

STUDENTS FEEDBACK ON CURRICULUM

This questionnaire is to collect information relating to your satisfaction towards curriculum for creating conducive atmosphere for teaching and learning. The information provided by you will be kept confidential and will be used as important feedback for quality improvement of the program of studies/institution.

Academic Year	2016-17
Branch	Biotechnology
Name of the Student	Raksha P A
USN	15G13BT028

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	How do you rate the syllabus of the courses that you have studied in relation to the competencies expected out of the course?	✓				
2	How do you rate the allocation of the credits to the courses?	✓				
3	Relevance for implementation in projects		✓			
4	How do you rate the electives offered in relation to the technological advancements?	✓				
5	How do rate the evaluation scheme designed for each of the course?	✓	✓			
6	How do you rate the percentage of courses having LAB components?	✓				
7	Curriculum is sufficient to make you analyze the engineering problems and its suitable solution	✓				

Suggestions:

Signature



Principal

Sapthagiri College of Engineering
Chikkasandra, Hosaraghatta Road
Bangalore- 560 057

STUDENTS FEEDBACK ON CURRICULUM

This questionnaire is to collect information relating to your satisfaction towards curriculum for creating conducive atmosphere for teaching and learning. The information provided by you will be kept confidential and will be used as important feedback for quality improvement of the program of studies/institution.

Academic Year	2016-17
Branch	BIOTECHNOLOGY
Name of the Student	DIVYASHREE . A . N
JSN	ISS13BTD11

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	How do you rate the syllabus of the courses that you have studied in relation to the competencies expected out of the course?	✓				
2	How do you rate the allocation of the credits to the courses?	✓				
3	Relevance for implementation in projects	✓				
4	How do you rate the electives offered in relation to the technological advancements?		✓			
5	How do rate the evaluation scheme designed for each of the course?	✓				
6	How do you rate the percentage of courses having LAB components?	✓				
7	Curriculum is sufficient to make you analyze the engineering problems and its suitable solution		✓			

Suggestions:

Signature




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Chikkasandra, Hesarghatta Road
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STUDENTS FEEDBACK ON CURRICULUM

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Academic Year	2016-17
Branch	BIOTECHNOLOGY
Name of the Student	Kruthika Shetty
USN	15G13BT0140

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	How do you rate the syllabus of the courses that you have studied in relation to the competencies expected out of the course?	✓				
2	How do you rate the allocation of the credits to the courses?		✓			
3	Relevance for implementation in projects	✓				
4	How do you rate the electives offered in relation to the technological advancements?		✓			
5	How do rate the evaluation scheme designed for each of the course?	✓				
6	How do you rate the percentage of courses having LAB components?	✓				
7	Curriculum is sufficient to make you analyze the engineering problems and its suitable solution		✓			

Suggestions:


Signature


Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
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FACULTY FEEDBACK ON CURRICULUM

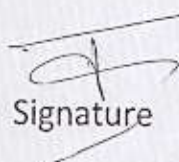
This questionnaire is intended to collect information relating to your satisfaction towards the curriculum, teaching, learning and evaluation. The information provided by you will be kept confidential and will be used as important feedback for quality improvement of the program of studies/institution.

Academic Year	2016-17
Branch	BIOTECHNOLOGY
Name of the Faculty	D. ROBIN K.C
Designation	Associate Professor
Subject/Sub. code	Immunology

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	Do you feel that the curriculum is defined in a way to clarify your teaching goals and what you expect your students to learn?	/				
2	Is the curriculum sufficient to bridge the gap between industry standards /current global scenarios and academics?	/				
3	Is the timely coverage of curriculum possible in the mentioned number of hours?	/				
4	Sufficient reference material and books are available for the topics mentioned in the curriculum?		/			
5	The evaluation methods mentioned in the curriculum are sufficient for providing proper assessment?	/				
6	Curriculum is suitable to the course		/			
7	The curriculum/course of this subject increased my knowledge and perspective in the subject area	/				

Suggestions:


Signature


Principal
Sapthagiri College of Engineering
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Bangalore-560 057



FACULTY FEEDBACK ON CURRICULUM

This questionnaire is intended to collect information relating to your satisfaction towards the curriculum, teaching, learning and evaluation. The information provided by you will be kept confidential and will be used as important feedback for quality improvement of the program of studies/institution.

Academic Year	2016-17
Branch	Biotechnology
Name of the Faculty	Saranya C.
Designation	Assistant Professor
Subject/Sub. code	Food Biotechnology

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	Do you feel that the curriculum is defined in a way to clarify your teaching goals and what you expect your students to learn?	✓				
2	Is the curriculum sufficient to bridge the gap between industry standards /current global scenarios and academics?	✓				
3	Is the timely coverage of curriculum possible in the mentioned number of hours?		✓			
4	Sufficient reference material and books are available for the topics mentioned in the curriculum?	✓				
5	The evaluation methods mentioned in the curriculum are sufficient for providing proper assessment?	✓				
6	Curriculum is suitable to the course		✓			
7	The curriculum/course of this subject increased my knowledge and perspective in the subject area	✓				

Suggestions:

Student should be benefited with lab and Hands on training on plant tissue culture


Signature


Principal
Sapthagiri College of Engineering
Chikkasandra, Hosuraghatta Road
Bangalore-560 057



ALUMNI FEEDBACK ON CURRICULUM

We are glad that you have spent valuable years pursuing courses of your choice at SCE. We shall be thankful if you can spare some of your valuable time to fill up this feedback form and give us valuable suggestions for further improvement of the College. Your valuable inputs will be of great use to improve the quality of our academic programs and enhance the credibility of our Institution. Rate the adequacy of following as they were during your tenure as a student

Year of Passing	2016
Branch	Bio-technology
Name	Vaishaly A-7
Status : Work/Study	Work
Phone no	

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	When you compare yourself with other counterparts from other Institution, you feel that you got most of all the facilities which is not available in other Institution	✓				
2	Learning value (in terms of skills, concepts, knowledge, analytical abilities or broadening perspectives)	✓				
3	Curriculum is sufficient to make you analyze the engineering problems and its suitable solution		✓			
4	How do you rate the learning experience in terms of their relevance to the real life application		✓			
5	Ability to work in teams		✓			
6	Ability to link theory to practice	✓				
7	How do you rate the course/curriculum content that you have learnt in relation to your current job	✓				
8	Compatibility with industry standards	✓				

Suggestions:

Vaishaly
 Signature

[Signature]
 Principal
 Sapthagiri College of Engineering
 Chikkasandra, Hosaraghatta Road
 Bangalore-560 057



STUDENTS FEEDBACK ON CURRICULUM

This questionnaire is to collect information relating to your satisfaction towards curriculum for creating conducive atmosphere for teaching and learning. The information provided by you will be kept confidential and will be used as important feedback for quality improvement of the program of studies/institution.

Academic Year	2016-17
Branch	Dept Biotechnology
Name of the Student	RIGIN.K
USN	15G13BT016

● Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	How do you rate the syllabus of the courses that you have studied in relation to the competencies expected out of the course?	✓				
2	How do you rate the allocation of the credits to the courses?		✓			
3	Relevance for implementation in projects	✓				
4	How do you rate the electives offered in relation to the technological advancements?	✓				
5	How do rate the evaluation scheme designed for each of the course?	✓				
6	How do you rate the percentage of courses having LAB components?		✓			
7	Curriculum is sufficient to make you analyze the engineering problems and its suitable solution	✓				

Suggestions:

Signature


Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore-560 057



ALUMNI FEEDBACK ON CURRICULUM

We are glad that you have spent valuable years pursuing courses of your choice at SCE. We shall be thankful if you can spare some of your valuable time to fill up this feedback form and give us valuable suggestions for further improvement of the College. Your valuable inputs will be of great use to improve the quality of our academic programs and enhance the credibility of our Institution. Rate the adequacy of following as they were during your tenure as a student

Year of Passing	2016
Branch	BIOTECHNOLOGY
Name	CHARU TRIPATHI
Status : Work/Study	WORK
Phone no	

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	When you compare yourself with other counterparts from other Institution, you feel that you got most of all the facilities which is not available in other Institution	✓				
2	Learning value (in terms of skills, concepts, knowledge, analytical abilities or broadening perspectives)		✓			
3	Curriculum is sufficient to make you analyze the engineering problems and its suitable solution	✓				
4	How do you rate the learning experience in terms of their relevance to the real life application	✓				
5	Ability to work in teams		✓			
6	Ability to link theory to practice	✓				
7	How do you rate the course/curriculum content that you have learnt in relation to your current job	✓				
8	Compatibility with industry standards	✓				

Suggestions:

Signature


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Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore-560 057

FACULTY FEEDBACK ON CURRICULUM

This questionnaire is intended to collect information relating to your satisfaction towards the curriculum, teaching, learning and evaluation. The information provided by you will be kept confidential and will be used as important feedback for quality improvement of the program of studies/institution.

