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RV COLLEGE OF ENGINEERING
Autonomous Institution affiliated to VTU
III Semester B.E. April -2024 Examinations
DEPARTMENT OF BIOTECHNOLOGY.
COURSE TITLE: BIO SAFETY STANDARDS AND ETHICS
(2022 SCHEME)

Time: 03 Hours

Maximum Marks: 100

Instructions to candidates:

1. 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, and 9 and 10.

PART-A (Objective type for one or two marks)
(True & false and match the following questions are not permitted)

1	1.1	What is level 2 biosafety cabinet?	1
	1.2	What are the allergens in the food? give examples	1
	1.3	Expand the term "BAP"	1
	1.4	Explain the term "LMO"	1
	1.5	Discuss the advantages of preservation of food	1
	1.6	Cholera is caused by _____microorganism	1
	1.7	What is the most dangerous temperature of food preservation?	1
	1.8	What is the Food borne disease? Give two examples	1
	1.9	Give the importance of HEPA filters	1
	1.10	What is the role of antibiotics in Poultry?	1
	1.11	What is GHP? Explain its importance	2
	1.12	How do you sterilize Food? Give suitable examples	2
	1.13	What is biosafety committee and its functions?	2
	1.14	List out the unit operations applicable in food processing	2
	1.15	Diffentiate between LAF and Biosafety Cabinet	2

PART-B (Maximum subdivisions is limited to 3 in each question)

UNIT-I			
2	a	Illustrate on biohazards and its consequences	08
	b	Describe in detail various Biosafety levels, with the help of a neat pictorial representation	08

UNIT-II			
3	a	Elaborate on the institutional Biosafety norms	08
	b	Classify GMOs and its applications in food and agriculture	08
OR			
4	a	Expand and give its functions i) RCGM ii) GEAC	04+04
	b	Explain and discuss the features of Cartagena Protocol	08

UNIT-III			
5	a	List out Functions, types of Licenses and compliance rules of FSSAI.	08
	b	What is Food Hygiene? What are the possible pathogens that can contaminate food and how do you prevent food contamination?	08
OR			
6	a	Illustrate the principles of Hazard Analysis Critical Control Point (HACCP).	08
	b	Give an account of Food Analysis and Testing in laboratories for maintaining the food quality.	08

UNIT-IV			
7	a	Discuss in details the need and importance of Food processing operations	08
	b	Explain with an examples the various methods for food preservations	08
OR			
8	a	Classify food packaging methods, and add and explanatory note on the novel food packaging methods	08
	b	Describe Good Manufacturing Practices applicable to food and the advantages of GAP and GLP	

UNIT-V			
9	a	Discuss in detail about Food safety and ethics	08
	b	Write explanatory notes on Food production and economics	08
OR			
10	a	Write explanatory notes on Bioethics and Clinical Ethics	08
	b	Classify food additives? Discuss the limits of additives to be added to the food as per the standards.	08

Signature of Scrutinizer:

Name:

Signature of Chairman

Name:

