

Certificate course on

**CERTIFICATE COURSE IN BASICS OF MEDICAL MICROBIOLOGY**

**(3-1-2022 to 3-2-2022)**



Organized by

Department of Biotechnology

Kakatiya Government College

Hanamkonda-506001

## **Certificate programs offered during 2021-22**

### **KAKATIYA GOVERNMENT COLLEGE, HANAMKONDA.**

#### **CERTIFICATE COURSE IN BASICS OF MEDICAL MICROBIOLOGY**

##### **SYALLABUS**

**30 Hours**

##### **Unit:I**

Microscopy - Handling and general maintenance. Care and operation of microscopes viz., Dark ground, Phase Contrast, Fluorescent microscope and Electron microscope. Sterilization and disinfection – Handling of main types of filters, preparation procedures for autoclaving, hot air oven. Operation and maintenance of autoclave, hot air oven, distillation plant, filters like Seitz and membrane and sterility tests. Washing and sterilization of glassware

##### **Unit:II**

Staining procedure – Preparation of stains viz, Grams, Alberts, Capsules, Spores, Ziehl Neelsens etc. and performing of staining. Media preparation and Quality control. Aseptic practice in Lab and Safety precautions. Care and maintenance of common laboratory instruments. Collection and transportation of specimens for Microbiological investigations such as Blood, Urine, Throat swab, Rectal swab, Stool, Pus, OT specimens. Processing of samples, inoculation and interpretation.

##### **Unit:III**

Preservation of bacteria. Preparation and pouring of media – Nutrient agar, Blood agar, Mac Conkey agar, Sugars, Kligler iron agar, Robertson's cooked meat. Collection and preservation of serum. Preparation of antigens. Preparation of adjuvants and rising of antisera in animals. Tube agglutination tests: Widal test, Weil Felix test. Slide agglutination: RA, CRP, ASO. Precipitation tests: VDRL, RPR.

##### **Unit:IV**

Performance of common serological tests. o Precipitation tests (including immunodiffusion tests) o Agglutination tests o Immuno electrophoresis o Immunodiffusion and CIEP o Radial immune-diffusion o ELISA o CD4, CD8 counts Immunofluorescence

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**Unit:IV**

Performance of common serological tests. o Precipitation tests (including immunodiffusion tests) o Agglutination tests o Immuno electrophoresis o Immunodiffusion and CIEP o Radial immune-diffusion o ELISA o CD4, CD8 counts Immunoflourescence

  
**IN CHARGE,**  
Department of Bio-Technology,  
KAKATIYA GOVT. COLLEGE,  
HANAMKONDA-508 031 A.P.

**Kakatiya Government College, Hanumakonda.**

**Department of Biotechnology**

**Resolution**

**Date: 25-10-2021**

As per the instructions given by the Principal, a meeting was held in the department of Biotechnology and resolved to conduct the following activities for the academic year 2021-22

1. Planning to conduct one day seminar in this academic year.
2. It is resolved to conduct two certificate courses in this academic year

First certificate course entitled " Biophysical Techniques " in the month of November 2021.

Second certificate course entitled " Basics of Medical Microbiology " in the month of January 2022.

3. To conduct various Programmes /Activities under MOUs

  
**INCHARGE.**  
Department of Bio-Technology  
KAKATIYA GOVT. COLLEGE,  
HANUMAKONDA-508 001 A.P.



# Basics Of Medical Microbiology


[3-1-22 to 3-2-22]

## Attendance Register of

Year Class

Certificate Course

Sl. No.	NAME OF THE STUDENT	Jan - 22													Feb - 24												
		Month Date													Month Date												
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
00470004	Jampala Prashanth	x	a	x	x	x	a	v	x	x	x	x	x	x	x	v	a	x	x	x	x	x	x	v	a	x	x
3003	Jangili Anjan Yadav	x	x	x	x	x	x	x	a	x	x	x	x	x	x	v	a	x	x	x	x	x	x	x	x	x	x
3006	Jutha Deep	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x
3007	Kolaru Shyamani	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
3012	Marika Abhinandan Gowd	x	a	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x
3013	Muppudi Bhavani	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
3014	Nidigonda Sowmya	x	a	x	x	x	x	a	v	a	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x
3018	Mathuraj Shivakumar	x	a	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x
3111	Thota Mahesh	x	x	a	x	x	a	x	x	x	x	x	a	a	x	x	a	x	x	a	x	a	x	x	x	x	x
3112	Vanavasi Venkata Varma	x	x	x	x	x	x	a	x	x	x	x	x	x	x	a	x	x	x	x	x	v	a	y	x	x	x
004715302	Gone Shashank	x	x	a	x	x	x	x	x	a	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	a
3053	Jeedi David Raj	a	x	a	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x
3054	Manthala Vinay Kumar	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x
3064	Valasa Divyender	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	a
3063	Kadasi Srikanth	x	x	x	a	x	x	x	x	x	x	x	x	x	a	x	x	x	x	a	x	x	x	x	x	x	x
3064	Teppa Karthik	x	x	x	a	x	x	a	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x
3102	Baikali Haranata	x	x	a	x	x	a	x	x	x	x	x	a	x	x	a	x	a	x	x	x	x	x	x	x	x	a
3103	Dohikala Vasu	a	x	x	x	x	x	a	x	a	x	x	x	x	x	x	a	x	a	x	a	x	x	x	x	x	y
3108	Potharajal Sivani	x	a	x	x	x	x	a	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	a
3109	Sankaraju Suresh Prasad	x	a	x	a	x	x	x	x	x	x	x	a	x	a	x	x	x	x	x	x	x	x	x	x	x	x
00472003	Dalnamally Prasad	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
3106	Jarugam Ruchita	x	x	a	x	a	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x
3107	Katsirajani Naraya	x	x	a	x	x	x	x	x	a	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	a
3108	Poxandla Sateja	x	x	a	x	a	x	x	x	a	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x
3919	Madhe Vijay	x	x	a	x	x	x	a	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x
3104	Gaddam Shiva Kumar	x	a	x	x	x	x	a	x	a	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x
3911	Thirupathi Sridevi	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x
3850	Melipally Sri Chand	x	x	x	a	x	x	x	x	a	x	x	a	x	x	x	a	x	x	x	x	x	x	x	x	x	x
3911	Pujari Devanashini	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
3853	Shankapally Devanaji	x	x	x	a	x	x	x	x	a	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	a

  
 Head of Institute  
 RAJAKOTTA-501001

**CERTIFICATE:**

