



Atria Institute of Technology

Bengaluru – 560024

Approved by AICTE | Affiliated to VTU Belagavi | Accredited by NAAC

Department of Computer Science and Engineering

Date: 30-07-2019

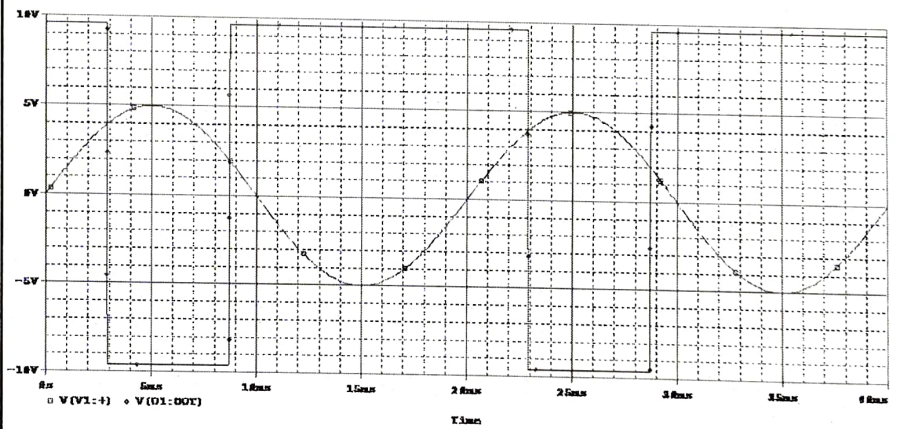
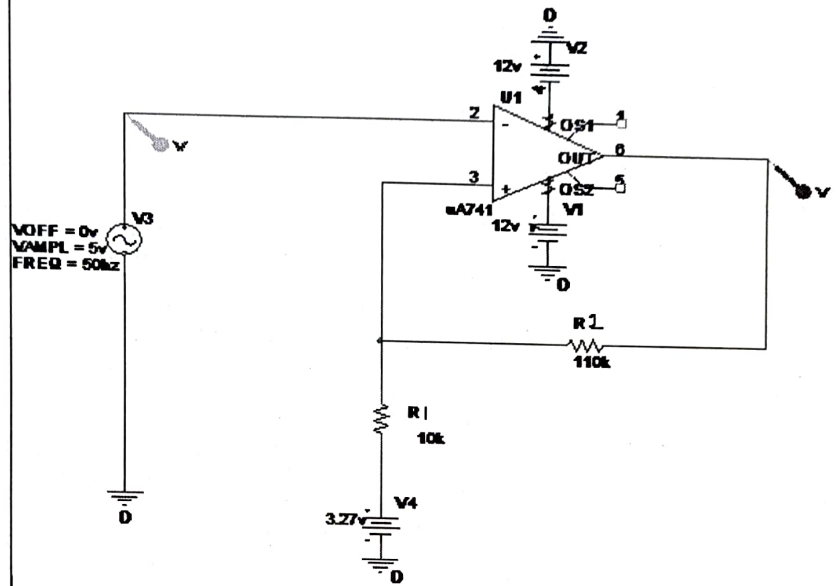
DETAILS OF THE INNOVATIVE TEACHING METHODS USED BY THE FACULTY

Academic Year	2019-20, ODD SEM
Subject Name and Subject Code	Analog & Digital Electronics, 18CS33
Faculty Name	Hemalatha K N/Sumitha B
Semester	III
Name of the Innovative Teaching Methods used	Hands-On Session On “ PSPICE Software To Simulate A Circuit”
Short Description of the Innovative Teaching Activity.	<p>In order to ensure a successful circuit design and mitigate costly and potentially dangerous design flaws, careful planning and evaluation must occur at every stage of the circuit design process. Circuit simulation provides a cost-effective and efficient method for identifying faults before moving to the more expensive and time-consuming prototyping stage. Including simulation in the design process reduces design errors and speeds the design cycle by allowing you to predict and better understand circuit behavior. The main purpose of simulation is to predict and understand the behavior of electronic circuits. PSpice is a program that simulates electronic circuits on your PC.</p> <p>Intended Students: 2nd year students</p> <p>Limitations of simulation: While a prototype helps you to verify and validate your design in the real world, simulation helps you catch design errors before spending money and time on prototyping.</p>

	<p>Orcad 9.2 Lite Edition Installation:</p> <ol style="list-style-type: none"> 1. Insert Cadence CD into CD-ROM drive 2. Select Products to install 3. Capture – Schematic entry application – it must be installed 4. Capture CIS – Should be grayed out. 5. PSpice – For conducting mixed-signal analog and digital simulations 6. Layout– For creating PC Board layouts from schematics <p>Then follow the instructions as it appears on the monitor and complete the installation</p> <p>The steps to simulation:</p> <ol style="list-style-type: none"> 1. Create a simulation project 2. Draw schematic to simulate 3. Establish a simulation profile 4. Set up simulation type 5. Simulate circuit 6. Analyze results in Probe
<p>Number of students got benefited.</p>	<p>40</p>

<p>Number of students involved in the activity.</p>	<p>54</p>
<p>Venue of the Activity</p>	<p>ADE Lab</p>
<p>Date of the Event</p>	<p>29/07/2019 @10 AM</p>
<p>Whether the work can be Reproduced and Reviewed.</p>	<p>YES</p>
<p>Details are available in the college website.</p>	<p>YES</p>


Photograph for the event





Contents of the Event	Students simulated the circuits using Pspice software and explored the practical working of theoretical circuits																																																																																																																																																																																																																																																																																																																																
Impact Analysis after using this Innovative Teaching Methods used.	Student's interest has been increased in designing the circuit in a different practical way																																																																																																																																																																																																																																																																																																																																
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Any comments or Suggestions from the Programme Co-ordinator	The content should be readily made in college website																																																																																																																																																																																																																																																																																																																																

Signature of the Faculty


[Hemalatha K.N.]

Signature of the HOD


30/07/19

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