

A.S.D GOVERNMENT DEGREE COLLEGE FOR WOMEN (A),
KAKINADA



DEPARTMENT OF MICROBIOLOGY

CERTIFICATE COURSE

ON

Introductory to Clinical Laboratory Techniques

(CC23ICLT/MB)

2023-24

Duration: 40 Hrs



A.S.D. GOVERNMENT DEGREE COLLEGE FOR WOMEN (A)
NAAC Re-Accredited With "B" Grade in Cycle-III

Affiliated to Adikavi Nannaya University, Rajamahendravaram
Kakinada-533 002, Andhra Pradesh



Department of Microbiology

**A SKILL DEVELOPMENT CERTIFICATE
COURSE ON**

"Introductory to Clinical Laboratory Techniques"

ADMISSION NOTIFICATION 2023 – 24

❖ Dear Learners!

Are you interested in Clinical laboratory Techniques?
Then! Here is an Opportunity for you.

The department of Microbiology offers a certificate course in this field.

❖ Course Highlights

❖ This course aims at imparting skills on use of various clinical laboratory techniques that are essential for disease diagnosis in medical laboratory.

❖ At the end of course, the student will be expertise in these techniques efficiently and can find a career opportunity as lab technician in Diagnostic centers.



Target Group

B. Sc (First/ Second Year)

Last Date for enrolment:
20-02-2024



For Details Contact

Smt. D. Jayasree

Course Coordinator

Lecturer In-Charge, Department of Microbiology

Phone No.: 8121000338

D. Jayasree
LECTURER IN CHARGE
MICROBIOLOGY DEPARTMENT
A.S.D. Govt. Degree College for Women
KAKINADA

V. Anant D.
PRINCIPAL
A.S.D. GOVT. DEGREE COLLEGE FOR WOMEN
AUTONOMOUS
KAKINADA

A.S.D. Government Degree College for Women (Autonomous), Kakinada
DEPARTMENT OF MICROBIOLOGY

B.Sc	Semester: II : Certificate Course	Credits: 2
CC23ICLT/M	Introduction to Clinical Laboratory Techniques	Total hours: 40

Course Duration: 40 Hours

Eligibility: All B.Sc. Second Year students

Objectives:

1. This course aims at imparting skills on use of various clinical laboratory techniques that are essential for disease diagnosis in medical laboratory.
2. At the end of course, the student will be expertise in these techniques efficiently and can find a career opportunity as lab technician in Diagnostic centers.

Course Outcomes:

- Pursue a career as a Microbiology Laboratory Technician
- Learn how to diagnose diseases
- Receive guidelines on how to get a job in this field

Course Syllabus:

Unit I: Introduction to Microbiology & Microorganisms

History, Scope & Importance of Microbiology
Prokaryotic microorganisms: General characters of Bacteria
Eukaryotic microorganisms: Habitat, nutrition, vegetative structure and reproduction of Fungi, Algae and Protozoa
General characteristics and classification of viruses

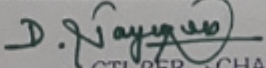
Unit II: Bacterial Disease Diagnosis

Principles of Microscopy and Staining techniques
Culture and Biochemical techniques for diagnosis.
Species Identification: Phenotyping, Genotyping & Serotyping
Antibiotic Susceptibility Testing

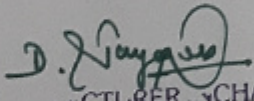
Unit III: Sero & Molecular Diagnosis

PCR and ELISA
Serological diagnosis techniques
Vaccines
Responsibilities of a Lab Technician

- **Additional Input:** Career Opportunities in Microbiology
- **Web link:** <https://www.udemy.com/course/become-a-microbiology-laboratory-technician/>


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Microbiology Certificate Course (2023-24)			
<i>Introductory to Clinical Laboratory Techniques</i>			
List of Students Enrolled for Certificate Course			
S.No	Regd.No	Name of the Student	Programme
1	2375002	D HIMA MALA	Botany Honours
2	2375008	GARIKINA SUPRIYA	Botany Honours
3	2375013	CHIKKAM CHAKRAVENI	Botany Honours
4	2375014	DHAKSHARAPU DIVYAKALYANI	Botany Honours
5	2375015	GADUTHURI SIVA LAKSHMI	Botany Honours
6	2375020	MADDA SUJATHA	Botany Honours
7	2375022	MUKE SHARMILA	Botany Honours
8	2375023	NEMALA ANJALI	Botany Honours
9	2375024	PILLI NEHA	Botany Honours
10	2375025	SAMMIDI JAYANTHI	Botany Honours
11	2376002	DARIPALLI SUVARNA	Zoology Honours
12	2376008	GUTTULA DEVI SRI	Zoology Honours
13	2376013	MUMMASANI MANASA	Zoology Honours
14	2376024	GODA BINDU MADHAVI	Zoology Honours
15	2376025	GUDALA RAMYA	Zoology Honours
16	2376030	MADHURA BHARGAVI	Zoology Honours
17	2376033	MASABATTULA MUKUNDA JASHMINE	Zoology Honours
18	2376035	PATNALA VYSHNAVI	Zoology Honours


