LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
Accredited by NAAC & NBA (Under Tier – 1) , ISO 9001:2015 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
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FRESHMAN ENGINEERING DEPARTMENT

One week faculty development programme on

MATHEMATICS AND ITS APPLICATIONS

03rd August to 07th August 2020, Time 10.00 AM to 11.00AM

One week online faculty development programme was conducted through Microsoft Teams platform. The registration for online FDP was opened 29/07/2020 at 5.00 PM and closed on 02/08/2020 at 5 PM. There was a huge response from the faculty and research scholars and a total 300 registrations were received from across the country and overseas. About 60 faculty and research scholars were registered for FDP from West Bengal, Gujarat, Odisha, Karnataka, Telangana. Based on the first come first serve, a total of 190 were selected given an opportunity to attend FDP.

Registration Link: **https://www.tinyurl.com/LBRCE-FED-FDP**
Registration fee: Free
Registration Deadline: 02/08/2020

Name of Coordinators : Dr. K. Jhansi Rani and Y.P.C.S. Anil Kumar

Target Audience : Faculty and Research Scholars in Mathematics

Total number of Participants : 190

Objective of the Event : To expose the Faculty and Research Scholars of Mathematics to various Research areas and their applications.

Outcome of the Event: By attending the F.D.P., the Faculty are made aware of different areas of Research and their applications and interest was generated for those who are keen to start the research.

Details of resource persons

	
Dr. Lakshmi Narayana Kunderu, Vidya Jyothi Institute of Engineering and Technology,Hyderabad. Topic: Concentration of Drug in Blood Plasma	**Dr. A. V. Papa Rao, University College of Engineering,Vizainagaram,JNTUK.** Topic: Some Mathematical Models in Ecology
	
Dr. Bala Siddula Malga, GITAM University, Hyderabad. Topic: Applications of finite element method in mathematics	**Dr. Ch. V. Ramana Murthy, KL University, Guntur.** Topic: Visco Elastic fluids

	
Dr. B. Satyanarana , ANU-Guntur Topic: BCK Algebra and Related algebraic Structures	

REPORT

The inauguration function of the FDP started on 03-08-2020 at 10.00 AM, with welcome address by the convenor, Dr. A. Rami Reddy, Professor & HOD of Freshmen Engineering Department, followed by address from principal, Dr. K. Appa Rao and the key note address by the distinguished guest and resource person Dr. Lakshmi Narayana kunderu, professor, Department of Mathematics, Jyothi Institute of Engineering and Technology, Hyderabad. The inaugural function concluded at 10.20 AM. The Day – 1 first person of FDP started with Dr. Lakshmi Narayana Kunderu on Concentration of blood plasma. The one week FDP has total five sessions and the details are given below

Date	Name of the person	Topic delivered
03-08-2020	Dr. Lakshmi Narayana Kunderu Vidya Jyothi Institute of Engineering and Technology, Hyderabad	Concentration of blood plasma
04-08-2020	Dr. A. V. Papa Rao University college of Engineering, Vizainagaram, JNTUK.	Some Mathematical model in Ecology.
05-08-2020	Dr. Bala Siddula Malga GITAM university Hyderabad.	Applications of finite element method in Mathematics
06-08-2020	Dr . Ch. V. Ramana Murthy KL University, Guntur.	Visco Elastic Fluids.
07-08-2020	Dr. B. Satyanarayana ANU, Guntur	BCK algebra and related algebraic structures

