### SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR

## UG Department of Microbiology Add on Course:Bioentrepreneurship Session 2022-23 Course Coordinator Report

A free Add-On Course for UG students in the Department Microbiology, Shri Shivaji Education Society Amravati's Science College, Congress Nagar, Nagpur was held from 09<sup>th</sup> January 2023 to 06<sup>th</sup> March 2023. The course title was "Bioentrepreneurship". It is the complete beginner to Expert Course was perfect for anyone who wants to learn Bioentrepreneurship.

The Bioentrepreneurship course is designed to provide students with foundational knowledge and skills necessary for starting and managing a biotech venture. The course covers key aspects of entrepreneurship in the biotech industry, including idea generation, business planning, market analysis, and funding strategies. This practical and interactive course aims to equip students with the tools needed to turn innovative ideas into successful biotech businesses.

The course duration was 10 weeks (30 hours). Two theory classes were engaged on Friday & Saturday and one Practical was engaged in every week. The structure of marking system was 50 marks on theory paper and 40 marks on practical examination including 10 marks for internal. The question paper of theory examination was in MCQ type of 25 questions with four multiple choices. Practical examination was also taken on this course for 40 marks. Internal marks assessment wason the basis of regularity, attendance, assignment submission **47** out of: 48 students were present in both theory and practical examination. The result was prepared and certificates were also distributed to the students.

Action Taken: This course provides a comprehensive introduction to bioentrepreneurship, focusing on the intersection of biological sciences and business. It covers the essential principles of entrepreneurship within the biotechnology sector, including innovation, business planning, and commercialization of biological products.



**Dr. Sapna Baghel** Course- Coordinator Add on Course

## SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR

# UG Department of Microbiology Add on Course:Bioentrepreneurship Session 2022-23

#### To,

The Principal SSES Amt's Science College, Congress Nagar, Nagpur-12

Subject: Permission to conduct the add on courses in the Microbiology and Biotechnology department during the session 2022-2023

#### Respected Sir,

This is to request you that, we wish to conduct the add on courses in Microbiology and Biotechnology department these are the certificate courses of thirty hours' time duration.

The details of the courses are submitted here with.

Hence please permit to run the same and oblige me.

Thanking you

2/07/2022

Yours sincerely

HEAD Department of Microbiology Science College, Congress Nagar, NAGPUR.



Permitted

## SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR

# UG Department of Microbiology

## NOTICE

#### Date: 02/01/2023

All the students are informed that **U.G.Department of Microbiology** runs **Add on Course:Bioentrepreneurship**for the session 2022-23. Interested students of B.Sc. are requested to register their names to the course Coordinator Dr. Sapna Baghel on or before 07/01/2023.



**Dr. Sapna Baghel** Course- Coordinator Add on Course









## U.G. DEPARTMENT OF MICROBIOLOGY, SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR

AccreditedwithCGPAof3.51at'A+'GradebyNAAC,Bangalore ACollegewithPotentialforExcellence AnInstitutionalMemberofAPQN RecognizedCenterforHigherLearning & Research AMentorCollegeunderParamarshSchemeofUGC,NewDelhi A Mentor College under Paris Sparsh Scheme of Maharashtra State

# Add on Course for the Session 2022-23 Bioentrepreneurship

### **Course Introduction**

The Bioentrepreneurship course is designed to provide students with foundational knowledge and skills necessary for starting and managing a biotech venture. The course covers key aspects of entrepreneurship in the biotech industry, including idea generation, business planning, market analysis, and funding strategies. This practical and interactive course aims to equip students with the tools needed to turn innovative ideas into successful biotech businesses.

### **Course Objectives**

- To understand the fundamentals of entrepreneurship and the biotech industry.
- To develop skills in idea generation and evaluating business opportunities.
- To learn how to create comprehensive business plans for biotech ventures.
- To explore funding options and strategies for biotech startups.
- To gain insights into market analysis and strategies for entering the biotech market.

## **Registration Date: 07/01/2023**

**Prof. Atul Bobdey** Coordinator Dept. of Microbiology **Prof. Mahendra Dhore** Principal Science College, Nagpur **Dr. Sapna Baghel** *Course- Coordinator Add on Course* 

## **UG Department of Microbiology**

### Add-on Course: Bioentrepreneurship (Session 2022-23)

#### Course Co-ordinator: Dr. Sapna Baghel

#### **Course Introduction**

The Bioentrepreneurship course is designed to provide students with foundational knowledge and skills necessary for starting and managing a biotech venture. The course covers key aspects of entrepreneurship in the biotech industry, including idea generation, business planning, market analysis, and funding strategies. This practical and interactive course aims to equip students with the tools needed to turn innovative ideas into successful biotech businesses.

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- To gain insights into market analysis and strategies for entering the biotech market.

