

ಎಮ್ ಎಸ್ ರಾಮಯ್ಯ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಕಾಲೇಜು M S Ramaiah College of Arts, Science and Commerce

Re-accessible of Ar by NAAC, Remainintly Affiliated to Bengduru City University. Approved by Grunnminit of Kernshala, Approved by AICTE, New Selfs. Recognitive by NOC under 2f & 128 of UGC art 1956.

(National Institutional Remong Framework, Ministry of Education, Goet of India) Romani 63° in hIRF India Ranking by HHRD, Agra-Della DBT Star College Scheme

REF: MSRCASC/ MB / 21-22 / 014

Date: 25.05.2022

Circular

Department of Microbiology

Value added Course

The students of B.Scare hereby informed that, there is a Value added course offered in the topic "Good Manufacturing Practices, Quality Control and Quality Assurance of Foods", organized by the Department of Microbiology under the DBT -STAR College Scheme. The students are hereby informed to register for the same at the earliest.

DBT - STAR College scheme

1:4:d of the Department MICRO BIOLOGY

Ramaiah College of Arts,

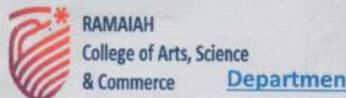
Science & Commerce Bangalore - 560 054

Principal

Principal,

M.S. Ramaiah College of Arts, Science & Commerce MSRIT Post, MSR Nagar

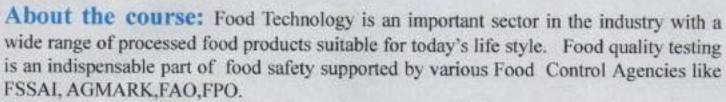
Bangalore - 560 054



Department of Microbiology

VALUE ADDED COURSE

Good Manufacturing Practices, Quality Control and Quality Assurance of Foods.



Hence assuring Food quality becomes an integral part of the food industry for the safety of the consumer. The course imparts all the technical skills towards various parameters set in the food industry.



Objectives:

- To impart technical knowledge and skill development in the field of Food industries.
- To develop qualities of a Microbiologist in the field of Good manufacturing practices, Food QC and QA.

Duration of the Course: 30 hours of theory and practical sessions with critical thinking, skill based learning, interactive sessions, personality development and Entrepreneurship development.

Registration: 50 Nos.(Students need to fill the Google form and the first registered students will be considered for the course)

Plan of action: The design of the course is in accordance to the industrial norms

The course content includes theoretical sessions, hands on practical sessions and skill based outcomes • Visit to Food industries to understand Food Quality Control and Quality Assurance.

Out come: To develop a professional Food Microbiologist in GMP, Quality Control and Quality Assurance as a stepping towards the Industries







Organizing committee

Dr. Pushpa.H

Professor, HOD- Microbiology, MSRCASC

Dr. Yogesh D

Assistant Professor,

Department of Microbiology

Dr. Prasanna Srinivas

Assistant Professor,
Department of Microbiology

Dr. Ramesha A

Assistant Professor,
Department of Microbiology



ಎಮ್ ಎಸ್ ರಾಮಯ್ಯ ಕಲಾ. ವಿಚ್ಚಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಕಾಲೇಜು M S Ramaiah College of Arts, Science and Commerce

Re-accredited 'A' by NAAC Permanently Afficiend to Bengsturu City University, Approved by Government of Karnataka, Approved by AICTE, New Dette. Recognised by UGC under 214 128 of UGC act '956'

(National Institutional Renking Framework, Ministry of Education, Govt of India)
Ranked 50° in NIRF India Ranking by MHRD. New Defis
DBT Star CoRego Scheme

M. S. RAMAIAH COLLEGE OF ARTS, SCIENCE AND COMMERCE

DEPARTMENT OF MICROBIOLOGY

Report on Value added course "Good Manufacturing practices, Quality Control and Quality Assurance of Foods".

Objectives: To study about the fast food outlets for the quality of raw materials used in food preparation.

Sponsored Project: DBT-STAR College Scheme.

Co-ordinator DBT-STAR College Scheme: Dr.Pushpa.H

Resource persons: Dr.PrasannaSrinivas.R

Dr. Yogesh

Dr.Ramesha

Venue: Microbiology Laboratory

Duration of conduction: 13th July to 13th August

No. of Participants:-26 students.