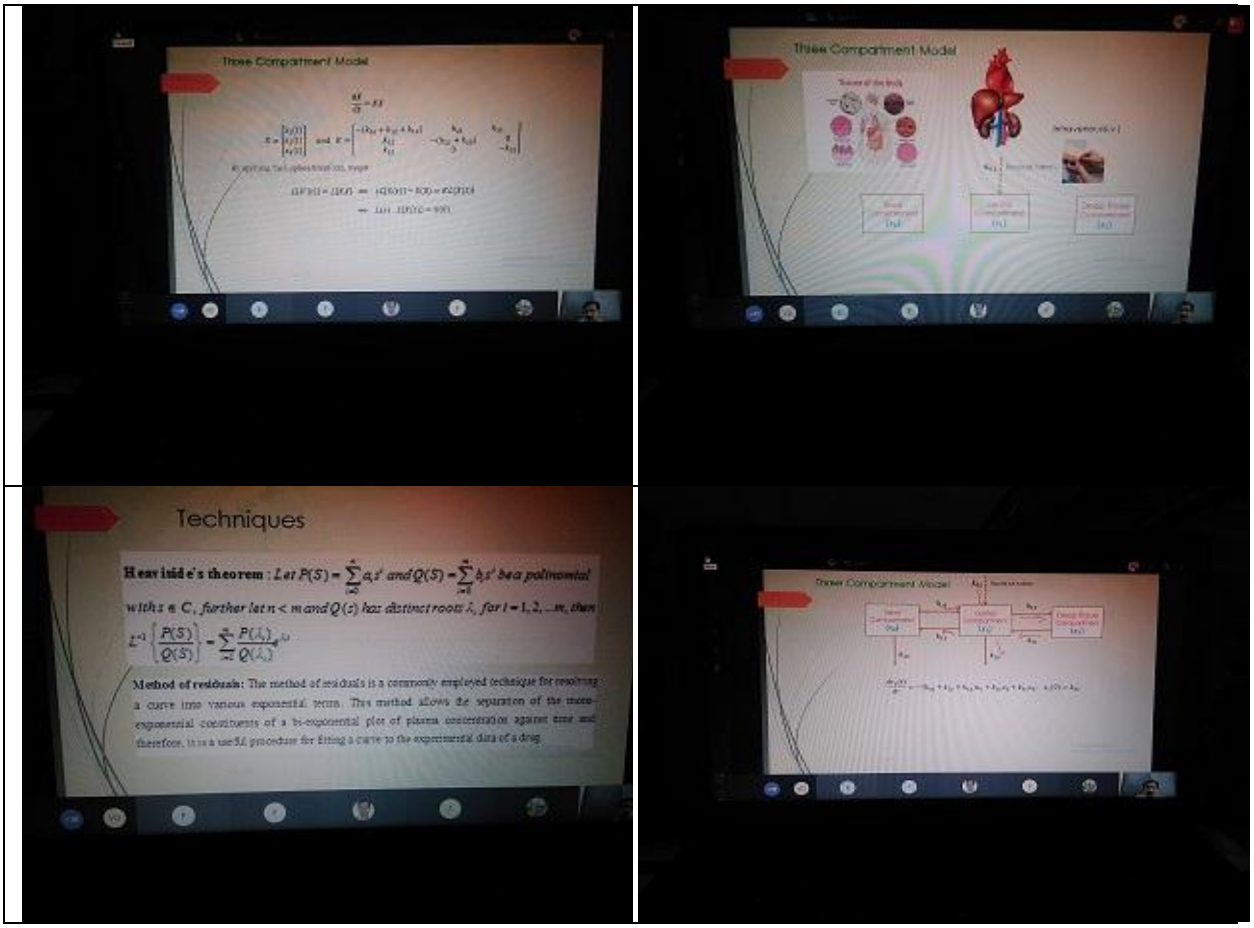
Outline of the topics covered in FDP:

- The types of pharmacokinetics models and application of mathematical modelling in pharmacokinetics is explained. The methodology is explained with moxalactum drug using analytic and numerical examples.
- The tour begins with ecology introduction, classification. The importance of mathematical modelling is explained with ecological models of single and multiple