Academic Year	2016-17
Branch	BIOTECHNOLOGY
Name of the Faculty	SHOBANA G
Designation	ASSISTANT PROFESSOR
Subject/Sub. code	Enzyme technology

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very Good	Good	Average	Below Average
		5	4	3	2	1
1	Do you feel that the curriculum is defined in a way to clarify your teaching goals and what you expect your students to learn?	/				
2	Is the curriculum sufficient to bridge the gap between industry standards /current global scenarios and academics?	/				
3	Is the timely coverage of curriculum possible in the mentioned number of hours?	/				
4	Sufficient reference material and books are available for the topics mentioned in the curriculum?					
5	The evaluation methods mentioned in the curriculum are sufficient for providing proper assessment?	/				
6	Curriculum is suitable to the course	/				
7	The curriculum/course of this subject increased my knowledge and perspective in the subject area		/			

Suggestions:


Signature


Principal
Sapthagiri College of Engineering
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Sapthagiri College of Engineering

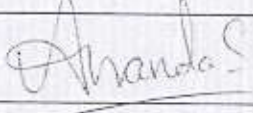




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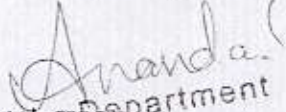
Department of Biotechnology


CIRCULAR

Date: 24/05/2017

This is to inform that there will be a meeting of Academic committee members for analyzing curriculum syllabus of academic year 2017-18. The meeting is scheduled on 25/05/2017 at 12.15 pm in HOD's chamber.

SI No.	Faculty Name	Designation	Signature
1	Dr. Ananda S	HOD, Professor	
2	Dr. Rohit K C	Associate Professor	
3	Prof. Prashanth Kumar H P	Assistant Professor	
4	Prof. Scumya C	Assistant Professor	
5	Prof. Shobha G	Assistant Professor	


Head of the Department
Dept. of Bio-Technology
Sapthagiri College of Engineering
No. 14/5, Chikkasandra
Hesaraghatta Main Road
Bangalore - 56


Principal
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Chikkasandra, Hesaraghatta Road
Bangalore-560057

Date: 25/05/2017

MINUTES OF MEETING

With reference to circular dated on 24/05/2017, the academic committee member assembled in HODs chamber for addressing the following agenda.

Agenda:

- Reviewing the department curriculum syllabus of Academic Year 2017-18
- Reviewing the feedback analysis of various stake holders of the academic year 2016-17
- Identifying the gaps in the syllabus
- Action to be taken for the identified gaps.

During the meeting the following members were present

Sl No.	Faculty Name	Designation	Signature
1	Dr. Ananda S	HOD, Professor	Ananda S
2	Dr. Rohit K C	Associate Professor	Rohit K C
3	Prof. Prashanth Kumar H P	Assistant Professor	Prashanth Kumar H P
4	Prof. Soumya C	Assistant Professor	Soumya C
5	Prof. Shobha G	Assistant Professor	Shobha G

The following points were discussed in the meeting

1. The committee members reviewed the analysis of department curriculum syllabus.
2. The committee members discussed about the feedback of department curriculum syllabus.
3. The members identified the gaps based on the analysis.
4. The following actions were taken for the gaps that are identified.

(Signature)
Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Main Road
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Department of Biotechnology

SL.NO	SEM	Course Title	Identified Gap
1	V Sem VI Sem	Plant Biotechnology	Lack of practical implementation
2	IV Sem II Sem	Microbiology	Lack of practical implementation

Action Taken:

Based on the feedback obtained from Students, Faculties and Alumni and analysis of syllabus by department academic committee members, it was decided to conduct certification course to overcome the gaps identified in the curriculum/syllabus.

Ananda S
HOD, BT
Head of the Department
Dept. of Bio-Technology
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B
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Sapthagiri College of Engineering
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Department of Biotechnology

Date: 30/05/2017

To

IQAC Coordinator
Sapthagiri College of Engineering
Bengaluru-560 057

Respected sir/madam,

Subject: Requisition for conduction of certification course and approval from Governing Council.

With respect to the Academic committee members meeting was held for analyzing department curriculum/syllabus for the academic year 2017-18. The committee members identified few gaps after analyzing the syllabus and feedback from the stakeholders. To bridge the gaps identified in the curriculum, the committee members decided to conduct a certification course on Micropropogations from 24th July 2017 to 29th July 2017 and Advanced Techniques in Clinical Microbiology from 24th January 2018 to 30th January 2018 for the academic year 2017-18. So, I request you to forward and get the approval from the governing council for the same

Thanking You,

Enclosure: Budget proposal

*Forwarded to the
G.C. approval / satisfaction*

[Signature]

Principal

Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bengaluru-560 057

[Signature]
Head of the Department
Dept. of Bio-Technology
Sapthagiri College of Engineering
No. 57/1, Chikkasandra
Hesaraghatta Main Road
Bengaluru -57

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Department of Biotechnology

Date: 30/05/2017

To

IQAC Coordinator

Sapthagiri College of Engineering

Bengaluru-560 057

Respected sir,

Subject: Budget proposal for conduction of certification of certification program on "Micropropogations" and Advanced techniques in clinical microbiology

The Budget Proposal for conduction a certificate program on Micropropogations from 24th July 2017 to 29th July 2017 and Advanced Techniques in Clinical Microbiology from 24th January 2018 to 30th January 2018 is hereby enclosed for your kind consideration and approval.

The details of the recurring budget are given as follows:

Recurring Amount:

Sl. No.	Description	Quantity	Amount in Rs.
1	Bouquet	1	500
2	Certificates	Students	4000
3	Others		2000
Total			6500

Forwarded for the
HC approval / ratification
[Signature]

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore-560 057

Anandas
Head of the Department
Dept. of Bio-Technology
Sapthagiri College of Engineering
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Bangalore-56

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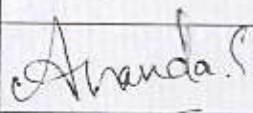


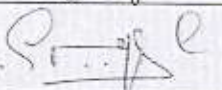

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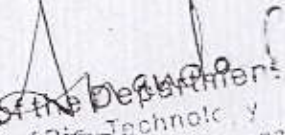
Department of Biotechnology

10-07-2017

CIRCULAR

This is to inform that the following Curriculum Board members are requested to attend the meeting on 11/07/2017 at 11.30 AM in the HODs chamber to decide the syllabus and lesson plan for the certification program on “Micropropagations”

Sl No.	Faculty Name	Designation	Signature
1	Dr. Ananda S	HOD, Professor	
2	Dr. Rohit K C	Associate Professor	
3	Prof. Prashanth Kumar H P	Assistant Professor	
4	Prof. Soumya C	Assistant Professor	
5	Prof. Shobha G	Assistant Professor	


Head of the Department
Dept. of Biotechnology
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Bangalore - 560057


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Department of Biotechnology

Date: 10-07-2017

To,

Mr. Rohith Raj
Managing Partner
Chlorbios Pvt. Ltd.
Yalahanka
Bangalore

Respected Sir,

Subject: Invitation as a "Guest Speaker" in certification program and to attend meeting to discuss about the certification program

Department of Biotechnology have planned to conduct a certification program titled "Micropropagation" for 5th and 7th semester students from 24th July 2017 to 29th July 2017. In this connection, we are privileged to invite you as a guest speaker on the above mentioned topic.

Thanking you for your kind acceptance to our request on phone. We request you to attend the meeting to discuss about the conduction of certification course on 11/07/2017 at 11.30 AM. We look forward to welcome you at SCE.

Thanking you

Yours faithfully


Head of the Department
Dept. of Bio-Technology
Sapthagiri College
No. 57/1, Chikkasandra,
Hesaraghatta
Bangalore - 560057


Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore - 560057

Minutes of Meeting

A meeting was conducted on 11-Jul-2017 in BT HoD's Chamber to discuss and approve the following about the one week Certification Course for 5th & 7th semester BT Students.

- **Course Title :** Micropropagation
- **Resource Personnel:** Mr.Rohith Raj, Managing Partner Chlorbios Pvt.Ltd.Yalahanka Bangalore.
- **Course Duration & Date:** One week from 24th July 2017 to 29th July 2017

Syllabus and Schedule of the certification program:

Date	Time	Topics
24-7-2017	8:30 AM - 10:30 AM	Tissue Culture Methodology
	10:30 AM - 12:30 PM	Sterile technique, Media Optimization
	1:30PM - 4:30pm	Hands on preparation of media for Micropropagation
25-7-2017	8:30 AM - 10:30 AM	Cell Growth
	10:30 AM - 12:30 PM	Measurement of growth of cultures
	1:30PM - 4:30PM	Hands on session on explant preparation and inoculation
26-7-2017	8:30 AM - 10:30 AM	Cell differentiation
	10:30 AM - 12:30 PM	Mutation and Differentiation Processes in Plant Cultures
	1:30PM - 4:30pm	Hands on preparation of different types media for micropropogations
27-7-2017	8:30 AM - 10:30 AM	Micropropagation: steps of micro propagation
	10:30 AM - 12:30 PM	Multiplication, Rooting and acclimatizing, Transfer new plant to soil
	1:30PM - 4:30PM	Hands on session on primary hardening of rooted plants in green house
28-7-2017	8:30 AM - 10:30 AM	Crop development through Anther Culture
	10:30 AM - 12:30 PM	Application of anther Culture
	1:30PM - 4:30PM	Hands on session on pretreatment of anthers and media optimization for Anther culture
29-07-2017	8:30 AM - 10:30 AM	Cell viability measurement

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Department of Biotechnology

10:30 AM – 12:30 PM	Viability tests
1:30PM – 4.30PM	Hands on session on viability of culture cells

The following Curriculum board members were present in the meeting and the syllabus and lesson plan for the certification program has been decided

Sl No.	Faculty Name	Designation	Signature
1	Dr. Ananda S	HOD, Professor	Ananda S
2	Dr. Rohit K C	Associate Professor	Rohit K C
3	Prof. Prashanth Kumar H P	Assistant Professor	Prashanth Kumar H P
4	Prof. Soumya C	Assistant Professor	Soumya C
5	Prof. Shobha G	Assistant Professor	Shobha G
6	Mr. Rohith Raj	Guest Speaker	Rohith Raj

Principal
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Head of the Department
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Department of Biotechnology

Date: 12/07/2017

NOTICE

As a part of programming skill development Department of Information Science and Engineering is conducting one week Certification Course on “MICROPROPOGATION” from 24th July 2017 to 29th July 2017

All the 5th & 7th SEM BT students must attend the course compulsorily.

