



RV Educational Institution
RV College of Engineering

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi

DEPARTMENT OF

BIOTECHNOLOGY

Academic year 2023-2024 (Odd Sem)

RV22A2,007

Date	January 8, 2024	Maximum Marks	50
Course Code	BT232AT	Duration	90 min
Sem	III Semester	Closed Book Offline Test-I	
Bio Safety Standards and Ethics (Basket course)			

Sl. No	Questions (Test)	M	BT-L	CO
1.	Elaborate on various bio hazards from nature	10	2	1
2	List out and discuss biosafety levels with a neat triangular diagram	10	4	1
3	Explain with a help of a neat diagram, biosafety cabinet B2	10	4	1
4	Differentiate the bio safety cabinets I, II and III	10	2	1
5	Give details on GMO and their applications in various fields	10	2	2

BT-L-Blooms Taxonomy, CO-Course Outcomes, M-Marks

Marks Distribution	Particulars		CO1	CO2	CO3	CO4	L1	L2	L3	L4	L5	L6
	Test	Max Marks	40	10	---	---	---	---	30	20	---	---



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DEPARTMENT OF
BIOTECHNOLOGY
Academic year 2023-2024 (Odd Sem)

Date	February 20, 2024	Maximum Marks	50
Course Code	BT232AT	Duration	90 min
Sem	III Semester	Closed Book Offline Test-2	
Bio Safety Standards and Ethics (Basket course)			

Sl. No	Questions (Test)	M	BT-L	CO
1.	Explain briefly the importance of The Cartagena Protocol on Biosafety	10	2	3
2	Mention the physical, chemical, and biological hazardous material which contaminate the food.	10	2	3
3	List out various methods to eliminate the chemical, Biological and physical hazardous materials from food.	10	3	3
4	Expand the terms FSSAI & HACCP, Elaborate on the seven principles of HACCP.	10	3	4
5a	Illustrate on various Techniques that take place in a food testing laboratory.	5	4	4
b	Mention and briefly explain the five methods used for food analysis applicable to samples	5	4	4

BT-L-Blooms Taxonomy, CO-Course Outcomes, M-Marks

Marks Distribution	Particulars		CO1	CO2	CO3	CO4	L1	L2	L3	L4	L5	L6
	Test	Max Marks	---	--	30	20	---	20	20	10	---	--



DEPARTMENT OF
BIOTECHNOLOGY
Academic year 2023-2024 (Odd Sem)

Sem	III Semester	Closed Book Offline Test-3
Bio Safety Standards and Ethics (Basket course)		

Sl. No	Questions (Test)	M	BT-L	CO
1.	Explain on various food processing techniques	10	2	4
2	Illustrate on the following: Blanching Pasteurization Frying	10	4	4
3	Describe three levels of packaging the food products	10	4	4
4	Explain the effects of poor packaging on food products, add a note on smart packing	10	2	4
5	Write Explanatory notes on Freezing Dehydration Homogenization	10	2	4

BT-L-Blooms Taxonomy, CO-Course Outcomes, M-Marks

Marks Distribution	Particulars		CO1	CO2	CO3	CO4	L1	L2	L3	L4	L5	L6
	Test	Max Marks	--	--	---	50	---	30	--	20	---	--

BT232TC

USN

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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:

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, 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
	1.6	What is GHP? Explain its importance	02	1	3
	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 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
3	a	Mention various functions of IBSC with examples	08	3	2
	b	Define GMO. Explain 1 st Generation, 2 nd Generation GM food.	08	2	1
OR					
4	a	Write short notes on i)RCGM ii)GEAC	08	1	3
	b	Discuss on the salient features of Cartagena Protocol	08	1	2
5	a	List out the important food safety Standards and Regulations	08	2	2
	b	Mention the possible pathogens that can contaminate food and how do you prevent food contamination.	08	1	1
OR					

6	a	Explain 7 basic principles of Hazard Analysis Critical Control Point (HACCP).	08	1	4
	b	Explain various biochemical analysis of food.	08	2	4
7		Explain chemical and physical method of food processing	16	2	2
OR					
8	a	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	a	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	Differentiate between clinical ethics and bioethics.	08	3	3
	b	Discuss the limits of additives to be added to the food as per the standards.	08	4	4