

Reg.No.:



VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN

[AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY, CHENNAI]

Elayampalayam – 637 205, Tiruchengode, Namakkal Dt., Tamil Nadu.

Question Paper Code: 90023

B.E. / B.Tech. DEGREE END-SEMESTER EXAMINATIONS – NOV. / DEC. 2024

Fifth Semester

Computer Science and Engineering

U19BTOE3 – BIO-BUSINESS

(Common to ECE, IT & BME)

(Regulation 2019)

Time: Three Hours

Maximum: 100 Marks

Answer ALL the questions

Knowledge Levels (KL)	K1 – Remembering	K3 – Applying	K5 - Evaluating
	K2 – Understanding	K4 – Analyzing	K6 - Creating

PART – A

(10 x 2 = 20 Marks)

Q.No.	Questions	Marks	KL	CO
1.	What is the market potential of Biotechnology industries in India?	2	K2	CO1
2.	Explain the importance of marketing analysis in starting a biobusiness.	2	K2	CO1
3.	Mention any two important applications of aquatic biotechnology.	2	K2	CO2
4.	How is Azolla cultivated?	2	K3	CO2
5.	List any four products produced from Fermentation Technology.	2	K3	CO3
6.	Identify some of the main raw materials for bioplastics manufacturing.	2	K2	CO3
7.	Indicate the importance of Licensing in biobusiness.	2	K2	CO4
8.	Differentiate between Working capital loan and Funding offered by banks for biobusiness.	2	K2	CO4
9.	Why is it mandatory to educate the public regarding the process of biotechnology?	2	K2	CO5
10.	BRAI- Expand and state its role in using biotechnological products in India.	2	K2	CO5

PART – B

(5 x 13 = 65 Marks)

Q.No.	Questions	Marks	KL	CO
11. a)	i. Perform a SWOT analysis of a biobusiness and brief it.	8	K2	CO1
	ii. Comment on the Scope and Demand for biotechnology industries in India.	5		
	(OR)			
b)	i. Report on the challenges faced in transforming a bioproduct from R & D unit to business unit.	8	K2	CO1
	ii. Reproduce the steps involved in a bioproduct development.	5		
12. a)	i. Exemplify the principles of vermitechnology in sustainable organic farming.	10	K2	CO2
	ii. Brief the importance of bio pesticides in organic farming.	3		
	(OR)			
b)	i. Summarize the current scenario, challenges, and opportunities prevailing in medicinal plant cultivation from Indian Farmer's Perspective.	10	K2	CO2
	ii. Write a short note on future scope of Horticulture in India.	3		
13. a)	Outline the recent advancements in transforming agro and organic substances into value added products.	13	K2	CO3
	(OR)			
b)	Substantiate the benefits of IoT in revolutionizing farming practices and transforming livestock management for smarter agriculture.	13	K2	CO3
14. a)	Summarize the anatomy of entrepreneurship support schemes for women entrepreneurs in India.	13	K2	CO4
	(OR)			
b)	Outline the various Government funding schemes and policies offered for a biobusiness in India.	13	K2	CO4
15. a)	Emphasize the major ethical and societal issues involved in carrying out biotechnology research and innovation in India.	13	K2	CO5
	(OR)			
b)	Portray the key role of regulatory affairs in guiding any bio based industries in India.	13	K2	CO5

PART – C

(1 x 15 = 15 Marks)

Q.No.	Questions	Marks	KL	CO
16. a)	Depict the cultivation process of field mushroom and explain in detail. Is mushroom cultivation profitable in India? Justify your answer with proper market analysis.	15	K4	CO2
(OR)				
b)	With a suitable example, narrate the industrial symbiosis for the development of biofuel production.	15	K4	CO3