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DEPARTMENT OF MICROBIOLOGY

Certificate Course

Introduction to Clinical Lab techniques

TIME TABLE

Day	0 9AM to 10AM	1 10AM TO 11AM	2 11AM TO 12NOON	3 12 TO 1PM	4 B R E A K	5 2PM TO 3PM	6 3PM TO 4PM	7 4PM TO 5PM
Monday			III 7A	II		III 6A	← III 6A Practical →	
Tuesday	Certificate course	← II Practical →	→ III 6A			II		
Wednesday		III 6A		II				
Thursday			III P6A	I Core-2		← III Lab P7A →		III 7A
Friday	Certificate course	I Core-2		III P7A				
Saturday		II Tutor/Ward	III P7A	II				

D. Jayaram
 LECTURER IN CHARGE
 MICROBIOLOGY DEPARTMENT
 S D Govt. Degree College for Women
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**DEPARTMENT OF MICROBIOLOGY
CERTIFICATE COURSE (2023-24)**

Introductory to Clinical Laboratory Techniques

Attendance

S.No	Regd.No	Name of the Student	Programe	Attendance											
				21/2/24	22/2/24	23/2/24	24/2/24	26/2/24	27/2/24	28/2/24	29/2/24	1/3/24	2/3/24	4/3/24	5/3/24
1	2375002	D HIMA MALA	Botany Honours	P	P	P	A	P	P	P	A	P	P	P	A
2	2375008	GARIKINA SUPRIYA	Botany Honours	P	P	A	A	A	P	A	P	A	P	P	A
3	2375013	CHIKKAM CHAKRAVENI	Botany Honours	A	P	P	P	P	P	P	P	P	P	P	P
4	2375014	DHAKSHARAPU DIVYAKALYANI	Botany Honours	P	P	P	P	P	A	P	P	P	P	P	P
5	2375015	GADUTHURI SIVA LAKSHMI	Botany Honours	P	A	P	P	P	P	P	P	A	P	P	P
6	2375020	MADDA SUJATHA	Botany Honours	P	P	P	P	P	P	P	P	P	A	P	P
7	2375022	MUKE SHARMILA	Botany Honours	P	P	P	P	P	A	P	A	P	P	P	P
8	2375023	NEMALA ANJALI	Botany Honours	A	P	A	P	P	P	P	P	P	P	P	P
9	2375024	PILLI NEHA	Botany Honours	P	P	A	P	P	P	A	P	P	P	P	A
10	2375025	SAMMIDI JAYANTHI	Botany Honours	P	P	P	P	P	P	P	P	P	A	P	P
11	2376002	DARIPALLI SUVARNA	Zoology Honours	A	A	A	Long Absent								
12	2376008	GUTTULA DEVI SRI	Zoology Honours	P	A	P	P	P	A	P	P	P	P	P	P
13	2376013	MUMMASANI MANASA	Zoology Honours	A	P	P	P	P	P	A	P	P	P	P	P
14	2376024	GODA BINDU MADHAVI	Zoology Honours	P	P	P	P	P	P	P	P	P	A	P	P
15	2376025	GUDALA RAMYA	Zoology Honours	P	P	P	P	A	P	P	A	P	P	P	P
16	2376030	MADHURA BHARGAVI	Zoology Honours	P	P	P	P	A	P	P	P	P	P	P	P
17	2376033	MASABATTULA MUKUNDA JASHMINE	Zoology Honours	A	P	A	P	P	P	P	P	P	P	P	P
18	2376035	PATNALA VYSHNAVI	Zoology Honours	P	P	P	P	P	P	P	A	P	A	P	P

