

Vasantdada Patil College Patoda

Department of Microbiology

Report on Certificate Course

Course Name: **Certificate Course in Food Microbiology and Food Safety**

Students Admitted : **20**

Duration: **09/04/2022 to 09/05/2022 (One Month)**

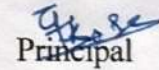
Department of Microbiology, starts one month certificate course entitled " **Food Microbiology and Food Safety** " as from **09/04/2022 to 09/05/2022**.

Inauguration of certificate course done on 09 April 2022, Chair person was Prof. Dr. Abasaheb Hange, Principal, Vasantdada Patil College. On Dias Vice Principal Dr. Kishor Machale, Vice Principal Dr. Ganesh Pachkore, Post Graduate Director, Dr. Manojkumar Prakash, and students who admitted for the course. Chair Person and Chief Guest and person's on dias inaugurate certificate course by showing informatory book of certificate course.

The 20 students were admitted for this Certificate course, attend Theory and Practical of course one month and after one month completing course successfully, on 09/05/2022 certificate was distributed by Honorable Principal Dr. Abasaheb Hange, PG Director, Dr. Manojkumar Prakash , HOD Dr. Abhay Kshirsagar by taking one program students express their thanks about course.



Dr. A.R.Kshirsagar



Principal

Principal
Vasantdada Patil Arts Comm.
& Sci.College Patoda, Dist. Beed

N.S.S.R's
Vasantdada Patil Arts, Commerce & Science College, Patoda Tq. Patoda, Dist. Beed
Department of Microbiology
Certificate Course on Food Microbiology & Food Safety
Admission Form
Academic Year 2021-2022

Photo

Batch No. :	
Serial No. :	
Name of Applicant	
Father's Name	
Date of Birth	
Gender	Male <input type="checkbox"/> / Female <input type="checkbox"/> / Transgender <input type="checkbox"/>
Category	
Caste	
Educational Qualification	
Mobile No.	
Email ID	
Aadhar Card No.	
Address	
Documents attached	1. 2.

Applicant Signature: _____ Guardian Signature: _____

Course Coordinator's Signature: 1. _____ 2. _____

Admission is confirmed to the course: _____

Office Use


Date of Admission: / / 2022

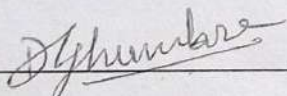
Receipt No.: _____ Sign. : _____

Certificate Course

Name of Course : Food Microbiology & Food Safety
Course Type : Certificate Course
Duration : 1 Month (40 Hours)
Eligibility : 12th Pass
Capacity in one batch : 20
Medium of course : English
Assessment / Evaluation process: 50 Marks MCQ/ Objectives/ Short Answer type exam

Course Coordinators

Dr. Abhay R. Kshirsagar: 


Dr. Pradeep D. Ghumbre: 

Syllabus

Sr. No.	Content	Hours
Theory		16 Hours
1.	<p>Chapter 1: Food Microbiology Fundamentals of Microbiology, History and development of microbiology, Scope and importance of food microbiology, Economic importance of yeast, molds and Bacteria, Factors affecting the survival and growth of microorganisms in food. Intrinsic and Extrinsic parameters that affect microbial growth. Intrinsic factors for growth- Generalized, nutrient effect, pH, buffer, anaerobic/aerobic conditions, moisture content, temperature, gaseous atmosphere, Application of microbiology in nutrition</p>	8 Hours
2.	<p>Chapter 2: Food Safety Food sanitation, microbiological criteria and food safety, Food safety objectives (FSO), Bacteriology of Water supplies, Sewage in waste treatment and disposal, Indicators of food microbial quality and safety, some indicators of product quality- Coliforms, Enterococci, Bifidobacterium, Coliphages. Bacterial Food-borne poisoning, infections and intoxication, Non-bacterial food-borne poisoning, infections and intoxication, Microbiological quality standards of food, control and inspection</p>	8 Hours
Practical's		24 Hours
1.	Introduction, Laboratory Safety, Use of Equipment; Sterilization Techniques; Culture Media Types and Use; Preparation of Nutrient broth and agar	4 Hours
2.	Different methods of microbial Examinations: – Procedures of TPC, SPC, Pour plate method, Streaking, Swabbing, Stabbing	4 Hours
3.	Enumeration of Lactic acid bacteria from fermented foods, Yeast and Mold count from fruits	4 Hours
4.	Factors affecting food safety:-physical hazards, biological hazards and chemical hazards, Personal hygiene & sanitation in handling food.	4 Hours
5.	Sanitation & Safety in handling Equipment, Plant constructions, water supply and sewage disposal.	4 Hours
6.	Regulatory & control bodies -FSSAI, GMP, Codex, GRAS, Certifications in Microbiology	4 Hours


Head

Dept. of Microbiology
 Vasantdada Patil College
 Patoda, Dist. Beed.