Ananda S
Head of the Department
Signature of HOD
Department of Biotechnology
Sapthagiri College of Engineering
#14/5, Chikkasandra, Hesaraghatta Main Road
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BT department

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Department of Biotechnology

Certification Program on “Micropropogations”

Academic Year 2017-18

Students Enrollment

Sl.No.	USN	Student Name
1	1SG15BT001	ABHISHEK.E
2	1SG15BT002	AKSHATHA .G
3	1SG15BT003	B.VARSHINI
4	1SG15BT004	BHAGYALAKSHMI.K.S
5	1SG15BT006	DEBIKA CHAKRABARTY
6	1SG15BT008	DISHA D B
7	1SG15BT009	DISHA PRABHU
8	1SG15BT010	GOUTHAM.L.B.L
9	1SG15BT011	HARSHITHA H.C
10	1SG15BT012	HARSHITHA S A
11	1SG15BT013	HARSHITHA.G
12	1SG15BT014	JAGANNATH J
13	1SG15BT015	KARTHIK.G
14	1SG15BT016	KEERTHANA N
15	1SG15BT017	KIRANA SHUBHASRI.R
16	1SG15BT018	NIHARIKA.N
17	1SG15BT019	PAVITHRA.K.S
18	1SG15BT020	PREM SAGAR FERNANDES
19	1SG15BT021	PRIYANKA P
20	1SG15BT022	PRIYANKA R
21	1SG15BT023	R S AKASH
22	1SG15BT024	RAMYASHREE M B
23	1SG15BT025	REVATHY H
24	1SG15BT026	SAHANA N M
25	1SG15BT027	SAHANA.R
26	1SG15BT028	SHRUTHEE KANNAN
27	1SG15BT029	SINDHOORA RAO B
28	1SG15BT031	SRILEKHA K
29	1SG15BT032	SUSHMITHA R
30	1SG15BT033	USHA S RAMU
31	1SG15BT034	VIBHA BHARDWAJ
32	1SG15BT035	VINEETHA M
33	1SG14BT001	A.RITISH
34	1SG14BT002	AASTHA KAMBOJ
35	1SG14BT003	AKSHATHA. J
36	1SG14BT004	AMEERKHAN
37	1SG14BT007	ANITHA.M
38	1SG14BT009	ARUN D K
39	1SG14BT010	ASHA PRANAVI.M
40	1SG14BT012	AYANA E K
41	1SG14BT013	CHANDANA.P

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42	ISG14BT015	DHEESHA.B.S
43	ISG14BT016	HARISH.G
44	ISG14BT017	HINDUSHREE.J
45	ISG14BT018	K.A.VINAY
46	ISG14BT021	MANISH KUMAR.M
47	ISG14BT022	MEERAN.HUSSAIN
48	ISG14BT023	MEGHANA.M
49	ISG14BT024	MEGHANA.M
50	ISG14BT025	MOHIT KUMAR.SINGH
51	ISG14BT026	NAVEEN.S
52	ISG14BT027	NIRANJANA.S
53	ISG14BT031	SHRIPRABHA.R.UPADHYAYA
54	ISG14BT032	SHWETHA.H
55	ISG14BT033	SIDHARTH.M.V
56	ISG14BT034	SINDHU.K
57	ISG14BT035	SNEHA
58	ISG14BT036	SNEHA.P.R
59	ISG14BT037	SONALI.S.KAMATH
60	ISG14BT039	VANI.VISWANATHAN
61	ISG14BT041	VEENA.G.V
62	ISG14BT042	VIBHA.M
63	ISG14BT043	VIDYA.G.V
64	ISG14BT044	VIKERAMAN.S
65	ISG14BT045	YAMINI.S.ACHARYA
66	ISG14BT046	YESHWANTHI
67	ISG12BT022	SAYEED AHMED KHAN
68	ISG13BT042	AKSHAY KUMAR
69	ISG13BT047	SHIVANI

[Signature]
COORDINATOR

[Signature]
HOD
Head of the Department
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Certification Course on "Micropropagations"

Attendance

Sl No.	USN	Student Name	24/7/17		25/7/17		26/7/17		27/7/17		28/7/17		29/7/17	
			MS	AS	MS	AS	MS	AS	MS	AS	MS	AS	MS	AS
1	ISG15BT001	ABHISHEK.E	1	2	3	4	5	6	7	8	9	10	11	12
2	ISG15BT002	AKSHATHA.G	1	2	3	4	5	6	7	8	9	10	11	12
3	ISG15BT003	B.VARSHINI	1	2	3	4	5	6	7	8	9	10	11	12
4	ISG15BT004	BHAGYALAKSHMI K.S	1	2	3	4	5	6	7	8	9	10	10	11
5	ISG15BT006	DEBIKA CHAKRABARTY	1	2	3	4	5	6	7	8	9	10	11	12
6	ISG15BT008	DISHA D B	1	2	3	4	5	6	7	8	9	10	11	12
7	ISG15BT009	DISHA PRABHU	1	2	3	4	5	6	7	8	9	10	11	12
8	ISG15BT010	GOUTHAMI.B.L	1	2	3	4	5	6	7	8	9	10	11	12
9	ISG15BT011	HARSHITHA H.C	1	2	3	4	5	6	7	8	9	10	11	12
10	ISG15BT012	HARSHITHA S A	1	2	3	4	4	5	6	7	9	10	11	12
11	ISG15BT013	HARSHITHA.G	1	2	3	4	5	6	7	8	9	10	11	12
12	ISG15BT014	JAGANNATH J	1	2	3	4	5	6	7	8	9	10	11	12
13	ISG15BT015	KARTHIK.G	1	2	3	4	5	6	7	8	9	10	11	12
14	ISG15BT016	KEERTHANA N	1	2	3	4	5	6	7	8	9	10	11	12
15	ISG15BT017	KIRANA SHUBHASRI.R	1	2	3	4	5	6	7	8	9	10	11	12
16	ISG15BT018	NIHARIKA.N	1	2	3	4	5	6	7	8	9	10	11	12
17	ISG15BT019	PAVITHRA.K.S	1	2	3	4	5	6	7	8	9	10	11	12
18	ISG15BT020	PREM FERNANDES SAGAR	1	2	3	4	5	6	7	8	9	10	11	12
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21	ISG15BT023	R S AKASH	1	2	3	4	5	6	7	8	9	10	11	12
22	ISG15BT024	RAMYASHREE M B	1	2	3	4	5	6	7	8	9	10	11	12
23	ISG15BT025	REVATHY H	1	2	3	4	5	6	7	8	9	10	11	12
24	ISG15BT026	SAHANA N M	1	2	3	4	5	6	7	8	9	10	11	12
25	ISG15BT027	SAHANA R	1	2	3	4	5	6	7	8	9	10	11	12
26	ISG15BT028	SHRUTHEE KANNAN	1	2	3	4	5	6	7	8	9	10	11	12

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27	ISG15BT029	SINDHOORA RAG B	1	2	3	4	5	6	7	8	9	10	11	12
28	ISG15BT031	SRILEKHA K	1	2	3	4	5	6	7	8	9	10	11	12
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38	ISG14BT009	ARUN D K	1	2	3	4	5	6	7	8	9	10	11	12
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44	ISG14BT017	HINDUSHREE.J	1	2	3	4	5	6	7	8	9	10	11	12
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48	ISG14BT024	MEGHANA.M	1	2	3	4	5	6	7	8	9	10	11	12
49	ISG14BT025	MOHIT KUMAR SINGH	1	2	3	4	5	6	7	8	9	10	10	11
50	ISG14BT026	NAVEEN .S	1	2	3	4	5	6	7	8	9	10	11	12
51	ISG14BT027	NIRANJANA.S	1	2	3	4	5	6	7	8	9	10	11	12
52	ISG14BT031	SHRIPRABHA UPADHYAYA R	1	2	3	4	5	6	7	8	9	10	11	12
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54	ISG14BT033	SIDHARTH.M.V	1	2	3	4	5	6	7	8	9	10	11	12
55	ISG14BT034	SINDHU K	1	2	3	4	5	6	7	8	9	10	11	12
56	ISG14BT035	SNEHA	1	2	3	4	5	6	7	8	9	10	11	12

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57	ISG14BT036	SNEHA.P.R	1	2	3	4	5	6	7	8	9	10	11	12
58	ISG14BT037	SONALI S.KAMATH	1	2	3	4	5	6	7	8	9	10	11	12
59	ISG14BT039	VANI VISWANATHAN	1	2	3	4	5	6	7	8	9	10	11	12
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64	ISG14BT045	YAMINI S ACHARYA	1	2	2	3	4	5	6	7	8	9	10	11
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66	ISG12BT022	SAYEED AL-MED KHAN	1	2	3	4	5	6	7	8	9	10	11	12
67	ISG13BT042	AKSHAY KUMAR	1	2	3	4	5	6	7	8	9	10	11	12
68	ISG13BT047	SHIVANI	1	2	2	3	4	5	6	7	8	9	10	11

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Department of Biotechnology

One week Certification Course on “Micropropagations”

Test Time Table

Sl. No.	DATE	DAY	TIMINGS
1	29/7/2017	Saturday	4.00 pm – 5.00 pm

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Bangalore- 560 057

CERTIFICATE COURSE PROGRAMME ON MICROPROPOGATIONS

QUESTION PAPER

Duration: 1hr

Maximum marks: 25

Note: Question number 1-15 (1M each)

