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RV22AIO7

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

Maximum Marks: 100

Instructions to candidates:

- Answer all questions from Part A. Part A questions should be answered in first three pages of the answer book only.
- 2. 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
	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	1.6	What is GHP? Explain its importance	02	1	3
1	1.7	What is food sterilization? Give examples.	02	1	4
	1.8	What is biosafety committee and its functions?	02	2	1
	1.9	List out the unit operations applicable in food processing			
	1.9	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
	b	Explain various biosafety levels using a triangular diagram	08	2	2
			- 00	2	2
3	a	Mention various functions of IBSC with examples Define GMO. Explain 1st Generation, 2nd Generation GM	08	3	
	b	food.	08	2	1
		OR			
4	а	Write short notes on i)RCGM ii)GEAC	08 08	1	3 2
	b	Discuss on the salient features of Cartagena Protocol			
5	а	List out the important food safety Standards and	08	2	2
	b	Regulations Mention the possible pathogens that can contaminate food and how do you prevent food contamination.	08	1	1
		OR			

6	а	Explain 7 basic principles of Hazard Analysis Critical Control Point (HACCP).	08	1	4
	b	Explain various biochemical analysis of food.	08	$\begin{vmatrix} 1 \\ 2 \end{vmatrix}$	4
7		Explain chemical and physical method of food processing	16	2	2
-		OR			
8	а	Classify food packaging methods and write an			
	,	explanatory note on the novel food packaging methods.	08	4	4
-	b	Write short notes on GMP and GLP	08	1	3,
9	а	Discuss in detail about food and Drug administration.	08	5	2
	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