D. Jayasree
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KAKINADA

**DEPARTMENT OF MICROBIOLOGY
CERTIFICATE COURSE (2023-24)**

Introductory to Clinical Laboratory Techniques

Attendance

S.No	Regd.No	Name of the Student	Programme	Attendance												
				6/24	7/24	8/24	9/24	10/24	11/24	12/24	1/25	2/25	3/25	4/25	5/25	
1	2375002	D HIMA MALA	Botany Honours	P	P	P	a	P	P	P	P	P	P	P	P	a
2	2375008	GARIKINA SUPRIYA	Botany Honours	P	a	P	P	P	P	a	P	P	P	a	P	
3	2375013	CHIKKAM CHAKRAVENI	Botany Honours	P	P	a	P	P	P	P	P	P	P	P		
4	2375014	DHAKSHARAPU DIVYAKALYANI	Botany Honours	P	P	P	P	P	P	P	P	a	P	P	P	
5	2375015	GADUTHURI SIVA LAKSHMI	Botany Honours	P	P	P	P	a	P	P	P	P	P	P		
6	2375020	MADDA SUJATHA	Botany Honours	a	a	P	P	P	P	a	P	P	P	P		
7	2375022	MUKE SHARMILA	Botany Honours	P	P	P	P	a	a	P	P	P	P	a	P	
8	2375023	NEMALA ANJALI	Botany Honours	P	P	P	P	a	P	P	P	P	P	P	P	
9	2375024	PILLI NEHA	Botany Honours	a	P	P	P	a	P	P	P	P	P	P		
10	2375025	SAMMIDI JAYANTHI	Botany Honours	P	P	a	P	P	P	P	P	P	P	P		
11	2376002	DARIPALLI SUVARNA	Zoology Honours							LA						
12	2376008	GUTTULA DEVI SRI	Zoology Honours	P	P	P	P	P	P	P	P	P	P	P	a	
13	2376013	MUMMASANI MANASA	Zoology Honours	P	P	P	P	P	P	P	P	P	P	P		
14	2376024	GODA BINDU MADHAVI	Zoology Honours	a	P	P	P	P	P	P	P	P	P	P		
15	2376025	GUDALA RAMYA	Zoology Honours	P	P	P	P	P	P	P	P	P	P	P		
16	2376030	MADHURA BHARGAVI	Zoology Honours	P	P	a	P	P	P	a	P	P	P	a		
17	2376033	MASABATTULA MUKUNDA JASHMINE	Zoology Honours	P	P	P	P	P	P	P	a	P	a	P		
18	2376035	PATNALA VYSHNAVI	Zoology Honours	a	P	a	P	P	P	a	P	P	P	P		

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MICROBIOLOGY DEPARTMENT
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KAKINADA

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AUTONOMOUS
KAKINADA

Introductory to Clinical Laboratory Techniques 2023-24 Attendance

S.No	21/3/24	22/3/24	23/3/24	24/3/24	25/3/24	26/3/24	27/3/24	28/3/24	29/3/24	1/4/24	2/4/24	3/4/24	4/4/24	5/4/24	6/4/24	7/4/24
1.	P	P	P	P	P	P	P	P	P	P	a	P	P	P	P	P
2.	P	P	P	P	P	P	P	P	P	P	P	a	P	P	P	P
3.	P	P	P	a	P	P	P	P	P	P	a	P	P	P	P	a
4.	P	P	P	P	P	P	P	P	P	P	P	P	a	P	P	P
5.	P	P	P	P	P	a	P	P	P	P	P	a	P	P	P	P
6.	P	P	a	a	P	P	P	P	P	P	P	P	P	P	P	P
7.	P	P	a	P	a	P	P	a	P	P	P	P	P	a	P	P
8.	a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
9.	P	P	a	P	P	P	P	P	a	P	a	P	P	P	P	P
10.	P	P	a	P	a	P	P	P	P	P	P	a	P	P	P	P
11.	LA	LA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.	P	P	P	P	P	a	a	P	P	P	P	P	P	P	P	P
13.	P	P	P	a	P	P	P	P	P	a	P	P	P	P	P	P
14.	a	P	P	P	P	a	P	P	P	P	P	P	P	P	P	P
15.	a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	a
16.	P	P	a	P	a	P	P	a	P	P	P	P	P	P	P	P
17.	P	P	P	P	P	a	P	P	P	a	P	P	P	P	P	P
18.	P	P	P	a	P	P	P	P	P	P	P	P	P	P	P	P

Principals Signature

D. Narayana

LECTOR IN CHARGE
MICROBIOLOGY DEPARTMENT
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V. S. D.