Instructional Strategies: Theory class, Practical, Video clips, Models etc.

Evaluation Strategies: Oral discussions and Final MCQ examination

Course Outcomes: Upon completing this course, students will be able to:

- Generate and evaluate business ideas in the biotech field.
- Develop and present detailed business plans.
- Analyze market opportunities and create entry strategies.
- Identify and pursue appropriate funding sources.
- Manage and grow a biotech startup.

Duration of course: Ten weeks (30 Hours)



Dr. Sapna Baghel **Course-Coordinator** Add on Course

# UG Department of Microbiology Add-on Course: Bioentrepreneurship (Session 2022-23)

# Module: The Structure of Syllabus and system of evaluation

		То	tal Ma	rks
Course	Theory Papers and Practical	Theory	Internal	Practical
Certificate Course in Bioentrepr eneurship	Theory paper- Bioentrepreneurship * Theory examination will be of MCQ pattern having 25 questions each with equal marks.	50	10	40
cheursnip	* Practical examination will be based on performance evaluation in the laboratory and hands-on-training		100	

Dr. Sapna Baghel Add on CourseCoordinator



Yor

Dr. Amitabh Halder

IQAC Coordinator Internal Quality Assurance Cell (IQAC) (IQAC) S. S. E. S. A. Science College Congress Nagar, Nagpur.

Blier

Prof. Mahendra Dhore

Principal Principal

## UG Department of Microbiology Syllabus of Add-on Course: Bioentrepreneurship

### (Session 2022-23)

#### **Course Units**

# Unit 1: Introduction to Bioentrepreneurship

- Topics:
- Definition and scope of bioentrepreneurship
- The biotech industry landscape
- Key characteristics of successful bioentrepreneurs
- Overview of the biotech product development process
   Unit 2: Idea Generation and Evaluation
- Topics:
- Techniques for generating innovative ideas
- Identifying and assessing business opportunities
- Feasibility analysis
- Intellectual property basics in biotechnology
   Unit 3: Business Planning for Biotech Ventures
- Topics:
- Components of a business plan
- Market analysis and competitive analysis
- Marketing and sales strategies
- Financial planning and projections
- Unit 4: Funding and Managing Biotech Startups
- Topics:
- Overview of funding options (venture capital, angel investors, grants, etc.)
- Strategies for securing funding
- Managing startup operations
- Scaling and growth strategies

#### **Practical Sessions**

### Practical 1: Idea Generation Workshop

- Activity: Brainstorming and developing biotech business ideas in groups.
- Outcome: Presentation of initial business ideas with feasibility analysis.
- Practical 2: Business Plan Development
- Activity: Creating a business plan for a chosen biotech venture.
- Outcome: Detailed written business plan with all key components.
- Practical 3: Market Analysis Project
  Activity: Conducting a market analysis for a biotech product or service.
- Activity: Conducting a market analysis for a bloccen product of section.
   Outcome: Market analysis report identifying target market, competitors, and entry
  - strategies.

#### **Practical 4: Funding Pitch Presentation**

- Activity: Preparing and presenting a funding pitch to a mock panel of investors.
- Outcome: Funding pitch presentation and feedback session.



Dr.SapnaBaghel Course- Coordinator Add on Course

# UG Department of Microbiology Add-on Course: Bioentrepreneurship (Session 2022-23) Week-wise teaching plan:

Week	Hrs.	Syllabus
Week 1	2	Definition and scope of bioentrepreneurship
	1	The biotech industry landscape
Week 2	2	Key characteristics of successful bioentrepreneurs
	1	Overview of the biotech product development process
Week 3	2	Techniques for generating innovative ideas
	1	Identifying and assessing business opportunities
Week 4	2	Intellectual property basics in biotechnology
	1	Components of a business plan
Week 5	2	Market analysis and competitive analysis
	1	Marketing and sales strategies
Week 6	2	Financial planning and projections
	1	Overview of funding options (venture capital, angel investors, grants, etc.)
Week 7	2	Strategies for securing funding
	2	Managing startup operations
Week 8	2	Scaling
	2	growth strategies
Week 9	1	Brainstorming and developing biotech business ideas in groups
	1	Creating a business plan for a chosen biotech venture
Week 10	1	Conducting a market analysis for a biotech product or service
	1	Preparing and presenting a funding pitch to a mock panel of investors



Dr. Sapha Baghel Course-Coordinator Add on Course

# UG Department of Microbiology Add-on Course: Bioentrepreneurship (Session 2022-23)

**Time Table** 

w.e.f. 09/01/2023

Day	Theory
Friday	Dr. Sapna Baghel (R. no C9) Theory 4.00 PM - 5.00 PM
Saturday	Dr. Sapna Baghel (R. noC9) Practical4.00 PM - 5.30 PM
	Dr. Sapna Baghel (R. noC9) Theory 4.00 PM - 5.00 PM



