

University of Mumbai



No. AAMS/ (UG) / 31 of 2022


CIRCULAR:-

Sub :- Certificate Course in Cultivation of Spice Plants.

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 (c) and subsequently passed by the Board of Deans at its online meeting held on 23rd September, 2021 **vide** item No. 6.8 (N) have been accepted by the Academic Council at its meeting held on 10th November, 2021, **vide** item No. 6.7 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 6757 & 6758 Regulations 9504 to 9507 and the syllabus of **Certificate Course in Cultivation of Spice Plants** 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
6th June, 2022


(Sudhir S. Puranik)
REGISTRAR

To,

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/6.7 (N) /10/11/2021
M.C/3/30/12/2021

No. AAMS/ (UG) / 31 - A of 2022

6th 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.

AC – 10/11/2021
Item No. 6.7 (N)

UNIVERSITY OF MUMBAI



Syllabus for the **CERTIFICATE COURSE IN CULTIVATION OF SPICE PLANTS**

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

AC- 10/11/2022
Item No. 6.7 (N)

UNIVERSITY OF MUMBAI



Syllabus for Approval

Sr. No.	Heading	Particulars
1	Title of the Course	0-6757 Certificate Course in Cultivation of Spice Plants
2	Eligibility for Admission	0-6758 XII th Pass and Farmers, Gardeners
3	Passing Marks	40%
4	Ordinances / Regulations (if any)	
5	No. of Years / Semesters	Six Months
6	Level	Certificate/Diploma/UG/PG (Strike out which is not applicable)
7	Pattern	Semester/Yearly (Strike out which is not applicable)
8	Status	Revised/New / (Strike out which is not applicable)
9	To be implemented from Academic Year	From Academic Year:2022-2023

Rajendra Shinde

Signature Chairman of BoS
Name of BOS Chairman :-
Dr. Rajendra Shinde

Anuradha Majumdar

Dr. Anuradha Majumdar
Dean, Science and Technology

University of Mumbai

ordinance, Regulations and Syllabus related to the

CERTIFICATE COURSE IN CULTIVATION OF SPICE PLANTS

Ordinance: 6757

Title of Course

‘Certificate Course in Cultivation of Spice Plants

Ordinance:v6758

Eligibility

A candidate for being eligible at admission to the Certificate Course in ‘**Cultivation of Spice Plants**’ must have passed XII standard examination in any stream from Maharashtra State Board of Higher Education or as equivalent thereto. Enthusiastic farmers and gardeners can take admissions without age bar.

Regulation: 9504

Duration of Course

The duration of Certificate Course in **Cultivation of Spice Plants** will be of six months.

Regulation: 9505

Intake Capacity:

40 candidates in one batch

Teachers:

Post Graduate in Botany, or Horticulture

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: 9506

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: 9597**Standards of Passing of Examination**

To pass this six-month Certificate Course in Cultivation of Spice Plants 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, Projects and field-based visits, Case studies, Audio – video program, group work, assignments, project and presentation. The course envisages active participation approach of the students.

Regulation:**Course Evaluation**

Project work and presentation: 20 %
Farm 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, Organic fertilizers and pesticide development units, composting units, shade net etc. will be Rs. 95,000.00.

University of Mumbai
Ordinance, Regulations and Syllabus related to the
CERTIFICATE COURSE IN CULTIVATION OF SPICE PLANTS

Total Hours: 120 hours

PAPER I: Spices: (25 hours)

1. Need and Global demand, History and Status in India- state wise.
2. Types of Spices, source and understanding Native spices
3. Development of saplings: Seed germination, Grafting methods
4. Land preparation and Cultivation practices
5. Growth and development of various spice plants

PAPER II: Spice farms management (25 hours)

1. Nutrient management in spice farms
2. Spice gardens for ecotourism
3. Composting methods and organic ways for sustainable spice garden management
4. Companion plants with spice plants
5. Pests and diseases: identification and control in organic way.

PAPER III: Harvesting and post-harvest techniques (25 hours)

1. Introduction and importance: Market study
2. Harvesting methods for maximum production and Quality management
3. Post-harvest management and by-product development
4. Processing methods for spice product and value addition
5. Market information and exporters in India.

PAPER IV: Practical component.

(45 hours)

1. Spices: Identification
2. Composting and Pesticide management
3. Harvesting and processing
4. Packing and sell
5. Pests and disease control: sustainable management
6. Spice garden visits to understand Eco-tourism aspects
7. Case study of 5 spice gardens and market survey

References:

1. The Complete Book on Spices and Condiments (With cultivation, Processing and Use), 2nd Revised Edition, NIIR Board of Consultants
2. Objective Spices and Plantation Crops, G. S. Sreekala
3. Introduction to Spices, Plantation Crops, Medicinal and Aromatic Plants, N. Kumar, Second Edition
4. Production, Handling and Processing of Spices, I. S. Singh and Vinod Singh
5. Cultivation of Spice Crops, Sreeramu Farooki and Srivassappa
6. Text book of Vegetables, Tuber Crops and Spices, S and Narendra Singh Thamburaj
7. Spices Export Promotion Council Indian Spices {Google Book}
8. The complete Book on Spices and Condiments, NIIR Board of Consultant and Engineers ,2006

Certificate Course in Cultivation of Spice plants

Item No. 6.7 Justification

i. Necessity of starting this course:

Spices are major agricultural / horticultural products of India with export potential since history. Production, value additions, processing and packaging for local market as well as best export quality, need of market study, understanding global standards should be understood. Course can provide systematic approach for cost effective spice cultivation method and harvesting, processing providing base to start up projects and small scale industries. Region wise spice diversity can be studied for socio-economic development in sustainable way. Rural as well as urban youth can be involved in spice Global spice market with better future of India.

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 Qualification 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: Spice production and processing units can be started through start up projects. Self-employment can be increased. Job opportunities are possible in Spice industry, Export of spices with value addition is need of the time and has a great market across the World.


Dr. Rajendra Shinde
Chairman, BOS