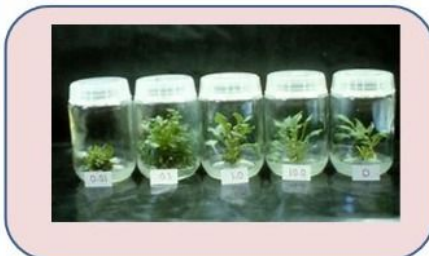


Basics of Micro propagation

Course Name: Basics of Micro propagation
Course code: VAC BT 106
Duration: 15.05.2017 – 20.05.2017



Course offered by:
Department of Biotechnology
VALUE ADDED COURSES
SESSION 2016-17



Basics of Micro propagation

Objectives:

Rapidly multiplying stock plant material to produce a large number of progeny plants, using modern plant tissue culture

Coordinator Name: Dr. Amit Kumar
Designation: Assistant Professor
Department: Biotechnology, KVFO, SVSU, Meerut
Email ID: amit.agbiotech1581@gmail.com
Ph No: 8267010205

VALUE ADDED COURSES Session 2016-17 REGISTRATION FORM

REGISTRATION FORM

Name:.....

Enrolment No.....

Program:.....

Sem. & Year.....

Contact No./Mobile:.....

E-mail:.....

Course Opted:.....

Course Code:.....

Signature with date:.....

Coordinator Name: Dr. Amit Kumar
Designation: Assistant Professor
Department: Biotechnology, KVFO, SVSU, Meerut
Email ID: amit.agbiotech1581@gmail.com
Ph No: 8267010205

Course Schedule

15.05.2017 – 20.05.2017

8.30 am – 12.30 pm
2.00 pm 4.00 pm

Name of Value Added Course: **Basics of Micro propagation**

Course Code: **VAC-BT-106**

Time: **30hrs**

Course Objectives: To acquaint the students about the application of biotechnology in plant science

Course Contents:

Unit -I:

Micro propagation of plants, Protoplast isolation and culture, somatic hybridization, Production of industrially important metabolites in plant culture, Cytopreservation ,transport of germplasm (semen ,ovum embryo).

Unit-II:

Terminology used in cell culture, Aseptic cell culture techniques, Tissue culture lab: Basic requirements. Techniques of suspension culture.

Unit -III:

Gene delivery system: -*Agrobacterium* and virus mediated direct transfer methods

Unit-IV:

Transgenic plants: Bt genes , Biofertilizers, resistance to herbicides, fungal viral pathogens, environmental stress.

Unit-V:

Concept of totipotency, Primary and established cell lines.

Course outcome: At the end of the course, a student would be able to –

Definition of Biotechnology and different branches of Biotechnology

Discussion of scope, history and achievement of Biotechnology

Applications of PCR, Role of enzymes involved in Genetic Engineering

Distinguish between vectors and the applications

Create cDNA library and Genomic library

Assess the use of molecular markers in Plants

Recommended Books

1. Applied plant biotechnology-Ignacimuthu, Tata McGraw Hill New Delhi.
2. Horizons of Biotechnology: B.D. Singh : Kalyani publications
3. An introduction to plant tissue culture: M .K. Razdan Elsevier publication
4. Biotechnology and genomics: P.K. Gupta
5. Plant tissue culture: S .S Bhojwani and M.k. Razdan Elsevier publication

Ref. No. - KVFEES/BT/2017/VAC-35

DEPARTMENT OF BIOTECHNOLOGY

Report on Value Added Course

A one week value added course on BASICS OF MICROPROPAGATION was conducted in the department for UG students. The course starts on 15-05-2017 and 50 students registered themselves in the course. The sessions were handled by course coordinator Dr Amit Kumar, for improving the skills of the students in modern plant tissue culture.

The course was completed on 20-05-2017 and all the 50 students registered successfully completed the course. Students felt that the course was very much helpful and they got the basic knowledge on rapidly multiplying stock plant material to produce a large number of progeny plants.

Rekha Dixit

HOD

Department of Biotechnology


Registrar
Swami Vivekanand
Subharti University
MEERUT



Participants during Value Added course:Basics of Micro propagation

List of Students completed VAC

Name of Value Added Course: **Basics of Micro propagation**

Course Code: **VAC BT 106**

S. No.	Enrollment No.	Name of Students
1	1606020002277	ANITA SHARMA
2	1606020002323	SACHIN
3	1319100413	ANNU
4	1606020002281	ANUJ KUMAR
5	1606020002287	DIMPLE SINGH RANA
6	1606020002292	GURUMAYUM ROCKY SHARMA
7	1606020002294	KARUNA GIRI
8	1606020002303	KM. ALISHA
9	1606020002297	KM. SALONI TYAGI
10	1606020002309	MAHD ZUAIB
11	1606020002316	PANKAJ SHARMA
12	1319100432	RAKIB MALIK
13	1606020002324	SACHIN SHARMA
14	1606020002328	SHALINI SHRIVASTVA
15	1606010002080	AMISHA PANWAR
16	1606010002104	KANIKA KASHYAP
17	1606010002108	KM. DIMPY MALHOTRA
18	1606010002113	KM. SHAGUN BHARDWAJ
19	1606010002159	SONAL GHANSAL
20	1606010001825	ABHISHEK TRIPATHI
21	1606010001840	ANIKA SINGH
22	1606010001842	ANKIT VERMA
23	1606010001844	ANKUR VIKAL
24	1606010001856	ASHISH KUMAR
25	1606010001860	BABAR
26	1606010001861	BHURA
27	1606010001862	CHHAVI
28	1606010001885	HARIS ANSARI
29	1606010001903	KAPIL
30	1606010001912	KM SONIYA JOSHI
31	1606010001914	KM. LIPIKA
32	1606010001917	KM. SHALU
33	1606010001919	KM. SHIVANI
34	1606010001933	MANPREET KAUR
35	1606010001939	MD. SUHAIL
36	1606010001943	MOHD RASHID
37	1606010001945	MOHD USMAN
38	1606010001948	MOHIT KAPASIYA
39	1606010001953	MONEY DHANKARD

40	160601860200155	NEHA CHAUDHARY
41	1606010001961	NIKHIL KUMAR
42	1606010001967	NISHA IRSHAD
43	1606010001969	NISHU KUMARI
44	160601001969	NISHU SAINI
45	1606010001976	PAWAN PAL
46	1606010001977	POOJA
47	1606010001980	POONAM
48	1606010001985	PREETY SHARMA
49	1606010001990	RAFIYA ALI
50	1606010001991	RAHUL

Rabha Dixit

HOD
Department of Biotechnology


Registrar
Swami Vivekanand
Subharti University
MEERUT



Swami Vivekanand Subharti University, Meerut

CERTIFICATE OF COMPLETION

Organized by
**Department of Biotechnology,
Keral Verma Faculty of Science**

*This is to certify that..... Pooja Sharma Class..... B.Sc Biotechnology
Department/College..... Biotechnology, KVSCOS..... has successfully
completed the Value Added Course entitled "Basics of Micropropagation" during,
15.05.2017 to 20.05.2017.*

उत्तिष्ठतः जाग्रतः प्राप्य वरान्निबोधत

Rekha Dixit

Dr. Rekha Dixit
(HOD)

Amit Kumar

Dr. Amit Kumar
(Coordinator)