Dr. Sapna Baghel Course- Coordinator Add on Course

#### ATTENDENCE SHEET (2022-23)

#### S.S.E.S.A's Science College, Congress Nagar, Nagpur

Add on Course: Bioentrepreneurship (Session 2)

#### **Class: Bioentrepreneurship**

# Theory/ Practical:

Month: January + February + March Name of Lecturer: Dr. Sapana Baghel

Sr. No	Name of Student	13/01/3	14101/23	20/1/23	8/1/83	22/10/22	38/01/23	3/2/23	412133	10/2/23	112123	212/21/1	24/223	25/8/33	3/3/23	413/33								
1.	Ambole Trupti Dnyaneshwar	P	P		P	P	P	P	P	P	P	P	P	9	P	P								
2.	Anasane Vaidehi Ganesh	P	P	2	P	P	p	P	A	P	P	P	P	P	P	P								
3.	Atilkar Pranay Dnaneswhar	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A								
4.	Bagde Yashika Pramod	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P								
5.	Bansod Samyak Dnyaneswatr	P	P	P	P	P	A	P	P	P	P	P	P	P	P	A								
6.	Baraskar Ashwini Umesh	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P								
7.	Barde Visha Prakash	P	P	P	P	P	P	P	A	P	9	P	P	A	P	P								
8.	Bhoyar Hemad Ajay	P	P	P	P	P	A	P	P	P	P	P	P	P	A	P								
9.	Bhushankar Mrunali Naresh	P	P	P	P	P	P	5	P	P	P	P	P	P	P	A								
10.	Bisen Kajal Deblal	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P								
11.	Bole Achal Anoop	b	P	P	P	P	p	P	P	P	P	p	P	P	p	P								
12.	Bonde Shruti Vinod	P	P	P	P	P	A	p	P	P	P	P	P	P	P	P								
13.	Bondre Tithi Kusumakar	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P								
14.	Borkar Dushant Rushi	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P								

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1	6.   C	Chaudhari Bharvi Vikas	P	P	P	P	P	P	P	P	P	P	P	8	P	P	P								
1	17.	Chavhan Ayush Dilip	P	P	P	P	P	P	P	P	P	P	A	P	P	P	ρ								
	18.	Chikhalkar Harshada Wasudev	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P								
	19.	Dalvi Chetna Kailas	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P								
	20.	Dhobe Riya Satish	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P								
	21.	Dhore Parisa Pramod	P	P	P	P	P	A	P	P	P	P	P	P	A	P	P								
	22.	Ghugal Rushali Ghanshyam	P	P	P	P	P	P	9	P	P	P	P	9	P	P	P								
	23.	Gujwar Khushbu Puransingh	P	P	P	P	P	P	P	A	P	P	9	P	P	P	p								
	24.	Hakim Shafin Rafiyoddin	P	P	A	P	P	P	P	P	P	A	P	P	P	P	P								
		Hiwarkar Raunak Krishna	P	P	P	A	P	P	P	P	P	P	P	A	P	P	Р								
	26.	Ingole Nikita Bandu	P	9	P	P	A	P	P	P	P	P	A	P	P	P	P								
	27.	lshwarkar Kanika Yograj	P	P	P	P	P	P	A	P	P	P	A	P	P	A	P								
	28.	Jaitwar Kajal Ratanlal	P	P	P	P	P	P	p	P	A	P	12	P	P	P	P								
	29.	Jambhulkar Kalshika Sudesh	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P								
	30.	Jangamwar Isha Vinod	P	P	r	P	P	P	P	P	P	P	P	A	P	P	P								
	31.	Jiwane Grecy Chandu	P	P	P	P	P	P	P	P	P	A	P	P	Ρ	P	P								
	32.	Joshi Aryan Shripad	P	P	A	P	P	P	P	Ρ	P	P	P	P	P	P	p								
	33.	Kadam Dhadmayur Yogeshwar	P	P	P	P	P	P	P	P	P	p	P	ĵ	P	P	P								
		Kadhao Mayuri Murlidhar	P	P	P	r	P	٢	p	P	P	P	P	P	P	Р	A								
	35.	Kalamkar Shravani Madhukar	P	P	A	р	P	P	P	P	P	P	P	A	2	P	P								
	36.	Kale Gauri Atul	P	P	Р	Ρ	P	P	Р	Р	<b>A</b>	P	P	p	P	P	P								