Question number 16-20 (2M each)

1. Who is the father of tissue culture?

a) Bonner b) Haberlandt c) Laibach d) Gautheret

2. The production of secondary metabolites require the use of

a) protoplast b) cell suspension c) meristem d) auxillary buds

3. Synthetic seed is produced by encapsulating somatic embryo with

a) sodium chloride b) sodium alginate c) sodium acetate d) sodium nitrate

4. Hormone pair required for a callus to differentiate are

a) auxin and cytokinin b) auxin and ethylene c) auxin and abscisic acid d) cytokinins and gibberlin

5. DMSO (Dimethyl sulfoxide) is used as

a) Gelling agent b) alkylating agent c) Chelating agent d) Cryoprotectant

6. The most widely used chemical for protoplast fusion, as fusogens, is

a) Mannitol b) Sorbitol c) Mannol d) Poly ethylene glycol (PEG)

7. Cybrids are produced by

a) Fusion of two different nuclei from two different species b) Fusion of two same nuclei from same

species c) Nucleus of one species but cytoplasm from both the parent species

d) none of the above


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8. Callus is

- a) Tissue that forms embryo b) An insoluble carbohydrate c) Tissue that grows to form embryoid d) Unorganized actively dividing mass of cells maintained in culture

9. Part of plant used for culturing is called

- a) Scion b) Explant c) Stock d) Callus

10. Growth hormone producing apical dominance is

- a) Auxin b) Gibberellin c) Ethylene d) Cytokinin

11. A medium which is composed of chemically defined compound is called

- a) Natural media b) Synthetic media c) Artificial media d) None of these

12. To obtain haploid plant, we culture

- a) Entire anther b) Nucleus c) Embryo d) Apical bud

13. Somaclonal variations are the ones

- a) Caused by mutagens b) Produce during tissue culture c) Caused by gamma rays d) Induced during sexual embryogeny

14. Which of the following plant cell will show totipotency?

- a) Xylem vessels b) Sieve tube c) Meristem d) Cork cells

15. Which vector is mostly used in crop improvement?


- a) Plasmid b) Cosmid c) Phasmid d) Agrobacterium

16. Define micro propagation? Mention the steps in micro propagation.

17. Mention the advantages of micro propagation

18. Mention the limitations of micro propagation.

19. Write the applications of Micropropagation



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20. Mention the methods of micro propagation

Approved by Academic Committee members:

Sl No.	Faculty Name	Designation	Signature
1	Dr. Ananda S	HOD, Professor	Ananda S
2	Dr. Rohit K C	Associate Professor	
3	Prof. Prashanth Kumar H P	Assistant Professor	
4	Prof. Soumya C	Assistant Professor	
5	Prof. Shobha G	Assistant Professor	
6	Mr. Rohith Raj	Guest Speaker	


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Certification Course on "MICROPROPOGATIONS"

Solutions for the Questions

Duration: 1hr

Maximum marks: 25

- | | |
|-----------------------|------------------------|
| 1. Answer 1: Option B | 9. Answer 9: Option B |
| 2. Answer 2: Option B | 10. Answer10: Option A |
| 3. Answer 3: Option B | 11. Answer11: Option B |
| 4. Answer 4: Option A | 12. Answer12: Option A |
| 5. Answer 5: Option B | 13. Answer13: Option D |
| 6. Answer 6: Option D | 14. Answer14: Option C |
| 7. Answer 7: Option C | 15. Answer15: Option D |
| 8. Answer 8: Option D | |

16. Micro propagation is the practice of rapidly multiplying stock plant material to produce many progeny plants, using modern plant tissue culture methods. In short, steps of micro propagation can be divided into 4 stages. Selection of mother plant, Multiplication, Rooting and acclimatizing, Transfer new plant to soil
17. Micro propagation can be used to produce disease-free plants. It is the only viable method of regenerating genetically modified cells or cells after protoplast fusion. It is useful in multiplying plants which produce seeds in uneconomical amounts, or when plants are sterile and do not produce viable seeds or when seed cannot be stored.
18. It is very expensive, and can have a labor cost of more than 70%. A monoculture is produced after micro propagation, leading to a lack of overall disease resilience, as all progeny plants may be vulnerable to the same infections. An infected plant sample can produce infected progeny. This is

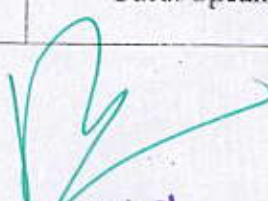

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uncommon as the stock plants are carefully screened and vetted to prevent culturing plants infected with virus or fungus.

19. The technique of micro propagation provides a good alternative for those plant species that show resistance to practices of conventional bulk propagation. An alternative method of vegetative propagation for mass propagation is offered through micro propagation. Plants in large numbers can be produced in a short period. Any particular variety may be produced in large quantities and the time to develop new varieties is reduced by 50%. Large amounts of plants can be maintained in small spaces. This helps to save endangered species and the storage of germplasm.
20. Multiplication by Meristematic Tissue of Axillary and Apical Shoots, Multiplication by Adventitious Shoots, Multiplication by Adventitious Embryo Formation, Multiplication through Callus Culture

Approved by Academic Committee members and Guest speaker

Sl No.	Faculty Name	Designation	Signature
1	Dr. Ananda S	HOD, Professor	Ananda S
2	Dr. Renit K C	Associate Professor	[Signature]
3	Prof. Prashanth Kumar H P	Assistant Professor	[Signature]
4	Prof. Soumya C	Assistant Professor	[Signature]
5	Prof. Shobha G	Assistant Professor	[Signature]
6	Mr. Rohith Raj	Guest Speaker	[Signature]

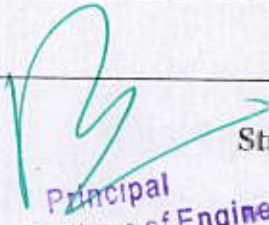

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Certification Course on "Micropropagations"

Participant Feedback

1. How was the overall organization of the Certification Course?
a) Poor b) Satisfactory c) Good ☒ d) Excellent
2. How appropriate were the facilities provided?
a) Poor b) Satisfactory c) Good ☒ d) Excellent
3. Opportunity to ask questions for clarification and interaction with presenters
a) Poor b) Satisfactory c) Good ☒ d) Excellent
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5. Topic and contents of the Certification Course
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6. How do you rate the Certification Course compared to other workshops that you have attended?
a) Poor b) Satisfactory c) Good ☒ d) Excellent
7. Generally how was your overall experience during the Certification Course
a) Poor b) Satisfactory c) Good ☒ d) Excellent
8. Any Suggestions:

Student Name: VARSHINI. B

Student Signature: 

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a) Poor b) Satisfactory c) Good d) Excellent
8. Any Suggestions:

Student Name: Ranjana

Student Signature: Ranjana

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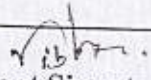
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8. Any Suggestions:

Student Name: VIBHA BARDWAJ

Student Signature: 


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8. Any Suggestions:

Student Name: Narves

Student Signature: Narves

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Chikkasandra, Hesaraghatta Road
Bengaluru-560057



Sapthagiri College of Engineering

(Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi)

#14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057

Phone: 080-28372800/1/2 www.sapthagiri.edu.in Fax: 080-28372797

Department of Biotechnology

Certification Course on "Micropropogations"

Participant Feedback

1. How was the overall organization of the Certification Course?
a) Poor b) Satisfactory c) Good d) ~~Excellent~~
2. How appropriate were the facilities provided?
a) Poor b) Satisfactory c) Good d) ~~Excellent~~
3. Opportunity to ask questions for clarification and interaction with presenters
a) Poor b) Satisfactory c) Good d) ~~Excellent~~
4. Effectiveness of the Hands-on Sessions
a) Poor b) Satisfactory c) ~~Good~~ d) Excellent
5. Topic and contexts of the Certification Course
a) Poor b) Satisfactory c) Good d) ~~Excellent~~
6. How do you rate the Certification Course compared to other workshops that you have attended?
a) Poor b) Satisfactory c) ~~Good~~ d) Excellent
7. Generally how was your overall experience during the Certification Course
a) Poor b) Satisfactory c) Good d) ~~Excellent~~
8. Any Suggestions:

