

## BIO-BUSINESS AND MANAGEMENT

Semester	Subject code	Category	Lecture		Theory		P	C
V	21SBT5A	Skill based subject - III	2hrs per week	30	2 hrs per week	30	0	2

### COURSE OBJECTIVE:

- ✓ The course aims at providing an overview of the life sciences sector, supported and complemented by business, entrepreneurial and applied modules.

**COURSE OUTCOMES:** On the successful completion of the course, students will be able to

CO NUMBER	CO STATEMENT	KNOWLEDGE LEVEL(K1-K4)
CO1	Identify the concept of business and its principles.	K1
CO2	Describe the project formulation system.	K2
CO3	Discuss the project cost and market potential	K2
CO4	Evaluate the role and opportunity of entrepreneurs in biotechnology	K4
CO5	Apply the marketing skills in business	K3

**Knowledge level:** K1- Remember; K2- Understand; K3- Apply; K4- analyze

### MAPPING WITH PROGRAMME OUTCOMES

COS	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	S	M	S	M
CO2	S	M	S	M	M	S
CO3	S	S	S	M	M	M
CO4	S	S	M	M	S	M
CO5	S	S	S	S	M	S

S-Strong, M-Medium, L-Low

**UNIT I:  
INTRODUCTION TO BUSINESS**

**6 Hours**

Principles of business management and concept of Bio business, Understanding of organizational behaviour and structure. Fundamentals of Business management, Management: Definition and process. Business management Concepts.PMP certification. SWOT analysis of Indian Bio business, bioentrepreneurship.

**UNIT II:  
PROJECT FORMULATION**

**6 Hours**

Project formulation and selection: based on size, five stages of project life cycle, Situation analysis and project design, Problem analysis, technological assessment, technical report, feasibility and commercial viability

**UNIT III:  
PROJECT COST AND MARKET POTENTIAL**

**6 Hours**

Prepare project management plan, Total product cost, capital investment and profitability, manufacturing cost estimation, capital investment estimation, types of funding –state and central government schemes.

**UNIT IV:  
ENTREPRENEURSHIP OPPORTUNITY IN BIOTECHNOLOGY**

**6 Hours**

Business opportunity and scope on Plant cell and tissue culture technique, Nutraceuticals, value added herbal products, Bioethanol production, Integrated compost production, Biopesticide production, Fermented products, Single cell protein and secondary metabolite production, mushroom cultivation.

**UNIT V:  
SALES AND MARKETING**

**6 Hours**

Introduction to marketing, scope of marketing, marketing philosophies, marketing management process, marketing analysis, understanding marketing environment, consumer and organization buyer behavior, market measurement and marketing research,

**Distribution of Marks:** Theory 80% and Problems 20%

**TEACHING METHODOLOGY:**

- Class room teaching
- Assignments
- Discussions
- Homework
- PPT presentations
- Seminars
- Models and charts

**TEXT BOOKS:**

S.NO	AUTHORS	TITLE	PUBLISHERS	YEAR OF PUBLICATION
1.	Gupta P.K.	Biotechnology and Genomics	Rastogi Publications Meerut	2003
2.	Gurinder S Shahi	BioBusiness: A Strategic Perspective	Lulu.com	2005
3.	Sharma R.K and Shashi K Gupta	Business management	Kalyani Publishers	2002
4.	James L. Burrow, Brad Kleinfl and Kenneth E.	Business Principles and management	EverardCengage	2007
5.	Kumar H.D	Agricultural Biotechnology	Daya Publishing House	2005

**REFERENCE BOOKS:**

S.NO	AUTHORS	TITLE	PUBLISHERS	YEAR OF PUBLICATION
1.	Sussman, M., Collmi, C.H., Shimnen, A.A. and Stewart-tull D.E.	The release of Genetically engineered micro-organisms	Academic Press, London.	1994
2.	Karmach, C.L	Biotechnology Regulations Handbook	Centre for energy and environmental management, FanifacStn.Vingnia	1991
3.	Discon, b.	Morals, ethics, and biotechnology	Raven press	1992
4.	Goel B.B	Project Management	Deep and deep publications	2002
5.	Jack R. Meredith and Samuel J. Mantel	Project management	Wiley India Pvt Limited	2010

**Web Sources:**

1. <https://www.youtube.com/watch?v=JPq7gPkvLjI>
2. <https://www.youtube.com/watch?v=oN6bG4veZrk>
3. <https://www.youtube.com/watch?v=EyPFi0YO32M>
4. <https://www.youtube.com/watch?v=fzoYXccm8cY>
5. <https://www.youtube.com/watch?v=jQVsQenDiEo>

**Syllabus Designer:**

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