37.	Kambe Arpit Avinash	P	P	P	A	P	P	A	P	A	P	P	P	P	P	P													
38.	Kamble Komal Sanjay	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P													
39	. Kawade Khushi Raju	P	P	P	P	P	P	P	A	P	A	P	A	p	P	P													
40	0. Kelapure Saipriya Ramchandra	P	P	A	P	P	P	P	P	P	19	P	P	A	P	P													
4	1. Khot Samiksha Ghanshyam	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P													
4	2. Kothalkar Awanti Sahebrao	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A													
4	3. Kulthe Sneha Pawan	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P													
4	4. Kuthe Hemaksh Imaheshkumar	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P													
4	5. Lomsoge Sayukta Prashant	P	P	P	P	P	P	A	P	P	P	P	A	P	P	P													
4	5. Madan Mokshita Harish	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A													
4	7. Malewars Oumya Sunil	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P													~
4	<ol> <li>Mankar Maitreyee Kishor</li> </ol>	P	P	P	P	P	P	P	P	A	P	F	P	P	P	P													
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## ATTENDENCE SHEET (2022-23)

#### S.S.E.S.A's Science College, Congress Nagar, Nagpur

Add on Course: Bioentrepreneurship (Session 2)

#### **Class: Bioentrepreneurship**

#### Theory/ Practical:

Month:	January +	February	+ March	
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Name of Lecturer: Dr. Sapna Baghel

Sr. No	Name of Student	68/1/21	21/1/23	28/1/23	412123	11/2/23		413/23														
1.	Ambole Trupti Dnyaneshwar	P	P	P	P	A	P	P														
2.	Anasane Vaidehi Ganesh	P	P	P	P	P	P	P														
3.	Atilkar Pranay Dnaneswhar	P	P	P	P	P	A	p														
4.	Bagde Yashika Pramod	A	P	P	P	P	P	A														
5.	Bansod Samyak Dnyaneswatr	P	P	12	P	P	P	P														
6.	Baraskar Ashwini Umesh	Р	P	P	P	P	P	P														
7.	Barde Visha Prakash	P	P	P	A	P	P	P														
8.	Bhoyar Hemad Ajay	P	P	P	P	P	P	P														
9.	Bhushankar Mrunali Naresh	P	P	Ρ	P	P	P	P				T										
10.	Bisen Kajal Deblal	P	P	P	P	P	A	P				T						-			 1.000	
11.	Bole Achal Anoop	P	P	P	P	P	P	P													***********	
12.	Bonde Shruti Vinod	P	P	P	P	P	P	P									-				 	
13.	Bondre Tithi Kusumakar	ρ	P	P	P	P	P	P													 	
14.	Borkar Dushant Rushi	P	P	P	P	A	P	P										T				

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15.		P	P	P	P	P	P	Р												
<b>1</b> 6.	Chaudhari Bharvi Vikas	P	P	A	P	P	P	P												 
17		P	P	P	P	A	P	P												
18		P	P	P	P	P	A	р												
19	. Dalvi Chetna Kailas	P	P	P	A	P	P	P												
20		P	P	P	P	P	P	A												 
21	. Dhore Parisa Pramod	P	P	P	A	P	P	P												
22	Ghugal Rushali Ghanshyam	P	P	P	P	P	P	A												 
23	Gujwar Khushbu Puransingh	P	P	P	P	A	P	P												 
24	Hakim Shafin Rafiyoddin	P	P	P	P	P	P	P												
25		P	P	P	A	P	P	P										 		 
26	5	ρ	P	A	P	P	P	P											 	
27	Ishwarkar Kanika Yograj	P	P	P	P	A	p	P										 		 
28	•	P	P	P	P	P	P	P								_		 	 	 
29		P	P	P	P	P	A	P							 					
30	Jangamwar Isha Vinod	P	P	P	P	P	P	P												
31	Jiwane Grecy Chandu	P	P	P	P	A	P	P												
32	5 1	P	P	P	P	P	P	A						_						
33		P	P	P	P	P	P	P												
34	, , , , , , , , , , , , , , , , , , ,	P	P	P	P	P	A	P												
35		P	P	P	P	A	P	P												
36	. Kale Gauri Atul	P	P	P	P	P	P	P												



	Kambe Arpit Avinash	1	p	P	P	9	P	P	IP	
- 38.	Kamble Komal Sanjay	IS	>	P	A	P	P	P	1	
39.	Kawade Khushi Raju		P	P	P	P	A	P	P	
40.	Kelapure Saipriya Ramchandra	P	)	P	P	P	P	A	P	
41.	Khot Samiksha Ghanshyam		P	P	P	P	A	P	P	
42.	Kothalkar Awanti Sahebrao		P	P	P	P	P	P	A	
43.	Kulthe Sneha Pawan		P	P	P	A	P	P	P	
44.	Kuthe Hemaksh Imaheshkumar		P	P	P	P	P	A	P	
45.	Lomsoge Sayukta Prashant		P	P	P	P	P	P	F	
46.	Madan Mokshita Harish		P	9	P	P	P	P	A	
	Malewars Oumya Sunil	1	P	P	P	P	P	P	P	
48.	Mankar Maitreyee Kishor		P	P	P	P	A	P	P	

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SBoypel Dr. Saproi Boghel



# SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR UG Department of Microbiology

# **EXAMINATION NOTICE**

Date: 09/03/2023

All the students enrolled for**Add on Course:Bioentrepreneurship** for the session 2022-23 are informed that Theory and Practical Exam of the course is scheduled on 13/03/2023. All the appearing students are informed to remain present in Microbiology Laboratory at 10:30 – 11:30AM AM for Theory Exam and at 12:30PM – 5:30PM for Practical Exam.