Interacted sessions, - Skill andic session required

Student Name: Vinay G. V

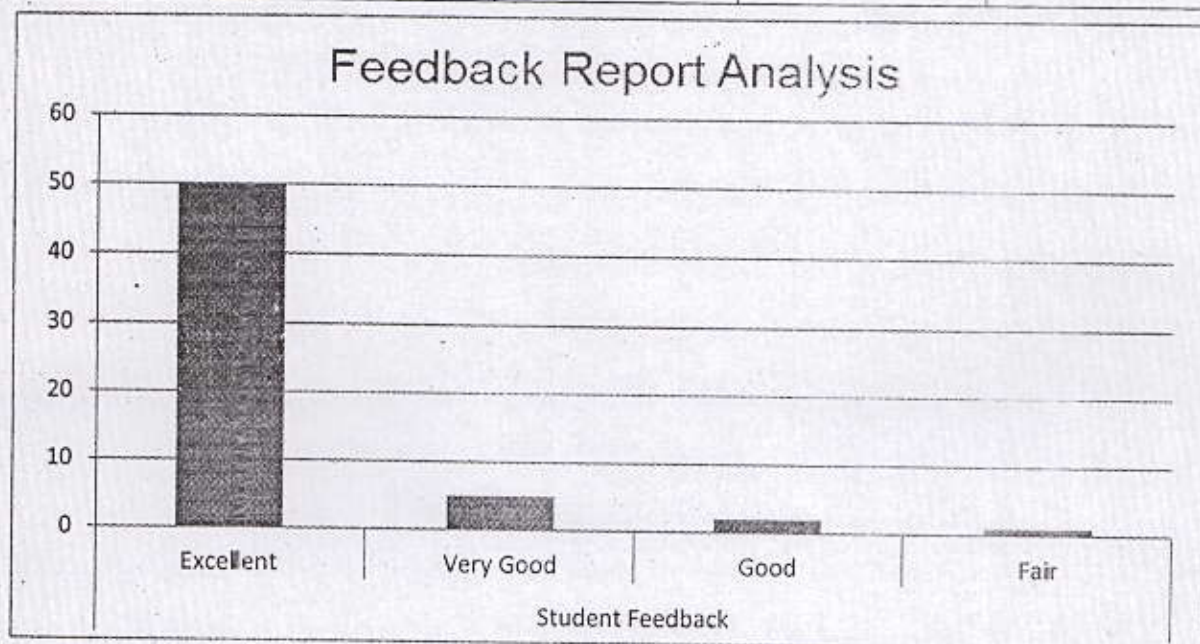
Student Signature: Vinay G. V

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore-560 057

FEEDBACK ANALYSIS

Certification Programme: "Micropropagations"

No. of students participated	Student Feedback			
	Excellent	Very Good	Good	Fair
58	50	05	02	01




Action Report:

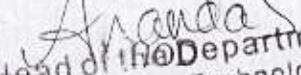
86 % of students were completely happy with the certification program and 8 % of students felt it was a good program and remaining 1 % students were satisfied with the program.

Action Taken:

The Feedback report which was collected from the students was sent to the principal and he would take necessary actions based on the comments and conduct more programs for the benefit of students.


Program Coordinator


Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560057


Head of the Department
Dept. of Bio-Technology
Sapthagiri College of Engineering
No. 57/1, Chikkasandra
Hesaraghatta Main Road
Bangalore-57



**CERTIFICATE COURSE
ON
MICROPROPOGATIONS**



This is to certify that

Mr./Ms.. DISHA D.B

Of Vth / VIth Semester Biotechnology has successfully completed
MICROPROPOGATIONS organized by Department of Biotechnology,
Sapthagiri College of Engineering, Bengaluru-57 and CHLORBIOS PVT
LTD, Bengaluru-560106 from 24th July 2017 to 29th July 2017

[Signature]
Chief Coordinator

[Signature]
Head
Department of BT

[Signature]
Managing Partner
CHLORBIOS PVT LTD

[Signature]
Principal
SCE




**CERTIFICATE COURSE
ON
MICROPROPOGATIONS**

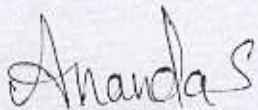



This is to certify that


Mr./Ms. R. S. AKASH

**Of Vth / VIth Semester Biotechnology has successfully completed
MICROPROPOGATIONS organized by Department of Biotechnology,
Sapthagiri College of Engineering, Bengaluru-57 and CHLORBIOS PVT
LTD, Bengaluru-560106 from 24th July 2017 to 29th July 2017**


Chief Coordinator


Head
Department of BT


Managing Partner
CHLORBIOS PVT LTD


Principal
SCE



**CERTIFICATE COURSE
ON
MICROPROPOGATIONS**



This is to certify that

Mr./Ms..K.A.VINAY.....

**Of Vth / VIth Semester Biotechnology has successfully completed
MICROPROPOGATIONS organized by Department of Biotechnology,
Sapthagiri College of Engineering, Bengaluru-57 and CHLORBIOS PVT
LTD, Bengaluru-560106 from 24th July 2017 to 29th July 2017**


Chief Coordinator


Head
Department of BT


Managing Partner
CHLORBIOS PVT LTD


Principal
SCE



CERTIFICATE COURSE ON MICROPROPOGATIONS



This is to certify that

Mr./Ms..

Of Vth / VIth Semester Biotechnology has successfully completed MICROPROPOGATIONS organized by Department of Biotechnology, Sapthagiri College of Engineering, Bengaluru-57 and CHLORBIOS PVT LTD, Bengaluru-560106 from 24th July 2017 to 29th July 2017

**Chief
Coordinator**

**Head
Department of BT**

**Managing Partner
CHLORBIOS PVT LTD**

**Principal
SCE**

Sapthagiri College of Engineering
Chikkasandra, Hosur Road
Bengaluru-560057
Principal

CERTIFICATION COURSE – MICROPROPOGATIONS

POST EVENT REPORT

Department of BT conducted Certificate Course on Micropropogations from 24th July 2017 to 29th July 2017

Objective of the Course: The One week course made the students to be familiar with the major concepts in plant tissue culture which is a main platform for their career. Certificate Course became the vital step to improve the knowledge of students.

GuestSpeaker: Mr.Rohith Raj, Managing Partner Chlorbios Pvt.Ltd.Yalahanka Bangalore.

Duration of the course: One week from 24th July 2017 to 29th July 2017



Student participants in certification course program

[Handwritten Signature]
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Department of Biotechnology

Dates	Report
24-7-2017	Speaker delivered a talk on Introduction, Tissue Culture Methodology Sterile technique Media Optimization, Hands on preparation of media for Micropropagation
25-7-2017	Speakers delivered a talk on Cell Growth, Measurement of growth of cultures, Hands on session on explant preparation and inoculation
26-7-2017	Speakers delivered a talk on Cell differentiation, Mutation and Differentiation Processes in Plant Cultures, Hands on preparation of different types media for micropropogations
27-7-2017	Speakers delivered a talk on Micropropagation: steps of micro propagation, Multiplication, Rooting and acclimatizing, Transfer new plant to soil, Hands on session on primary hardening of rooted plants in green house
28-7-2017	Speakers delivered a talk on Crop development through Anther Culture, Application of anther Culture, Hands on session on pretreatment of anthers and media optimization for Anther culture
29-07-2017	Speakers delivered a talk on Cell viability measurement, Viability tests, Hands on session on viability of culture cells

Conclusion: A program of education resulting in a certificate of completion. These programs prepare students to complete a specific task or allow them proficiency in one of the particular aspect of their field. Students are able to learn about micropropogations. Students pursue certificates in order to get ahead in the professional field of their interest. Faculty members were also equally benefited with the course

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Head of the Department
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Department of Biotechnology

04-01-2018

CIRCULAR

This is to inform that the following Curriculum Board members are requested to attend the meeting on 05/01/2018 at 10.30 AM in the HODs chamber to discuss about the certification course.

Sl No.	Faculty Name	Designation	Signature
1	Dr. Ananda S	HOD, Professor	Ananda S
2	Dr. Rohit K C	Associate Professor	Rohit K C
3	Prof. Prashanth Kumar H P	Assistant Professor	Prashanth Kumar H P
4	Prof. Soumya C	Assistant Professor	Soumya C
5	Prof. Shobha G	Assistant Professor	Shobha G

Head of the Department
Dept. of Bio-Technology
HOD
Sapthagiri College of Engineering
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Department of Biotechnology

Date: 04-01-2018

To,

Dr.Hemavathi and Team

Head of Department

Department of microbiology

Sapthagiri institute of medical sciences & research center

Bangalore - 560057.

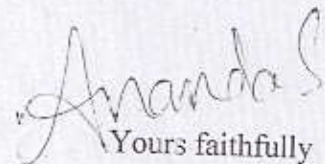
Respected Sir,

Subject: Invitation as a "Guest Speaker" in certification program and to attend meeting to discuss about the certification program

Department of Biotechnology has planned to conduct a certification program titled "**Advanced Techniques in Clinical Microbiology**" for 2nd and 4th semester students from 24th January 2018 to 30th January 2018. In this connection, we are privileged to invite you as a guest speaker on the above mentioned topic.

Thanking you for your kind acceptance to our request on phone. We request you to attend the meeting to discuss about the conduction of certification course on 05/01/2018. We look forward to welcome you at SCE.

Thanking you


Yours faithfully

Head of the Department

Dept. of Bio-Technology

Sapthagiri College of Engineering

#14/5, Chikkasandra

Hesaraghatta Main Road

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Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
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Minutes of Meeting

A meeting was conducted on 05-Jan -2018 in BT Hods' Chamber to discuss and approve the following about the five days Certification Course for 2nd & 4th semester BT Students.

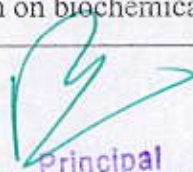
Course Title: Advanced Techniques in Clinical Microbiology

Resource Personnel: Dr.Hemavathi, HOD, Department of microbiology, Sapthagiri institute of medical sciences & research center, Bangalore - 560057.