Modules for the study:

Module 1- Biosafety in Microbiology Laboratory :

Biosafety Levels- Level -I, Level-II, Level-III and Level- IV

General Laboratory directions for Food safety

Module 2-Chemical and Microbiological analysis of raw materials

Microbial standards of food and water used in the preparation of foods

Module 3 - Microbial examination of Canned foods:

Study of Mesophiles and Thermophiles- microbes in low acid foods, microbes in acid and Acidfied low acid foods by Enrichment and Direct Plating technique.

Module 4 - Microbiological Standards for processed foods:

The study of Standard Food safety limits of nine major food borne pathogens.

Module 5 - Food Auditing, HACCP, Quality Control and Quality Assurance:

Basic map of Food industry, Data maintenance, Book keeping and Basic auditing at Food Industry, Overview of HACCP, Quality Control and Quality Assurance cell in the industry.

REPORT:

The course started with a basic interaction with the students and an orientation was given to the students towards the value added course. An overview of the modules were discussed and explained about the theory and practical sessions, which would be conducted during the programme.

The students were advised to select a few street food outletsin different areas around Bengaluru. The students studied the food preparation conditions and the quality of hygiene by sampling the food serving plates, the personnel and the air flora. The raw food samples like pulses, chopped onions, coriander, etc were analysis for the microbiological quality.

The water samples used for the food preparation were collected and tested for MPN test and coliform tests. The canned foods were analyzed for mesophilic bacteria and sampled on specialized media like Bacillus agar, Pseudomonas Agar, Salmonella Shigella Agar, etcto understand about food contaminants.

The students were provided with theoretical knowledge about the Thermophiles, Acidophiles and contaminants of Acidified low acid foods. The study included Biosafety Levels- Level -I, Level-II, Level-III and Level- IV in the food industry for good manufacturing practices.

The ready -to-eat foods- pizza, pasta, Filled cream rolls, sandwiches, Dips, Dressings/ Mayonnaise, icing agents, cherries were analyzed for microbiological qualityand compared with standard guidelines.

Hence the Microbiological assessment of the above foods was categorized for Class A, Class B, Class C, Class D. The topics of HACCP, Quality control and Quality assurance were discussed

OUTCOME OF THE PROJECT:

The food samples analyzed for microbiological quality showed that there was moderate level of contamination. The students were assessed about food quality control, food standards, HACCP, by few MCQ.



Students at the Microbiology Laboratory on the first day of Value added Course



Air exposure at a food outlet ampling of the raw food ingredients



Isolation of Bacteria from raw pulses used in food preparations



Most Probable Number method of Food analysis conducted for water and milk

Future Objectives:

- 1. Study of food colouring agents artificial food colours and their effect on microorganisms.
- 2. Adulterants used in food preparation.

DBT-STAR College Scheme

Haad of the Department MICRO BIOLOGY Ramaiah College of Arts, AScience & Commerce Bangalore - 560 054

Resource persons

Principal,

M.S. Ramaiah College of Arts, Science & Commerce MSRIT Post, MSR Nagar

Bangalore - 560 054

Volado







DEPARTMENT OF BIOTECHNOLOGY MINISTRY OF SCIENCE & TECHNOLOGY, GOVERNMENT OF INDIA

Certificate

This is to Certify that Jashada &

of B.Sc. W Semesten has participated in Value Added Program on

"Good Manufacturing Practices, Quality Control and Quality Assurances of Foods"

held from 13" July to 13" August 2022 Organized by the Department of Microbiology,