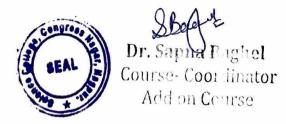


Dr. Sapna Baghel Course- Coordinator Add on Course

# List of the Students: Add on Course- Bioentrepreneurship (Session 2022-2023)

Sr. No	. Name of Student	Signature
1)	AMBOLETRUPTIDNYANESHWAR	AA).
2)	ANASANEVAIDEHIGANESH	Alequest
3)	ATILKARPRANAYDNANESWHAR	Admar
4)	BAGDEYASHIKA PRAMOD	Bagdefram
5)	BANSODSAMYAKDNYANESWATR	phyman
6)	BARASKARASHWINI UMESH	amela
7)	BARDEVISHAPRAKASH	Pbaude
8)	BHOYARHEMAD AJAY	Ajas
9)	BHUSHANKARMRUNALINARESH	Brunk
10)	BISENKAJALDEBLAL	Sulm
11)	BOLEACHALANOOP	Anophole
12)	BONDESHRUTIVINOD	Dened
13)	BONDRETITHIKUSUMAKAR	tithisbourka
l4)	BORKARDUSHANT RUSHI	Rulli
.5)	BRAHMANKARSMRUTISANJAY	Cl avil al
.6)	CHAUDHARIBHARVIVIKAS	Cellino
7)	CHAVHANAYUSHDILIP	Anutulain
8)	CHIKHALKARHARSHADAWASUDEV	Suder
9)	DALVICHETNAKAILAS	12
0)	DHOBERIYA SATISH	Satury Satury
1)	DHOREPARISAPRAMOD	E Pro mondal.
2)	GHUGALRUSHALIGHANSHYAM	( da MA
3)	GUJWARKHUSHBUPURANSINGH	(TI HILL OUN - 1
F)	HAKIMSHAFINRAFIYODDIN	Olymer feugh
5)	HIWARKARRAUNAKKRISHNA	Quite

26)	INGOLENIKITABANDU	Alma
27)		Niki B.
27)	ISHWARKARKANIKAYOGRAJ	
28)	JAITWARKAJALRATANLAL	Ratanter
29)	JAMBHULKARKALSHIKASUDESH	Jane uller
30)	JANGAMWAR ISHA VINOD	Cam.
31)	JIWANEGRECY CHANDU	Charo
32)	JOSHIARYANSHRIPAD	(J) othi
33)	KADAMDHADMAYURYOGESHWAR	Kadam
34)	KADHAOMAYURIMURLIDHAR	Kadhao.
35)	KALAMKARSHRAVANIMADHUKAR	halling
36)	KALEGAURIATUL	hanatul.
37)	KAMBEARPITAVINASH	. Aningth
38)	KAMBLE KOMAL SANJAY	Cambleson
39)	KAWADE KHUSHI RAJU	Rapilamade
40)	KELAPURE SAIPRIYARAMCHANDRA	Rancho.
41)	KHOTSAMIKSHAGHANSHYAM	Samilelethot
42)	KOTHALKARAWANTISAHEBRAO	thethallard.
43)	KULTHE SNEHA PAWAN	Suchal
44)	KUTHEHEMAKSHIMAHESHKUMAR	Consoetute
45)	LOMSOGESAYUKTAPRASHANT	Leneraige
46)	MADANMOKSHITAHARISH	Minokohit
47)	MALEWARSOUMYASUNIL	Sounda.
48)	MANKARMAITREYEEKISHOR	Availtrey-e.