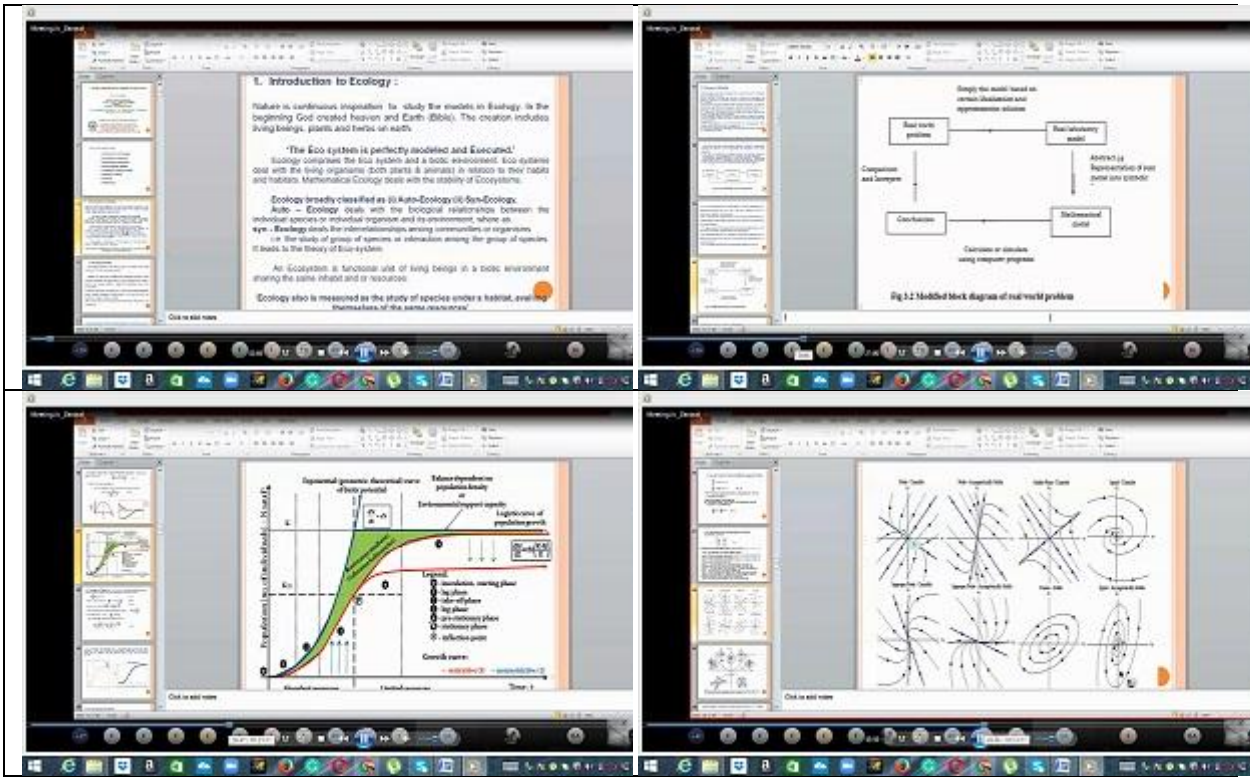
species. The need of studying stability analysis is discussed. The methodology is explained with suitable examples.

- Solving Ordinary differential equations using Galarkin finite element method has been discussed. Explain the methodology of formulating problems for various engineering applications using finite element methods.
- The types of fluids were explained and Starting from basics of fluid mechanics, the second order fluid and its flow has been discussed in detail. Special focus was given to the incompressible fluid flow of second order by creating forced oscillations on the porous boundary.
- Applications of BCK Algebra and related algebraic Structures.