M. S. Ramaiah College of Arts, Science and Commerce, Bangalore

Dr. Pushpa H

Vice Principal & Head, Department of Microbiology MSRCASC, Bangalore

Dr. Vatsala G

MSRCASC, Bangalore Principal

M.S.RAMAIAH COLLEGE OF ARTS, SCIENCE AND COMMERCE

VALUE ADDED COURSE- DBT SPONSORED 2022-ATTENDANCE- July to August 2022

DEPARTMENT OF MICROBIOLOGY

12	Brinda.P	TV SEN	Bounds.	Brin	Bulna	P Brings	P Bainda	P Buink	Buinda	de & Brinde P	
13	Akshatha.K	五公	Tres les	THE	77	Akahan	Arsharmy Arien & Arana	ANA KAIN	Frederica Destr	P. Brand	2
14	Dhathri.V.Murali	IV 8EM	Dolasions	And Land	To Second	of white part of the way	man market	The same	1	The printer	5
15	Easha Roy	IN SEM	EasterRaysant	ey Easter		P. Mar	20 /	Easte Por	Kentur Ray	Easter Por	
16	Sushma,D	V SER	100		X	*	3	AR	S	12 X	
17	Ramya Shankar . R.	VI SEM	Ramp	County	Konnia	Lauma	Farme	Conneg	Konnig	Panula	
18	Tamding Dolna	VI SEM	B	B	\	J&	ß	Jg/	V	M	
19	Nityasree Natarajan	VI SEM	, Angella	WHY WAY	WHIN	1	A STAN	图	K-T-X	The state of the s	
20	Vedika .R.Kuttanda	VI SEM	age age	A STATE OF THE PARTY OF THE PAR	含	13	E S		- AND	Sala Sala	
21	RITANKAR	VI SEN	ঠ	St.	B	age of	B	A.	S.	B	
22	ROHINI.R	VI SEN	4	at	OF)	100	4	47	4	2	
23	SPOORTHY	VI SED	4	A See	Charles .	Brest	(Rught	Care A	R. M.	Charles !	
24	ANNESHA. BANGER	SEP SEN	De B	iests.	the	Show	to the	San San	Sans.	Spring	
25	AHUSUKA	Vi sen	graphiles Araballes of restricted formands	AND C	Andrah &	Mount Per	1	Annuly	Gostales American Charles	Samuel B	
56	ANDRED PMIL	PMICH VI SEM	Duil S	Cultiman C	S. Jung	Anima	Prints 5	Donillie	Parish Derived Chiles Drives Deviled Citiment	1	
27	1080	3		1				-	6		
28				E				Para Para	Principal Science & Commen	T. T	
							St.	Normalah Lampo MSRIT P	MSRIT Post. 260 05" MSRIT Post. 560 05" Bangdore		

.



ಎಮ್ ಎಸ್ ರಾಮಯ್ಯ ಕಲಾ, ವಿಚ್ಚಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಕಾಲೇಜು

M S Ramaiah College of Arts, Science and Commerce
Re-accredited 'A' by NAAC, Permanently Affiliated to Bengaluru City University,
Approved by Government of Karnataka, Approved by AICTE, New Delhi,
Recognized by UGC under 2f & 12B of UGC act 1956

(National Institutional Ranking Framework, Ministry of Education, Go Ranked 55" in NIRF India Ranking by MHRD, New Delhi DB1 Star College Scheme

Assessment of the Value Added Course:

SI.No.	NAME OF THE	***	220.000000
	STUDENT	CLASS	30 MARKS
1	Aishwarya.S	VI SEM	27
2	Keerthana.K	VI SEM	28
3	DivyaBala.R	VI SEM	29
4	Divyashree.B	VI SEM	29
5	Aishwarya.K	VI SEM	25
6	Afsana Khan	VI SEM	26
7	Bandi Sai Charishmitha	VI SEM	25
8	Swathi,S	IV SEM	29
9	Nityasree Natarajan	IV SEM	29
10	Yashoda.O	IV SEM	30
11	Hima.R	IV SEM	28
12	Brinda.P	IV SEM	28
13	Akshatha.K	IV SEM	29
14	Dhathri.V.Murali	IV SEM	30
15	Easha Roy	IV SEM	27
16	Sushma.D	VI SEM	27

17	Ramya Shankar	VI SEM	28
18	Tamding Dolna	VI SEM	28
19	Nityasree Natarajan	VI SEM	27
20	Vedika .R.Kuttanda	VI SEM	29
21	Ritankar	VI SEM	25
22	Rohini.R	VI SEM	26
23	Spoorthy	VI SEM	28
24	Annesha Bannerjee	VI SEM	30
25	Andrea Amili Lobo	VI SEM	28
26	Anushka	VI SEM	29

2) Lamerla A

Principal, M.S. Ramaiah College of Arts, Science & Commerce MSRIT Post, MSR Nagar

Bangalore - 560 054

Hase of the Department MICRO BIOLOGY Ramaiah College of Pris. Science & Commerce Eangelone - 590 054