Certificate course on

CERTIFICATE COURSE IN BIOPHYSICAL TECHNIQUES

(15-11-2021 to 15-12-2021)

(OFFLINE MODE)

Organized by

Department of Biotechnology

Kakatiya Government College

Hanamkonda-506001

Certificate programs offered during 2021-22

KAKATIYA GOVERNMENT COLLEGE, HANAMKONDA.

CERTIFICATE COURSE IN BIOPHYSICAL TECHNIQUES

SYALLABUS   **30 Hours**

Unit:I

Diffusion : Boyle's law, Charles' law, Gas laws (Ideal gas and real gas equation), Dalton's law of partial pressure. Diffusion in fluids,Fick's laws(Statement and explanation), Facilitated diffusion e.g. gas exchanges in lungs.

Unit:II

Osmosis : Definition,contrast with diffusion,Tonicity and isotonic solutions.Effect of tonicity on R.B.C. Cell nutrition.

Unit:III

Centrifugation

Theory of ultracentrifugation, Relative centrifugal force (RCF),Sedimentation rate sedimentation coefficient, Isopycnic (equilibrium) sedimentation, (discussion with example e.g. Meselson and Stahl Experiment)

Unit:IV

Spectrophotometry and other methods :Absorption of light, Transmittance, Absorbance(Optical density), Lambert-beer law, Method of determining Absorption spectrum of chlorophyll by spectrophotometer. A brief idea on Dialysis,Chromatography(Gel filtration,Ion exchange), Electrophoresis.

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INCHARGE,
Department of Bio-Technology,
KAKATIYA GOVT. COLLEGE,
HANAMKONDA-506 001 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.
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Attendance Register of Biophysical Techniques [15-11-21 to 15-12-21] — Year, Class — Certificate Course

Regd. No	NAME OF THE STUDENT	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
006-20-3101	Dharavath Naresh	x	x	x	x	x	x	x	a	x	x	x	a		x	x	x	x	x	x	x	x	x	x	x	x	x
06-20-3102	Gandamala Praveena	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	a	a	x	a	x	x	x	a	a	x	
3102	Banoth Mahesh	x	a	x	a	x	x	a	x	x	x	x	x	a	x	x	x	x	x	x	a	x	a	x	x	x	
3111	Thota Mahesh	x	x	x	x	x	a	x	x	x	a	x	a	x	x	x	a	x	x	x	x	x	x	x	x	x	
3013	Muppidi Bhavani	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	
3105	Gadla Ramesh	x	x	x	x	a	x	x	x	x	x	x	x	a	x	a	x	x	a	x	x	x	x	x	x	x	
3016	Thalloni Srinivas	x	a	x	x	x	x	a	x	a	x	a	x	x	x	x	x	a	x	x	x	x	x	a	x	x	
3005	Kontula Sainik	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	
3103	Bhukya Krishi Kethennaik	x	a	x	x	x	a	x	a	x	a	x	a	a	x	x	x	a	x	x	x	a	x	x	x	x	
3106	Gowthapu Lavanya	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	a	x	x	x	x	x	a	x	a	
06-21-3051	Agaboina Selfish	a	x	x	a	x	x	x	a	x	a	x	x	x	x	a	a	x	x	x	x	x	x	x	x	x	
3106	Kaalivendi Tejaswi	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	a	x	x	x	a	
3102	Kusetty Akhila	x	x	x	x	a	x	a	x	a	x	a	x	a	x	x	x	x	x	x	x	x	x	x	a	x	
3110	Suvarna Deepak	x	a	x	x	x	a	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
3109	Pothangal Sravani	x	x	x	x	x	a	x	x	x	a	x	x	x	x	x	x	x	x	x	x	a	x	x	a	x	
3114	Kanakam Raghu	a	x	x	a	x	a	x	x	x	x	x	x	x	a	x	x	x	x	x	a	x	x	x	x	x	
3101	Aitha Ajay	x	x	x	x	x	x	x	a	x	a	x	x	x	x	x	a	a	x	x	x	x	x	x	x	a	
3104	Teppa Karthik	a	x	a	a	x	a	x	x	a	x	x	x	x	a	x	x	x	x	x	x	x	a	x	x	
3061	Yalsua Devender	x	x	x	x	x	x	x	a	x	x	x	x	x	x	a	x	x	x	x	a	x	x	x	x	
3058	Nagavelli Deekshi	x	a	x	a	a	x	x	x	a	x	x	x	x	x	x	a	x	a	x	x	x	x	x	x	
06-21-3101	Bhukya Thasun	x	a	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	a	
3102	Chaganti Sri Chandra	x	x	x	a	x	x	a	x	a	x	a	x	a	x	x	a	a	x	x	x	x	x	x	x	x	
3109	Putta Pavan Krishna	a	x	x	a	x	x	x	x	x	x	x	x	x	x	a	x	x	a	x	a	x	a	x	x	
3110	Suthrapu Kalyani	x	a	x	x	x	x	x	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	
3908	M. Bhumika	x	x	a	a	x	x	x	a	x	x	a	x	a	x	x	x	a	x	x	x	x	a	x	x	a	x
3910	Paka Nethaji	x	a	a	x	x	x	x	x	x	x	a	x	x	x	x	x	x	x	a	x	x	x	a	
3913	thirtullai Raja Narsimha	x	x	a	x	x	x	x	x	a	x	x	x	x	x	x	x	x	a	x	a	x	x	x	x	
3114	Tirupathi Sridevi	x	x	x	a	x	x	a	x	x	x	x	a	a	x	x	a	a	x	x	a	x	a	x	a	
3801	Mothe Vijay	x	a	x	x	x	x	x	a	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
06-22-3101	Kommu Sanjay	x	x	x	a	x	x	x	x	x	x	x	x	x	a	x	x	x	a	x	x	a	x	x	

Certificate:

DEPARTMENT OF BIOTECHNOLOGY

KAKATIYA GOVERNMENT COLLEGE HANUMAKONDA

Certificate of Completion

Awarded to

THOTA MAHESH

For Completion Of

Certificate Course in Biophysical techniques

Incharge of the Department

Principal