Course Duration & Date: Five days 24th January 2018 to 30th January 2018

Syllabus & Schedule of the certification program

Date	Time	Topics
24-01-2018	8:30 AM - 10:30 AM	Media used in Microbiology
	10:30 AM - 12:30 AM	Pure culture Techniques
	1:30PM - 4.30PM	Hands on session on Pure Culture Techniques
25-01-2018	8:30 AM - 10:30 AM	Biosafety levels
	10:30 AM - 12:30 AM	Good laboratory Practices
	1:30PM - 4.30PM	Hands on session on sterilization process
28-01-2018	8:30 AM - 10:30AM	Human Pathology
	10:30 AM - 12:30 AM	Bacterial Pathogens, Fungal Pathogens
	1:30PM - 4.30PM	Hands on session on isolation and identification of Bacteria and Fungi
29-01-2018	8:30 AM - 10:15 AM	Cell viability
	10:30 AM - 12:30 AM	Cell viability Tests
	1:30PM - 4.30PM	Hands on session on cell viability
30-01-2018	8:30 AM - 10:15 AM	Biochemical Tests to characterize microbes
	10:30 AM - 12:30 AM	Shake flask studies
	1:30PM - 4.30PM	Hands on session on biochemical test, Shake flask studies



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Department of Biotechnology

The following Curriculum board members were present in the meeting and syllabus and lesson plan for the certification program has been decided

Sl No.	Faculty Name	Designation	Signature
1	Dr. Ananda S	HOD, Professor	Ananda S
2	Dr. Rohit K C	Associate Professor	Rohit K C
3	Prof. Prashanth Kumar H P	Assistant Professor	Prashanth Kumar H P
4	Prof. Soumya C	Assistant Professor	Soumya C
5	Prof. Shobha G	Assistant Professor	Shobha G
6	Dr. Hemavathi	Guest Speaker	Hemavathi

Ananda S
HOD
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Date: 08/01/2018

NOTICE

As a part of programming skill development Department of Information Science and Engineering is conducting Five days Certification Course on "Advanced Techniques in Clinical Microbiology" from 24th January 2018 to 30th January 2018. All the 2nd & 4th SEM BT students must attend the course compulsorily.

Ananda S
Head of the Department
of Bio-Technology
Signature of HOD
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BT department

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Department of Biotechnology

Certification Program on "Advanced Techniques in Clinical Microbiology"

Academic Year 2017-18

Students Enrollment

Sl.No.	USN	Student Name
1	1SG16BT001	AKANSHA CHAUHAN
2	1SG16BT002	AMBIKA
3	1SG16BT003	ANANYA.N.NAYAK
4	1SG16BT004	BI BI AYESHA
5	1SG16BT005	C.SUSHMITHA
6	1SG16BT006	CHAITRA.M
7	1SG16BT007	CHARISHMA.C.GOWDA
8	1SG16BT009	DHEERAJ REDDY.B.N
9	1SG16BT010	GURUPRASAD.K.G
10	1SG16BT011	HEMA.H
11	1SG16BT012	HEMA.J.N
12	1SG16BT013	HEMANTH
13	1SG16B0014	JEEVITHA.D
14	1SG16BT015	LAKSHITHA W N
15	1SG16BT017	LAVANYA.B
16	1SG16BT018	M.YASHWANTH
17	1SG16BT019	MAHIMA M SIDDHESHWAR
18	1SG16BT020	MAYURI
19	1SG16BT022	NAFISATHUL MISRIYA.A
20	1SG16BT023	NAYANA.K.N
21	1SG16BT024	NETHRAVATHI.M.C
22	1SG16BT025	NIDHI.K.V
23	1SG16BT026	NIKITHA.S
24	1SG16BT027	POOJA.P
25	1SG16BT029	PRAJWAL.M
26	1SG16BT030	PRAJWAL.V.S
27	1SG16BT031	PRIYANKA.M
28	1SG16BT032	PRIYANKA VASUDEV
29	1SG16BT033	RABBANA SOUDAGAR
30	1SG16BT034	RAMYASHREE.S.J
31	1SG16BT035	REACHIKAA RAJESWARIS
32	1SG16BT036	SABA ANJUM
33	1SG16BT037	SAI PADMASHREE
34	1SG16BT038	SHREEMASHREE.K.P
35	1SG16BT039	SHWETA
36	1SG16BT040	SIRISHA.J

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Department of Biotechnology

37	1SG16BT041	SUPRITHA.R
38	1SG16BT042	SWASTIK SOURJEET
39	1SG16BT043	VARSHA.B.S
40	1SG16BT044	VINAY.B.S
41	1SG17BT001	ABHINAV BANARJI
42	1SG17BT002	ADITI KASHYAP
43	1SG17BT003	AMBIKA R
44	1SG17BT004	ANAGHA SHESHADRI
45	1SG17BT005	ANJALI R
46	1SG17BT007	B M KARTHIK
47	1SG17BT008	BHOOMIKA G
48	1SG17BT009	BHUVANESHWARI G
49	1SG17BT010	D S NEHA
50	1SG17BT011	DEEPIKA G
51	1SG17BT012	DIVYA D ANAND
52	1SG17BT014	HARSHITHA J Y
53	1SG17BT015	KUHELI BHOWMICK
54	1SG17BT016	MANIKUMAR R
55	1SG17BT017	KIRAN KUMAR N
56	1SG17BT018	NITHYASHREE S
57	1SG17BT019	PRAKRUTHI M R
58	1SG17BT020	PRATHIMA H S
59	1SG17BT021	PRAVEEN P
60	1SG17BT022	PRIYADARSHINI M
61	1SG17BT024	RAKSHITHA A
62	1SG17BT025	RASHMI T S
63	1SG17BT026	RIDA TABASSUM
64	1SG17BT027	RUMAISA FATIMA
65	1SG17BT028	SANCHIT S YADAV
66	1SG17BT030	SANGEETHA R
67	1SG17BT031	SHASHIKALA S
68	1SG17BT032	SHWETHA S
69	1SG17BT033	SOMNATH SINGH
70	1SG17BT034	SONALI
71	1SG17BT035	SHREELAKSHMI K
72	1SG17BT036	SUPRAJA O D
73	1SG17BT037	THANUSHREE M
74	1SG17BT038	VINUTHA
75	1SG17BT039	YASHASWINI S S
76	1SG17BT040	YUKTHA R
77	1SG17BT041	KIRAN KUMAR M L

COORDINATOR

HOD

Head of the Department
Department of Biotechnology
Sapthagiri College of Engineering
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Department of Biotechnology

Certification Course on "Advanced Techniques in Clinical Microbiology"

Attendance

Sl No.	USN	Student Name	24/01/18		25/01/18		26/01/18		29/01/18		30/01/18	
			MS	AS	MS	AS	MS	AS	MS	AS	MS	AS
1	ISG16BT001	AKANSHA CHAUHAN	1	2	3	4	5	6	7	8	9	10
2	ISG16BT002	AMBIKA	1	2	3	4	5	6	7	8	9	10
3	ISG16BT003	ANANYA.N.NAYAK	1	2	3	4	5	6	7	8	9	10
4	ISG16BT004	BI BI AYESHA	1	2	3	4	5	6	7	8	9	10
5	ISG16BT005	C.SUSHMITHA	1	2	3	4	5	6	7	8	9	10
6	ISG16BT006	CHAITRA.M	1	2	3	4	5	6	7	8	9	10
7	ISG16BT007	CHARISHMA.C.GOWDA	1	2	3	4	5	6	7	8	9	10
8	ISG16BT009	DHEERAJ REDDY.B.N	1	2	3	4	5	6	7	8	9	10
9	ISG16BT010	GURUPRASAD.K.G	1	2	3	4	5	6	7	8	9	10
10	ISG16BT011	HEMA.H	1	2	3	4	5	6	7	8	9	10
11	ISG16BT012	HEMA.J.N	1	2	3	4	5	6	7	8	9	10
12	ISG16BT013	HEMANTH	1	2	3	4	5	6	7	8	9	10
13	ISG16B0014	JEEVITHA.D	1	2	3	4	5	6	7	8	9	10
14	ISG16BT015	LAKSHITHA W N	1	2	3	4	5	6	7	8	9	10
15	ISG16BT017	LAVANYA.B	1	2	3	4	5	6	7	8	9	10
16	ISG16BT018	M.YASHWANTH	1	2	3	4	5	6	7	8	9	10
17	ISG16BT019	MAHIMA SIDDHESHWAR M	1	2	3	4	5	6	7	8	9	10
18	ISG16BT020	MAYURI	1	2	3	4	5	6	7	8	9	10
19	ISG16BT022	NAFISATHUL MISRIYA.A	1	2	3	4	5	6	7	8	9	10
20	ISG16BT023	NAYANA.K.N	1	2	3	4	5	6	7	8	9	10
21	ISG16BT024	NETHRAVATHI.M.G	1	2	3	4	5	6	7	8	9	10
22	ISG16BT025	NIDHI.K.V	1	2	3	4	5	6	7	8	9	10
23	ISG16BT026	NIKITHA.S	1	2	3	4	5	6	7	8	9	10
24	ISG16BT027	POOJA.P	1	2	2	2	3	4	5	6	7	8
25	ISG16BT029	PRAJWAL.M	1	2	3	4	5	6	7	8	9	10
26	ISG16BT030	PRAJWAL.V.S	1	2	3	4	5	6	7	8	9	10

