15 should be enrolled to run the course primarily.
- vii. Employment opportunities: Can get job at Nurseries, Fertilizer and pesticide companies. Self-Employment as Landscape designers, Gardeners, nursery men, production of fertilizers and pesticides with organic base through tart up projects.

Or Rajendra Chirole Chairman Bos