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Introductory to Clinical Laboratory Techniques

Model Question Paper

Time: 2 Hrs

Max Marks: 40

Section-A

Answer any **Ten** of the following questions

10x2=20 M

1. Anton von Leeuwenhoek
2. Biogenesis Vs Abiogenesis
3. Scope of Microbiology
4. Prokaryote
5. Algae
6. Protozoa
7. Culture Media
8. Phenotype
9. Disinfection
10. UV sterilization
11. Vaccine
12. Agar agar

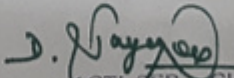
Section-B

Answer any Four of the following questions

4X5=20 M

Draw neat labeled diagrams wherever necessary

1. Write about History, Scope & Importance of Microbiology?
2. Give outlines of general characteristics and classification of viruses?
3. Write in detail Principles of light Microscopy?
4. Explain methods of Antibiotic Susceptibility Testing?
5. Give detailed account on working principle of PCR technique?
6. Define Vaccine? Write different types of vaccines?


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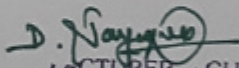
Microbiology Certificate Course (2023-24)

Introductory to Clinical Laboratory Techniques

Result & Marks obtained

Exam Date : 21/7/24

S.No	Regd.No	Name of the Student	Programme	Marks
1	2375002	D HIMA MALA	Botany Honours	22
2	2375008	GARIKINA SUPRIYA	Botany Honours	25
3	2375013	CHIKKAM CHAKRAVENI	Botany Honours	23
4	2375014	DHAKSHARAPU DIVYAKALYANI	Botany Honours	23
5	2375015	GADUTHURI SIVA LAKSHMI	Botany Honours	20
6	2375020	MADDA SUJATHA	Botany Honours	20
7	2375022	MUKE SHARMILA	Botany Honours	25
8	2375023	NEMALA ANJALI	Botany Honours	25
9	2375024	PILLI NEHA	Botany Honours	25
10	2375025	SAMMIDI JAYANTHI	Botany Honours	26
11	2376002	DARIPALLI SUVARNA	Zoology Honours	Long Absent
12	2376008	GUTTULA DEVI SRI	Zoology Honours	37
13	2376013	MUMMASANI MANASA	Zoology Honours	28
14	2376024	GODA BINDU MADHAVI	Zoology Honours	24
15	2376025	GUDALA RAMYA	Zoology Honours	35
16	2376030	MADHURA BHARGAVI	Zoology Honours	36
17	2376033	MASABATTULA MUKUNDA JASHMINE	Zoology Honours	40
18	2376035	PATNALA VYSHNAVI	Zoology Honours	30


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Department of Microbiology

This is to certify that Ms-----
-----of class/group has successfully completed Certificate
Course in "*Introductory to Clinical Laboratory Techniques*" Conducted by
Department of Microbiology with -----grade for the academic
year 2023 - 24 from February 2024 to April 2024.



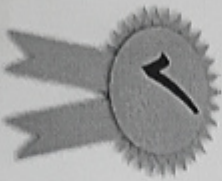
Convenor

LECTURER IN CHARGE
MICROBIOLOGY DEPARTMENT
S D Govt. Degree College for Women
KAKINADA



Principal

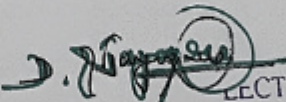
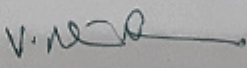
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DEPARTMENT OF MICROBIOLOGY

Brief report on Certificate Course

Academic Year 2023-24

Name of the Certificate Course	Certificate Course on "Introductory to Clinical Laboratory Techniques" (CC23ICLT/MB)
Academic Year of Course	2023-24
Department Conducting the Course	Department Of Microbiology
Duration Of the Course	40 Hrs
Number of Students Completed the Course	18 Students
Brief Report	Certificate Course on "Introductory to Clinical Laboratory Techniques" (CC23ICLT/MB) was conducted by the department of Microbiology for 40hrs in which total 18 students were enrolled. The course was held from February 2024 to April 2024. All the students appeared for the examination conducted at the end of the course and completed the course. They have been given grades. The certificates are also given to them.
Number of Beneficiaries	Students : 18
Signature of the Certificate Course Coordinator	 LECTURER IN CHARGE MICROBIOLOGY DEPARTMENT
Signature & Stamp of the Principal	 PRINCIPAL A.S.D.GOV.T.DEGREE COLLEGE AUTONOMOUS KAKINADA