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27	SG16BT031	PRIYANKA.M	1	2	3	4	5	6	7	8	9	10
28	SG16BT032	PRIYANKA VASUDEV	1	2	3	4	5	6	7	8	9	10
29	SG16BT033	RABBANA SOUDAGAR	1	2	3	4	5	6	7	8	9	10
30	SG16BT034	RAMYASHREE.S.J	1	2	3	4	5	6	7	8	9	10
31	SG16BT035	REACHIKAA RAJESWARLS	1	2	3	4	5	6	7	8	9	10
32	SG16BT036	SABA ANJUM	1	2	3	4	5	6	7	8	9	10
33	SG16BT037	SAI PADMASHREE	1	2	3	4	5	6	7	8	9	10
34	SG16BT038	SHREEMASHREE.K.P	1	2	3	4	5	6	7	8	9	10
35	SG16BT039	SHWETA	1	2	3	4	5	6	7	8	9	10
36	SG16BT040	SIRISHA.J	1	2	3	4	5	6	7	8	9	10
37	SG16BT041	SUPRITHA R	1	2	3	4	5	6	7	8	9	10
38	SG16BT042	SWASTIK SOURJEET	1	2	3	4	5	6	7	8	9	10
39	SG16BT043	VARSHA.B.S	1	2	3	4	5	6	7	8	9	10
40	SG16BT044	VINAY B.S	1	2	3	4	5	6	7	8	9	10
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43	ISG17BT003	AMBIKA R	1	2	3	4	5	6	7	8	9	10
44	ISG17BT004	ANAGHA SHESHADRI	1	2	3	4	5	6	7	8	9	10
45	ISG17BT005	ANJALI R	1	2	3	4	5	6	7	8	9	10
46	ISG17BT007	B M KARTHIK	1	2	3	4	5	6	7	8	9	10
47	ISG17BT008	BHOOMIKA G	1	2	3	4	5	6	7	8	9	10
48	ISG17BT009	BHUVANESHWARI G	1	2	3	4	5	6	7	8	9	10
49	ISG17BT010	D S NEHA	1	2	3	4	5	6	7	8	9	10
50	ISG17BT011	DEEPIKA C	1	2	3	4	5	6	7	8	9	10
51	ISG17BT012	DIVYA D ANAND	1	2	3	4	5	6	7	8	9	10
52	ISG17BT014	HARSHITHA J Y	1	2	3	4	5	6	7	8	9	10
53	ISG17BT015	KUHELI BHOWMICK	1	2	3	4	5	6	7	8	9	10
54	ISG17BT016	MANIKUMAR R	1	2	3	4	5	6	7	8	9	10
55	ISG17BT017	KIRAN KUMAR N	1	2	3	4	5	6	7	8	9	10
56	ISG17BT018	NITHYASHREE S	1	2	3	4	5	6	7	8	9	10
57	ISG17BT019	PRAKRUTHI M R	1	2	3	4	5	6	7	8	9	10

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58	ISG17BT020	PRATHIMA H S	1	2	3	4	5	6	7	8	9	10
59	ISG17BT021	PRAVEEN P	1	2	3	4	5	6	7	8	9	10
60	ISG17BT022	PRIYADARSHINI M	1	2	3	4	5	6	7	8	9	10
61	ISG17BT024	RAKSHITHA A	1	2	3	4	5	6	7	8	9	10
62	ISG17BT025	RASHMI T S	1	2	3	4	5	6	7	8	9	10
63	ISG17BT026	RIDA TABASSUM	1	2	3	4	5	6	7	8	9	10
64	ISG17BT027	RUMAISA FATIMA	1	2	3	4	5	6	7	8	9	10
65	ISG17BT028	SANCHIT S YADAV	1	2	3	4	5	6	7	8	9	10
66	ISG17BT030	SANGEETHA R	1	2	3	4	5	6	7	8	9	10
67	ISG17BT031	SHASHIKALA S	1	2	3	4	5	6	7	8	9	10
68	ISG17BT032	SHWETHA S	1	2	3	4	5	6	7	8	9	10
69	ISG17BT033	SOMNATH SINGH	1	2	3	4	5	6	7	8	9	10
70	ISG17BT034	SONALI	1	2	3	4	5	6	7	8	9	10
71	ISG17BT035	SHREELAKSHMI K	1	2	3	4	5	6	7	8	9	10
72	ISG17BT036	SUPRAJA O D	1	2	3	4	5	6	7	8	9	10
73	ISG17BT037	THANUSHREE M	1	2	3	4	5	6	7	8	9	10
74	ISG17BT038	VINUTHA	1	2	3	4	5	6	7	8	9	10
75	ISG17BT039	YASHASWINI S	1	2	3	4	5	6	7	8	9	10
76	ISG17BT040	YUKTHA R	1	2	3	4	5	6	7	8	9	10
77	ISG17BT041	KIRAN KUMAR	1	2	3	4	5	6	7	8	9	10

Arandas
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5 days Certification Course on "Advanced Techniques in Clinical Microbiology"

Test Time Table

Sl. No.	DATE	DAY	TIMINGS
1	30/01/2018	Tuesday	4:30 pm - 5:00 pm

Ananda S
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5 DAYS CERTIFICATION COURSE ON ADVANCED TECHNIQUES IN CLINICAL MICROBIOLOGY

QUESTION PAPER

Date:

Duration: 1hr

Maximum marks: 25

Note: Question number 1-25 (1M each)

- 1) All of the following are examples of special stains except:
 - a) Ziehl-Neelsen acid-fast stain
 - b) Flagella stain
 - c) Negative stains
 - d) Endospore stain
- 2) Which of the following stains is used to classify microorganisms based on their cell wall content?
 - a) Methylene blue
 - b) Capsular stain
 - c) Negative stain
 - d) Spore stain
 - e) Gram stain
- 3) What type of microscopy allows for the visualization of internal components within live, unstained specimens?
 - a) Bright-field
 - b) Fluorescence
 - c) Phase-contrast
 - d) Dark-field
 - e) Electron
- 4) The order of reagents used in the Gram stain are:
 - a) Iodine, crystal violet, safranin, alcohol
 - b) Crystal violet, iodine, alcohol, safranin
 - c) Crystal violet, iodine, safranin, alcohol
 - d) Alcohol, crystal violet, iodine, safranin
 - e) Crystal violet, safranin, alcohol, iodine

- 5) Which of the following microscopic techniques provide three-dimensional images of a bacterial cell?
 - a) Fluorescent microscopy
 - b) Scanning electron microscopy
 - c) Dark-field microscopy
 - d) Transmission electron microscopy
- 6) Which of the following is defined as the ability to distinguish or separate two adjacent objects or points from one another in a microscopic specimen?
 - a) Resolving power
 - b) Reflection
 - c) Illuminate
 - d) Refraction
 - e) Image
- 7) Each of the following statements concerning *Mycobacterium tuberculosis* is correct EXCEPT:
 - a) *M. tuberculosis* appears as a red rod in acid-fast stained specimens.
 - b) After being stained with carbolfuchsin, *M. tuberculosis* resists decolorization with acid alcohol.
 - c) *M. tuberculosis* appears as a red rod in Gram-stained specimens.
 - d) *M. tuberculosis* has a large amount of mycolic acid in its cell wall.
- 8) The presence of a capsule around bacterial cells usually indicates their increased disease-causing potential and resistance to disinfection. Capsules are generally viewed by:
 - a) Ziehl-Neelsen staining
 - b) Gram staining
 - c) Negative staining
 - d) Scanning electron microscopy
- 9) Which of the following statements is most correct about the differential Gram stain?
 - a) Safranin differentially stains Gram negative cells.
 - b) Gram's iodine differentially stains Gram positive cells.
 - c) Crystal violet differentially stains Gram positive cells.
 - d) Acetone/Alcohol differentially destains Gram negative cells
- 10) The medium used in membrane filter technique was
 - a) EMB agar

- b) EMR-Vp medium
 - c) Lactose broth
 - d) Endo agar
- 11) The technique used to avoid all microorganism is accomplished by
- a) Sterilization
 - b) Disinfection
 - c) Surgical sterilization
 - d) Disinfection sterilization
- 12) Agar is obtained from
- a) Brown algae
 - b) Red algae
 - c) Green algae
 - d) Blue green algae
- 13) Spore are killed by
- a) 70% alcohol
 - b) Glutaraldehyde
 - c) Autoclaving
 - d) Both b and c
- 14) The iodine used in gram's staining serves as
- a) Chelator
 - b) Catalyst
 - c) Mordant
 - d) Cofactor
- 15) In pour-plate method, the medium should be maintained at what temperature?
- a) 37 degree C
 - b) 67 degree C
 - c) 45 degree C
 - d) 0 degree C
- 16) Which of the following method can be used to determine the number of bacteria quantitatively?
- a) Streak-plate

- b) Spread-plate
 - c) Pour plate
 - d) Pour-plate and spread plate
- 17) Dilution of the mixed culture is a common step in all the three methods: the streak-plate, the spread-plate and the pour-plate technique.
- a) True
 - b) False
- 18) Which of the following are not performed in lyophilization?
- a) agar slant is covered with mineral oil
 - b) cell suspension is frozen at -60 degree to -78 degree C
 - c) vials are connected to high-vacuum line
 - d) bacterial sample is dehydrated
- 19) Nichrome loop wire is used in which of the following techniques?
- a) Pour-plate
 - b) Streak-plate
 - c) Spread-plate
 - d) Roll-tube technique
- 20) Most spoilage bacteria grow at
- a) acidic pH
 - b) alkaline pH
 - c) neutral pH
 - d) any of the pH
- 21) The microbiological examination of coliform bacteria in foods preferably uses
- a) MacConkey broth
 - b) Violet red bile agar
 - c) Eosine Methylene blue agar
 - d) All of the above
- 22) Plate count of bacteria in foods generally use the plating medium consisting of
- a) Peptone, yeast extract, glucose, NaCl, agar and distilled water.
 - b) Yeast extract, glucose, NaCl, agar and distilled water.