## UG Department of Microbiology Add-on Course: Bioentrepreneurship (Session 2022-23)

## **Theory Exam Multiple Choice Questions (MCQs) Pattern**

- 1. What is bioentrepreneurship?
- a) The process of creating a new business in the biotechnology field.
- b) The study of biological processes.
- c) Managing a biotech laboratory.
- d) Investing in biotech stocks.
- Answer: a
- 2. Which of the following is a key characteristic of a successful bioentrepreneur?
- a) Risk aversion
- b) Inflexibility
- c) Innovative thinking
- d) Lack of vision
- Answer: c
- 3. What is the first step in the biotech product development process?
- a) Market analysis
- b) Idea generation
- c) Funding
- d) Production
- Answer: b
- 4. Which technique is commonly used for generating innovative ideas?
- a) Brainstorming
- b) Market research
- c) Financial analysis
- d) SWOT analysis
- Answer: a
- 5. What is feasibility analysis?
- a) Assessing the potential success of a business idea.
- b) Writing a business plan.
- c) Securing funding.
- d) Conducting market research.
- Answer: a
- 6. What is intellectual property (IP)?
- a) Physical property owned by a biotech company.
- b) Knowledge and ideas legally protected from unauthorized use.
- c) Financial assets of a company.
- d) Equipment used in biotech labs.
- Answer: b
- 7. Which component is NOT part of a business plan?
- a) Executive summary
- b) Financial projections
- c) Daily task list
- d) Market analysis
- Answer: c

- 8. What does market analysis involve?
- a) Studying the target market and competitors.
- b) Developing a marketing strategy.
- c) Setting up a production facility.
- d) Conducting scientific research.
- Answer: a
- 9. Which strategy is essential for entering a new market?
- a) Ignoring competitors
- b) Comprehensive market research
- c) High pricing
- d) Minimal marketing efforts
- Answer: b
- 10. What is the primary goal of a funding pitch?
- a) To entertain potential investors
- b) To secure financial investment
- c) To conduct scientific experiments
- d) To create a marketing plan
- Answer: b
- 11. Which funding option involves private investors providing capital in exchange for equity?
- a) Bank loans
- b) Grants
- c) Venture capital
- d) Crowdfunding
- Answer: c
- 12. What is an angel investor?
- a) A government grant provider
- b) A wealthy individual who invests in startups
- c) A venture capital firm
- d) A crowdfunding platform
- Answer: b
- 13. What is essential for managing startup operations?
- a) Ignoring financial reports
- b) Effective leadership and management skills
- c) Avoiding market research
- d) Minimal team communication
- Answer: b
- 14. What is scaling in the context of a startup?
- a) Reducing the size of operations
- b) Increasing the business's capacity and reach
- c) Halting product development
- d) Decreasing marketing efforts
- Answer: b

15. Which document outlines the goals and strategies of a biotech venture?

- a) Research paper
- b) Business plan
- c) Patent application
- d) Financial statement
- Answer: b

#### 16. What is the role of market research in bioentrepreneurship?

- a) Identifying potential customers and competitors
- b) Designing laboratory experiments
- c) Writing scientific publications
- d) Managing day-to-day operations
- Answer: a
- 17. Why is financial planning important for a biotech startup?
- a) To ensure adequate funding and sustainability
- b) To avoid paying taxes
- c) To conduct scientific research
- d) To hire laboratory staff
- Answer: a
- 18. What does SWOT analysis stand for?
- a) Strengths, Weaknesses, Opportunities, Threats
- b) Sales, Workforce, Opportunities, Targets
- c) Science, Work, Output, Technology
- d) Success, Work, Operations, Tactics
- Answer: a
- 19. What is the primary focus of a marketing strategy?
- a) Scientific research
- b) Promoting and selling products or services
- c) Financial planning
- d) Laboratory management
- Answer: b
- 20. What is the purpose of a competitive analysis?
- a) To understand the strengths and weaknesses of competitors
- b) To avoid competition
- c) To develop scientific theories
- d) To manage internal operations
- Answer: a
- 21. What is a business incubator?
- a) A facility that provides support to startup companies
- b) A scientific research lab
- c) A marketing agency
- d) A financial institution
- Answer: a
- 22. What is venture capital?
- a) Long-term funding from government grants
- b) Investment from private equity firms
- c) Loans from commercial banks
- d) Donations from the public
- Answer: b
- 23. What is the key benefit of having a detailed business plan?
- a) To secure funding and guide the startup's growth
- b) To conduct scientific experiments
- c) To hire laboratory staff
- d) To purchase lab equipment
- Answer: a

24. What is the significance of intellectual property in biotech startups?

- a) Protecting innovative ideas and inventions
- b) Reducing operational costs
- c) Managing financial accounts
- d) Conducting market research
- Answer: a
- 25. What is a key factor in the success of a biotech startup?
- a) Strong scientific background and entrepreneurial skills
- b) Lack of competition
- c) High initial investment
- d) Minimal marketing efforts
- Answer: a



SB Dr. Sapna Baghel Course-Coordinator Add on Course

# UG Department of Microbiology Add-on Course: Bioentrepreneurship (Session 2022-23)

# **Practical Exam Question Paper:**

Subject Center	: Bioentrepreneurship : S.S.E.S.A's Science College, Nagpur
Time	: 5 hrs per day
Dates	:13/03/2023

## Max. Marks: 40

Q.1. Creating Business plan for a chosen Biotech venture	10
Q.2. Conducting a market analysis for a Biotech product or service	10
Q.3. Viva-Voce	10
Q.4. Practical Record	10