Principal
 Vasantdada Patil College,
 Patoda, Dist. Beed.

Objectives:

To define microbial food spoilage, food quality, food safety and the factors affecting the growth and control of microorganisms in food.

- To articulate the use of hurdle technology and food preservation in the control of foodborne pathogens in food systems.
- To discuss the principles of food preservations and to describe the different food preservation methods.
- To describe the role of beneficial microorganisms in food processing, preservation and safety, and their potential health benefits.
- To explain the causes of foodborne microbial diseases and predict the pathogens that can grow in any given food during different stages of the food production system.
- To explain the different factors that take place during food processing and how food can be contaminated in the food continuum (pre and post-harvest level)
- To apply rapid microbiology techniques to assess food safety and quality.
- To demonstrate the use of appropriate lab techniques commonly used in the food microbiology laboratory.
- To work effectively as a team in designing and using food microbiology laboratories and in-class activities.

Learning outcome:

Upon successful completion of this course the student will be able to:

- Complete understanding of isolation, characterization of various microbes associated with foods and food groups.
- determine and use the principles of sanitation, heat treatment, irradiation, modified atmosphere, antimicrobial preservative and combination of method (hurdle concept) to control microbial growth
- Familiarize with microbiological techniques for the study of foods.
- Better understanding of methods to detect pathogens in foods.
- This course is also designed to improve student's success skills, especially in oral and written communication, defining a problem, identifying potential causes and possible solutions and making thoughtful recommendations, applying critical thinking skills to new situations, independently researching scientific and non-scientific information, and facilitating group projects.

NSSR'S

Vasantdada Patil Arts, Commerce & Science College Patoda Tq. Patoda, Dist. Beed
 Department of Microbiology
 Certificate Course in Food Microbiology & Food Safety

Date:

Attendance Sheet

Time:

Sr. No.	Students Name	Signature
1	Randve Geeta Vikram	
2	Randve Seeta Vikram	
3	Jawale Pallavi Dinkar	
4	Kolhe Shweta Prashantao	
5	Ingole Rupali Jalindar	
6	Jadhav Mayuri Ramkrishna	
7	Kadbane Apaksha Ashok	
8	Misal Tukaram Khimrao	
9	Ghumeekar Akash Kisan	
10	More Vivek Baliram	
11	Adagale Krishna Hanumanth	
12	Mule Shivam Atmakam	
13	Theekar Prakash Hanumanth	
14	Sajid Shaikh Daud	
15	Pankhade Yashwanth Chandrakant	
16	Palkar Vaisram Muband	
17	Rakh Ravindra Vishnu	
18	Momin Ubaidur Rahman	
19	Mandon Surin Bahagindan	
20	Gafaman Ranvijay Chinchole	
21	Sachin Bhagwan Sakthare	

Theory / Practical

Topic/Point Name: -----

Sub-Point Name: -----

Lecturer Name:

Lecturer Sign: -----

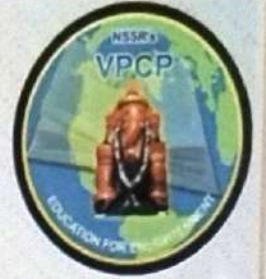
Coordinator Sign: -----

Head Sign: -----

(Dr. Abhay R. Kshirsagar)

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Navgan Shikshan Sanstha Rajuri's
**VASANTDADA PATIL ARTS, COMMERCE & SCIENCE
COLLEGE, PATODA DIST. BEED**



DEPARTMENT OF MICROBIOLOGY

CERTIFICATE OF COMPLETION

This is to certify thathas

successfully completed the one month (30 Days) certificate course in Food

Microbiology & Food Safety from 09 April to 09 May 2022.

Credits: A

Dr. Pradeep Ghumbre
Coordinator
Department of Microbiology

Dr. Abhay Kshirsagar
Coordinator & Head
Department of Microbiology

Prof. Dr. Abasaheb Hange
Principal
V.P. College Patoda

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