USN (RV2287019

## RV COLLEGE OF ENGINEERING®

(An Autonomous Institution Affiliated to VTU) V Semester B. E. Examinations April/May-2024

Biotechnology

## BIOSAFETY STANDARDS AND ETHICS

Time: 03 Hours

Instructions to candidates:

Maximum Marks: 100

 Answer all questions from Part A. Part A questions should be answered in first three pages of the answer book only.

 Answer FIVE full questions from Part B. In Part B question number 2 is compulsory. Answer any one full question from 3 and 4, 5 and 6, 7 and 8, 9 and 10.

		PART-A	M	BT	CO
1	1.1	List the advantages of preserving of food with examples	02	1	1
	1.2	Mention the dangerous temperature of food preservation	02	1	1
	1.3	Mention the examples of food borne diseases.	02	1	3
16	1.4	Give the importance of HEPA filters and examples	02	1	4
	1.5	Write the role of antibiotics in Poultry	02	1	1
	1.6	What is GHP? Explain its importance	02	1	3
1	1.7	What is food sterilization? Give examples.	02	1	4
A	1.8	What is biosafety committee and its functions?	02	2	1
M	1.9	List out the unit operations applicable in food processing with suitable examples.	02	1	1
	1.10	Differentiate between LAF and Biosafety Cabinet	02	2	2

## PART-B

2 a	Define biohazard and mention the various biohazards with example.	08	2	1
ь	Explain various biosafety levels using a triangular diagram	08	2	2
3 a	Mention various functions of IBSC with examples  Define GMO. Explain 1st Generation , 2nd Generation GM	08	3	2
Ь	food.	08	2	1
	OR			
a b	Write short notes on i)RCGM ii)GEAC Discuss on the salient features of Cartagena Protocol	08 08	1 1	3 2
a	List out the important food safety Standards and	08	2	2
ь	Regulations  Mention the possible pathogens that can contaminate food and how do you prevent food contamination.	08	1	1
	OR		1	1

6	a	Explain 7 basic principles of Hazard Analysis Critical	08	1	4
		Control Point (HACCP).	08	2	4
	b	Explain various biochemical analysis of food.	00	24	
		D. 1.: 1	16	2	2
7		Explain chemical and physical method of food processing			
		OR			
8	a	Classify food packaging methods and write an	0.0	4	4
		explanatory note on the novel food packaging methods.	08	4	3
	b	Write short notes on GMP and GLP	08	1	3
0		Discuss in detail about food and Drug administration.	08	5	2
9	a b	Write explanatory notes on food production and economics. Why is food production important to the			
		economy?	08	2	3
		OR			
10	a b	Differentiate between clinical ethics and bioethics.  Discuss the limits of additives to be added to the food as	08	3	3
		per the standards.	08	4	4