### **Total Marks 40**



Dr. Sapha Baghel Course- Coordinator Add on Course



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# U.G. DEPARTMENT OF MICROBIOLOGY

<u>Add-on Course</u> Course Exam Name: Bioentrepreneurship						
Name of Student:				INSTRUCTIONS FOR FILLING THE SHEET 1. This sheet should not be folded or crushed.		
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Test Date: 13/3/22	3	Max. Ma	rks: 50		7. Do not use marker or whit	te fluid to hide the mark.
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# UG Department of Microbiology

# Mark List: Add on Course- Bioentrepreneurship (Session 2022-2023)

Sr. No.	Name of the Student	Marks obtained out of 50 (Theory)	Marks obtained out of 40 (Practical)	Marks obtained out of 10 (Internal)	Total Marks 100	Grade
1)	AMBOLETRUPTIDNYANESHWAR	42	35	10	87	A+
2)	ANASANEVAIDEHIGANESH	48	36	10	94	0
3)	ATILKARPRANAYDNANESWHAR	44	35	10	89	A+
4)	BAGDEYASHIKA PRAMOD	50	34	10	94	0
5)	BANSODSAMYAKDNYANESWATR	48	35	10	93	0
6)	BARASKARASHWINI UMESH	50	38	10	98	0
7)	BARDEVISHAPRAKASH	50	34	10	94	0
8)	BHOYARHEMAD AJAY	42	35	10	87	A+
9)	BHUSHANKARMRUNALINARESH	44	35	10	89	A+
10)	BISENKAJALDEBLAL	42	34	10	86	A+
11)	BOLEACHALANOOP	50	38	10	98	0
12)	BONDESHRUTIVINOD	48	36	10	94	0
13)	BONDRETITHIKUSUMAKAR	42	35	10	87	A+
14)	BORKARDUSHANT RUSHI	46	39	10	95	0
15)	BRAHMANKARSMRUTISANJAY	42	35	10	87	A+
16)	CHAUDHARIBHARVIVIKAS	44	35	10	89	A+
17)	CHAVHANAYUSHDILIP	48	35	10	93	0
18)	CHIKHALKARHARSHADAWASUDEV	48	36	10	94	0
19)	DALVICHETNAKAILAS	44	35	10	89	A+
20)	DHOBERIYA SATISH	50	34	10	94	0

21)	DHOREPARISAPRAMOD	48	35	10	93	0
22)	GHUGALRUSHALIGHANSHYAM	48	36	10	94	0
23)	GUJWARKHUSHBUPURANSINGH	42	35	10	87	A+
24)	HAKIMSHAFINRAFIYODDIN	50	38	10	98	0
25)	HIWARKARRAUNAKKRISHNA	50	34	10	94	0
26)	INGOLENIKITABANDU	42	35	10	87	A+
27)	ISHWARKARKANIKAYOGRAJ	44	35	10	89	A+
28)	JAITWARKAJALRATANLAL	42	34	10	86	A+
29)	JAMBHULKARKALSHIKASUDESH	50	38	10	98	0
30)	JANGAMWAR ISHA VINOD	42	35	10	87	A+
31)	JIWANEGRECY CHANDU	48	36	10	94	0
32)	JOSHIARYANSHRIPAD	44	35	10	89	A+
33)	KADAMDHADMAYURYOGESHWAR	50	34	10	94	0
34)	KADHAOMAYURIMURLIDHAR	48	35	10	93	0
35)	KALAMKARSHRAVANIMADHUKAR	42	35	10	87	A+
36)	KALEGAURIATUL	48	36	10	94	0
37)	KAMBEARPITAVINASH	42	35	10	87	A+
38)	KAMBLE KOMAL SANJAY	50	38	10	98	0
39)	KAWADE KHUSHI RAJU	50	34	10	94	0
40)	KELAPURE SAIPRIYARAMCHANDRA	42	35	10	87	A+
41)	KHOTSAMIKSHAGHANSHYAM	44	35	10	89	A+
42)	KOTHALKARAWANTISAHEBRAO	42	34	10	86	A+
43)	KULTHE SNEHA PAWAN	50	38	10	98	0
44)	KUTHEHEMAKSHIMAHESHKUMAR	50	37	10	97	0

45)	LOMSOGESAYUKTAPRASHANT	46	39	10	95	0
46)	MADANMOKSHITAHARISH	AB	AB	AB	AB	AB
47)	MALEWARSOUMYASUNIL	44	35	10	89	A+
48)	MANKARMAITREYEEKISHOR	48	35	10	93	0



Baggel Dr. Sapna Baghel Course- Coordinator Add on Course



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# CERTIFICATE

Mr./Ku. <u>Trupti Ambole</u> is awarded with certificate on successful completion of the course entitled, Certificate course in "Bioentrepreneurship"

Session 2022-23 under Add-on course conducted for 30 hours from 09/01/2023 to 06/03/2023 by Department of Microbiology, SSESA's, Science College, congress Nagar, Nagpur 440012. He/She has passed the Examination with 'A+' Grade.