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Department of Biotechnology

- c) Peptone, glucose, NaCl, agar and distilled water.
d) Peptone, yeast extract, glucose, NaCl and distilled water.
- 23) NaCl can act as
a) Antagonist at optimal concentrations.
b) Synergistically if added in excess of optimum level.
c) Both (a) and (b).
d) None of the above.
- 24) Separation of a single bacterial colony is called
a) Isolation
b) Separation
c) Pure culturing
d) All of these
- 25) Which of the following method of sterilization has no effect on spore?
a) Drying
b) Hot air oven
c) Autoclave
d) None of these

Approved by Academic Committee members and Guest speaker:

Sl No.	Faculty Name	Designation	Signature
1	Dr. Ananda S	HOD, Professor	Ananda S
2	Dr. Rehit K C	Associate Professor	Rehit K C
3	Prof. Prashanth Kumar H P	Assistant Professor	Prashanth Kumar H P
4	Prof. Soumya C	Assistant Professor	Soumya C
5	Prof. Shobha G	Assistant Professor	Shobha G
6	Dr. Hemavathi	Guest speaker	Hemavathi

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Certification Course on "Advanced Techniques in Clinical Microbiology"

Solutions for the Questions

Duration: 1hr

Maximum marks: 25

Question No.	Answer
1	C
2	E
3	C
4	B
5	B
6	A
7	C
8	C
9	D
10	B
11	A
12	B
13	D
14	C

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15	A
16	D
17	A
18	A
19	B
20	C
21	D
22	A
23	C
24	A
25	A

Approved by Academic Committee members and Guest speaker

Sl No.	Faculty Name	Designation	Signature
1	Dr. Aranda S	HOD, Professor	
2	Dr. Rohit K C	Associate Professor	
3	Prof. Prashanth Kumar H P	Assistant Professor	
4	Prof. Soumya C	Assistant Professor	
5	Prof. Shobha G	Assistant Professor	
6	Dr. Hemavathi	Guest speaker	

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Department of Biotechnology

Certification Course on "Advanced Techniques in Clinical Microbiology"

Participant Feedback

1. How was the overall organization of the Certification Course?
a) Poor b) Satisfactory c) Good d) Excellent
2. How appropriate were the facilities provided?
a) Poor b) Satisfactory c) Good d) Excellent
3. Opportunity to ask questions for clarification and interaction with presenters
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4. Effectiveness of the Hands-on Sessions
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5. Topic and contents of the Certification Course
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6. How do you rate the Certification Course compared to other workshops that you have attended?
a) Poor b) Satisfactory c) Good d) Excellent
7. Generally how was your overall experience during the Certification Course
a) Poor b) Satisfactory c) Good d) Excellent
8. Any Suggestions:

Student Name:

Sandhya Reddy

Principal

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Chikkasandra, Hesaraghatta Road
Bangalore - 560 057

Student Signature:

Sandhya Reddy

Certification Course on "Advanced Techniques in Clinical Microbiology"

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8. Any Suggestions:

Student Name: Deepika


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Deepika
Student Signature:


Department of Biotechnology

Certification Course on "Advanced Techniques in Clinical Microbiology"

Participant Feedback

1. How was the overall organization of the Certification Course?
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7. Generally how was your overall experience during the Certification Course
a) Poor b) Satisfactory c) Good d) ~~Excellent~~
8. Any Suggestions:

Student Name: Dnyanesh


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Student Signature:

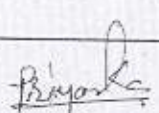
Certification Course on "Advanced Techniques in Clinical Microbiology"

Participant Feedback

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7. Generally how was your overall experience during the Certification Course
a) Poor b) Satisfactory c) Good ☒ d) Excellent
8. Any Suggestions:

Student Name: Prigatha


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Student Signature:


Certification Course on "Advanced Techniques in Clinical Microbiology"

Participant Feedback

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7. Generally how was your overall experience during the Certification Course
a) Poor b) Satisfactory c) ☒ Good d) Excellent
8. Any Suggestions:

Application of technique to be needed

Student Name: Rajal.

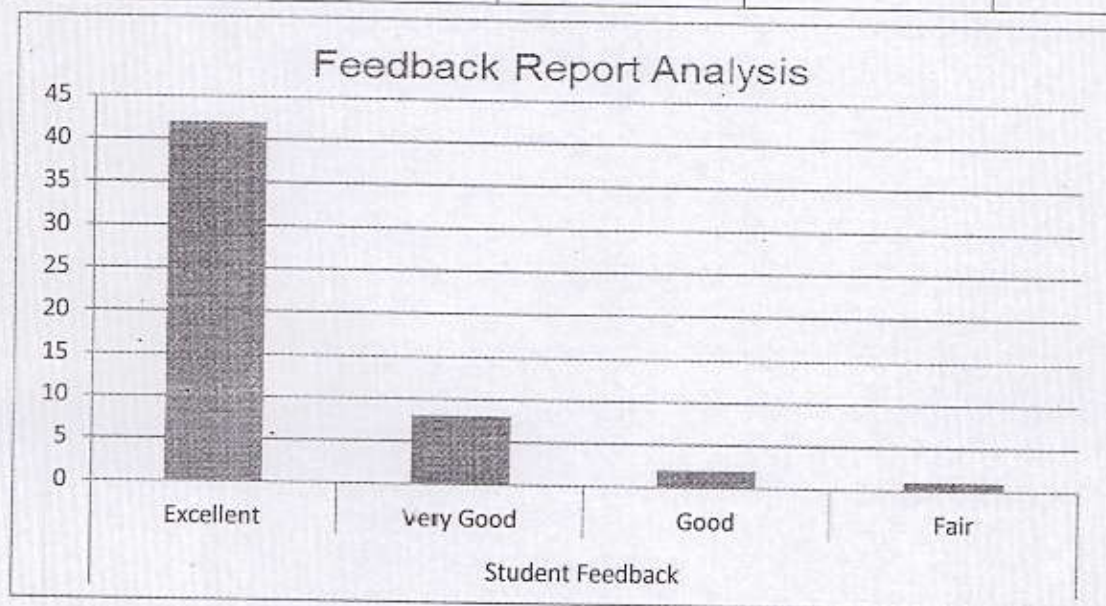

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Student Signature: Rajal.

FEEDBACK ANALYSIS

Certification Programme: "Advanced Techniques in Clinical Microbiology"

No. of students participated	Student Feedback			
	Excellent	Very Good	Good	Fair
53	42	8	2	1



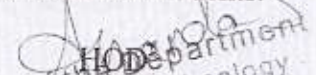
Action Report:


80 % of students were completely happy with the certification program and 15% of students felt it was a good program and remaining 3% students were satisfied with the program.

Action Taken:

The Feedback report which was collected from the students were sent to the principal and he would take necessary actions based on the comments and conduct more programs for the benefit of students.

Program Coordinator


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SAPTHAGIRI COLLEGE OF ENGINEERING, BENGALURU-57



DEPARTMENT OF BIOTECHNOLOGY
CERTIFICATE OF PARTICIPATION



SIMSRC
Sapthagiri Institute of Medical Science & Research Center

This is to certify that

MR./MS. AMBIKA

**Has Successfully completed Certification course on "ADVANCED
TECHNIQUES IN CLINICAL MICROBIOLOGY" conducted by
Department of Microbiology, SIMS & RC, Bengaluru at the
Department of Biotechnology, Sapthagiri College of Engineering,
Bengaluru-57 from 24th JAN 2018 to 30th JAN 2018.**

G. Shobha
**COURSE
CO-ORDINATOR**

Ananda S
HOD, DEPT OF BT

[Signature]
**HEAD, DEPT OF MICROBIOLOGY
SIMS & RC**

[Signature]
PRINCIPAL

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Principal

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CERTIFICATE OF PARTICIPATION



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Sapthagiri Institute of Medical Science & Research Center

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Bengaluru-57 from 24th JAN 2018 to 30th JAN 2018.**

[Signature]
**COURSE
CO-ORDINATOR**

[Signature]
HOD, DEPT OF BT

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SIMS & RC**

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G. Shobha
COURSE
CO-ORDINATOR

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SIMS & RC

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PRINCIPAL

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COURSE
CO-ORDINATOR

HOD, DEPT OF BT

HEAD, DEPT OF MICROBIOLOGY
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PRINCIPAL

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Department of Biotechnology

Certificate Course -Advanced Techniques in Clinical Microbiology

Post Event Report

Department of BT conducted Certificate Course on Advanced Techniques in Clinical Microbiology

Objective of the Course: The five day course made the students to be familiar with the major concepts in advanced techniques in clinical microbiology which is a main platform for their career. Certificate Course became the vital step to improve the knowledge of students.

Resource Person: Dr.Hemavathi, HOD, Department of Microbiology, SIMS, Bangalore

Duration of the course: Five days from 24th January 2018 to 30th January 2018

Student participants in certification program



Student participants in certification program

R. Hemavathi
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Department of Biotechnology



Guest speakers delivering a lecture on Clinical microbiology

Dates	Report
24-01-2018	Speaker delivered a talk on Media used in Microbiology, Pure culture Techniques, Hands on session on Pure Culture Techniques
25-01-2018	Speaker delivered a talk on Biosafety levels, Good laboratory Practices Hands on session on sterilization process,
28-01-2018	Speaker delivered a talk on Human Pathology, Bacterial Pathogens, Fungal Pathogens, Hands on session on isolation and identification of Bacteria and Fungi
29-01-2018	Speaker delivered a talk on Cell viability, Cell viability Tests, Hands on session on cell viability
30-01-2018	Speaker delivered a talk on Biochemical Tests to characterize microbes, Shake flask studies, Hands on session on biochemical test, Shake flask studies

Conclusion: A certificate is earned after taking a series of courses in a particular subject area. Students pursue certificates in order to get ahead in the professional field of their interest. Faculty members were also equally benefited with the course. This program helped the student to discover important area of microbial medical research.

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