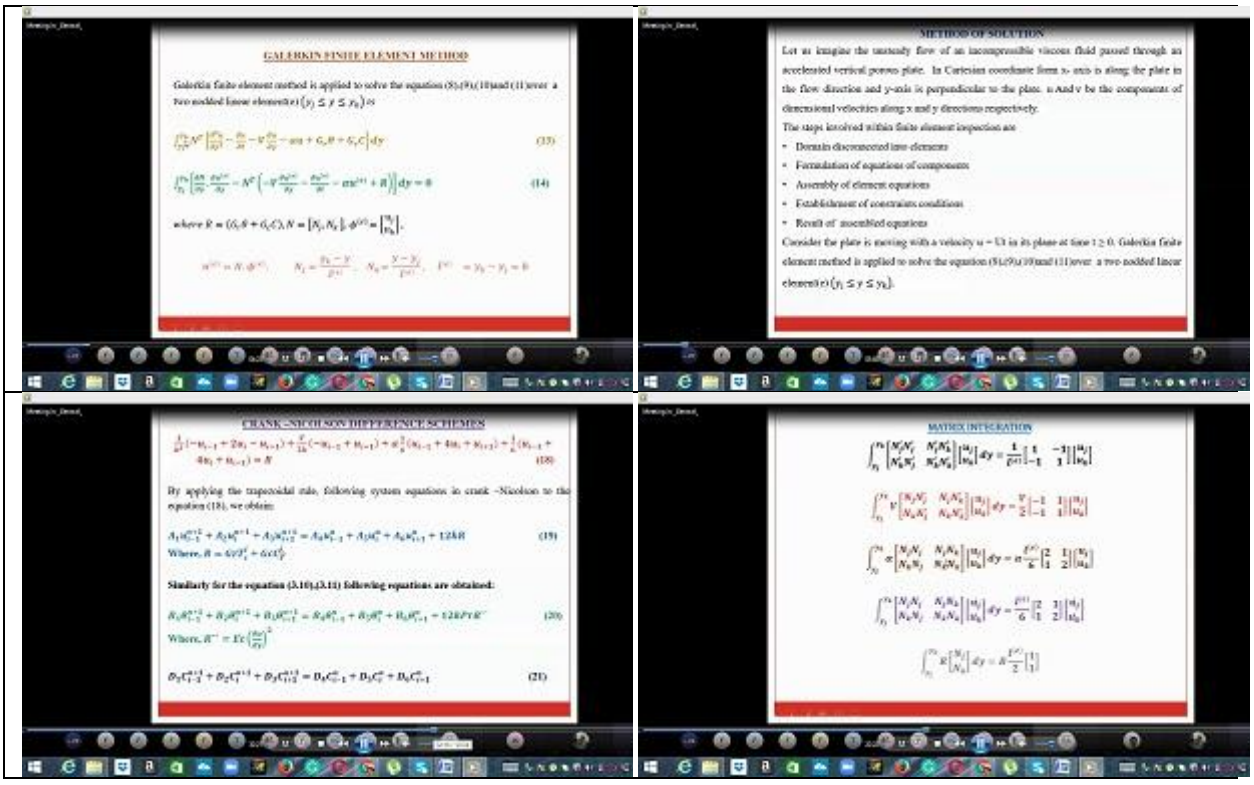
Day – 1: 03-08-2020



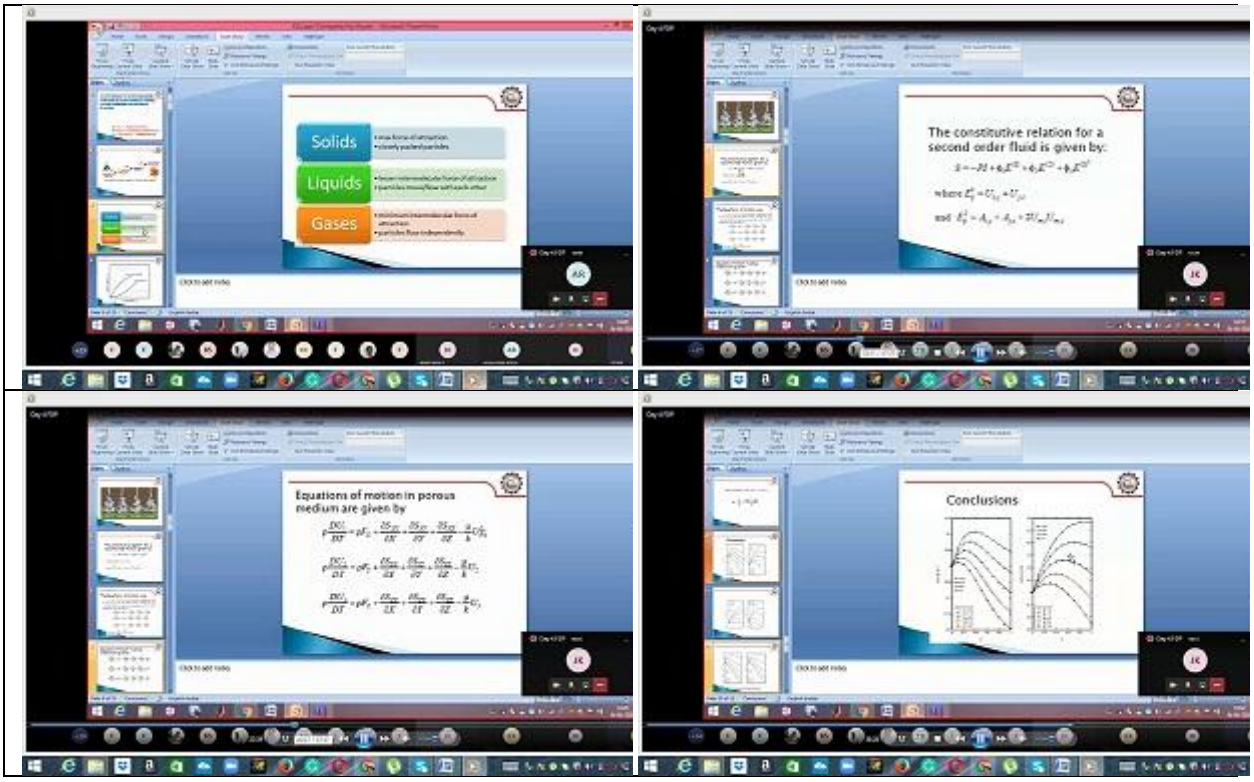
Day – 2: 04-08-2020



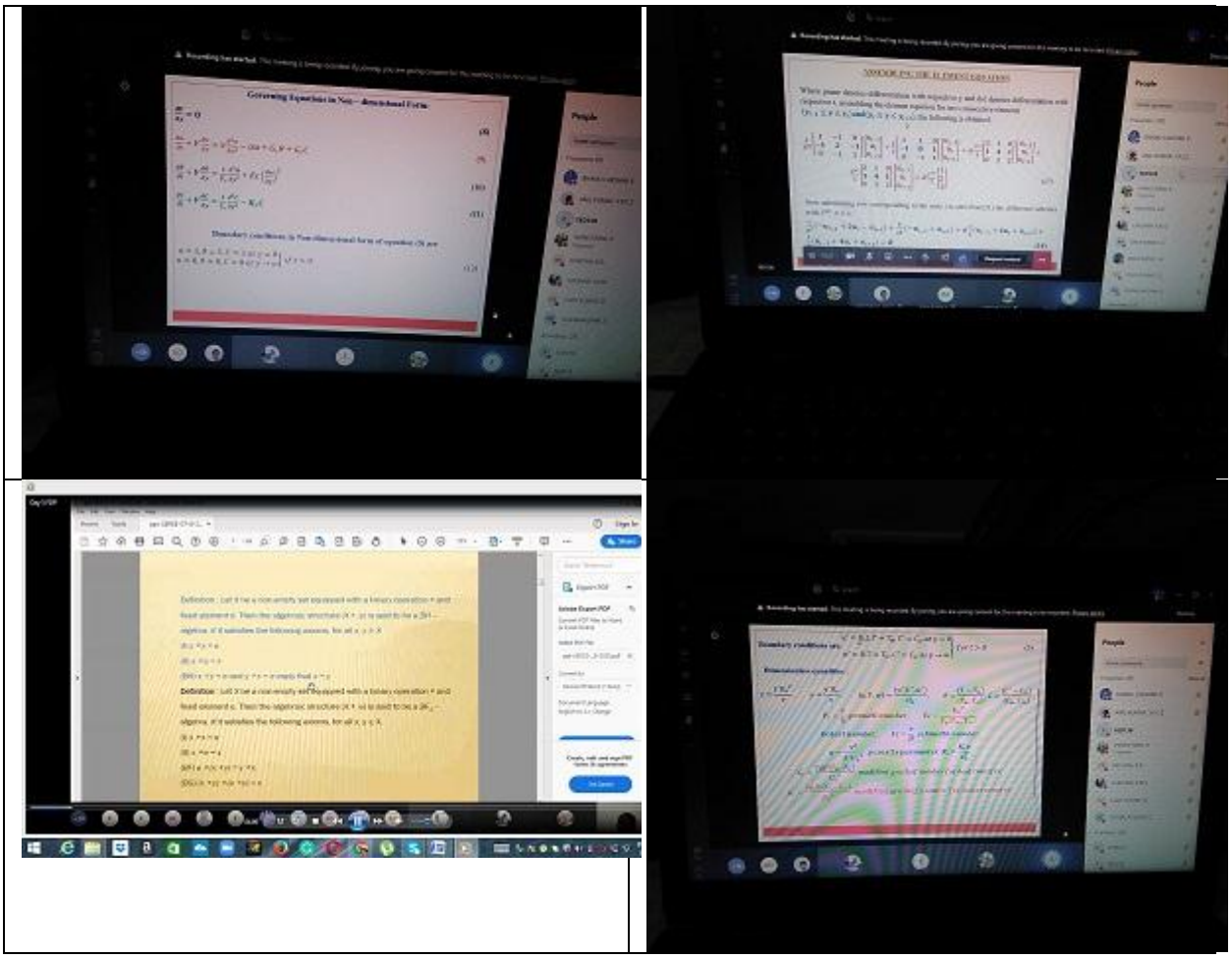
Day – 3: 05-08-2020



Day – 4: 06-08-2020



Day – 5:07-08-2020



Feedback / Suggestions :

- Insufficient time
- More number of such programs need to be conducted