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**Dr. Pranita Gulhane** Coordinator, Department of Microbiology



phone

**Prof. M. P. Dhore** Principal, Science College, Nagpur

# UG Department of Microbiology Session 2022-23 Add-On Courses: Bio Entrepreneurship Feedback form

Que.1How Would You Rate The Overall Quality Of The Add on Course- Bio Entrepreneurship?

- A. Excellent
- B. Good
- C. Average

Que.2 How well did the Add on course - Bio Entrepreneurship?

- A. Exceeded expectation
- B. Met expectations
- C. Below expectations

Que. 3 How effective were the course instructor in delivering the Add on course - Bio Entrepreneurship ?

- A. Very effective
- B. Effective
- C. Ineffective

Que.4 How likely are you to recommend the Add on course - Bio Entrepreneurship ?

- A. Very likely
- B. Likely
- C. Unlikely

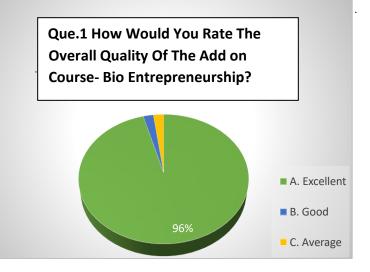
Que.5 How satisfied are you with the practical sessions of the Add on course - Bio Entrepreneurship ?

- A. Very satisfied
- B. Satisfied
- C. Dissatisfied.

# UG Department of Microbiology Session 2022-23 Add-On Courses: Bio Entrepreneurship Feedback Responses

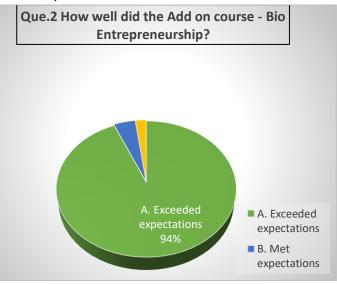
Que.1 How Would You Rate The Overall Quality Of The Add on Course- Bio Entrepreneurship?

Rating	No. of Students	Percentage
Excellent	45	96 %
Good	1	2 %
Average	1	2 %
Total	47	100%



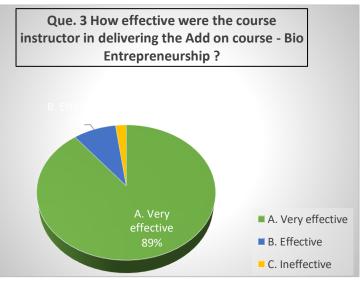
#### Que.2 How well did the Add on course - Bio Entrepreneurship?

Rating	No. of Stud ents	Percentage
Exceeded expectations	44	94 %
Met Expectations	2	4 %
Below Expactations	1	2 %
Total	47	100%



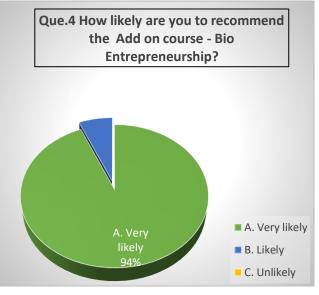
Que. 3 How effective were the course instructor in delivering the Add on course - Bio Entrepreneurship ?

Rating	No. of Students	Percentage
Very effective	42	89 %
Effective	4	9 %
Ineffective	1	2 %
Total	47	100%



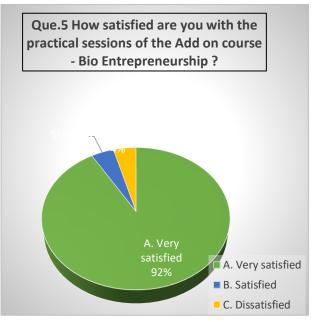
Que.4 How likely are you to recommend the Add on course - Bio Entrepreneurship ?

Rating	No. of Students	Percentage
Very likely	44	94 %
Likely	3	6 %
Unlikely	0	0 %
Total	47	100%



Que. 5 How satisfied are you with the practical sessions of the Add on course - Bio Entrepreneurship?

Rating	No. of Students	Percentage
Very Satisfied	43	92 %
Satisfied	2	4 %
Dissatisfied	2	4%
Total	47	100%



Dr. Sapna Baghel Course- Coordinator Add on Course



Dr. Amitabh Halder

IQAC Coordinator Internal Quality Assurance Cell (IQAC) S. S. E. S. A. Science College Science College, Nagpur. Congress Nagar, Nagpur.

Bhor

Prof. Mahendra Dhore

Principal Principal S. S. E. S. Amravati's

