# Innovative Pedagogical Approaches adopted by the Faculty of the MCA Dept (2021-22 Odd Sem)

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<tr><td></td><td colspan="5"><strong>NEW HORIZON COLLEGE OF ENGINEERING</strong><br><br><strong><u>Pedagogical Methods /Innovative Teaching Pedagogy Report</u></strong></td></tr>
<tr><td>Department</td><td>MCA</td><td>Academic Year</td><td colspan="3">2021-22(ODD)</td></tr>
<tr><td>Course Code</td><td>20MCA13</td><td>Course. Name</td><td>Operating System with Unix Programming</td><td colspan="2">Semester   1</td></tr>
<tr><td>Total No of Students</td><td>120</td><td>Name of the Faculty</td><td>Dr. Arpana Prasad</td><td>Date</td><td>05-05-2022</td></tr>
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Topic Name: Activity on Ethical Hacking and Prevention.

| Brief report about the incorporated teaching Pedagogy | Activity Based Learning Approach:<br><br>A. The objective of the class was to introduce the text editing utility 'awk' in UNIX.<br><br>B. A video from the link  AWK command in Unix/Linux with examples - YouTube  was played.<br><br>C. Some students were already aware of the 'awk' command at an introductory level. Since they had learnt the 'awk' command during their online classes, they were not very confident on its distinguishing role as a filter.<br><br>D. A comparison was drawn between 'awk' command and other filters. By the end of learning session, the students were able to appreciate 'awk' as an editing utility that allows multi-character field delimiters. |
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<u>Snapshot</u>

| Course Code | 20MCA11 | Course Name | Programming with Java | Semester : I | |
|---|---|---|---|---|---|
| Total No of Students | 120 | Name of the Faculty | Ms. Binju Saju | Date | 05-05-2022 |

Topic Name: Layout Manager

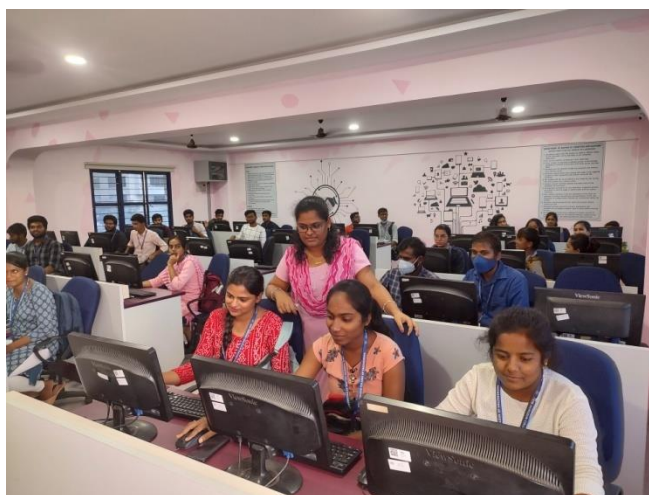| Brief report about the incorporated teaching Pedagogy | **Collaborative Learning Approach**<br><br>The concept of various layouts was introduced to the students with the help of Power point presentation.<br><br>Collaborative Learning approach is introduced in the class to make the students know and understand the concept in a better way. Students were asked to design a program with various AWT controls work out in the system in group of 3 and see what the different layouts available. The students were asked to identify the different alignments in various layouts.<br><br>Students by applying the knowledge received in the previous classes regarding AWT controls came out with their own programs and experienced how the various layouts are displayed in Java in an efficient way. |
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Snapshot

| Course Code | 20MCA14 | Course. Name | Computer Networks | Semester: I | |
|---|---|---|---|---|---|
| Total No of Students | 120 | Name of the Faculty | Jincy C Mathew | Date | 9-05-2022 |

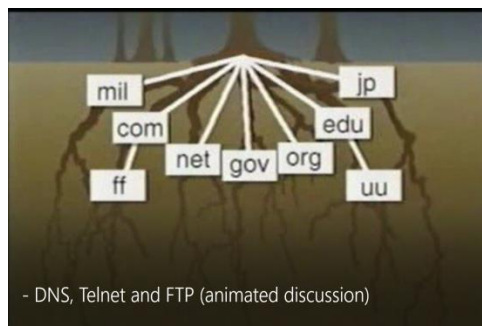Topic Name: Applications of computer networks

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| Brief reportabout the incorporated teaching Pedagogy | The different applications of computer network were discussed with students by using Activity based learning approach. Initially a video is played to make the students understand the features of protocols used in network applications.

Students were encouraged to read and explore on the applications like email, DNS, WWW, streaming of audio, video and content delivery. Few students came up on the stage and discussed in detail on the various protocols used in each application which were discussed with their functionalities.

The studentswere able to understand protocols like SMTP, POP3 and IMAP are used for email and as well as the architecture, message format and working of domain name server. Students got a clarity on different web protocols like HTTP and the protocols used for video, audio and content. |

Snapshot

| Course Code | 20MCA16[*] | Course. Name | Programming Logic and Design | Semester: I | |
|---|---|---|---|---|---|
| Total No of Students | 22 | Name of the Faculty | S. P. Sreeja | Date | 06.05.2022 |

Topic Name: File Handling Applications

| Brief report about the incorporated teaching Pedagogy | Various File handling applications where taken from real-time scenario and were discussed with the students. Students come out with their ideas for the real-time situations.

**Discussion approach** is introduced wherein the students came out with the concept of different file processing techniques. Based on the concept, students were asked to find out the type of the file concept involved in it and its various processing.

It helped the students to easily identify and understand the various file handling techniques. It also made it easier for connecting the theory concept with actual practice. The various file processing methods were explained with examples, an overall idea was given for them to solve a given problem. Students discussed various examples and where asked to incorporate in the coming semester for their Mini project work, if required. |
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Snapshot

| Course Code | 20MCA15 | Course. Name | Web Programming | Semester: I | |
|---|---|---|---|---|---|
| Total No of Students | 120 | Name of the Faculty | Vishwanatha C R | Date | 13.05.2022 |

Topic Name:  Database Access with PHP/MySQL

| Brief report about the incorporated teaching Pedagogy | Database Access with PHP/MySQL is introduced to the students. Before that, a video is played to demonstrate the students how database operations are done using PHP and MySql.<br><br>Experiential learning approach is introduced with the help of the "Programming Demonstration", wherein the students understand the concept directly. Based on the concept of the video, students were asked to write queries to the database.<br><br>It helped the students to easily write queries and understand the concept of Database Access with PHP/MySQL. It also made it easier for connecting the HTML program with PHP & MySql. The various programs were explained, an overall idea was given for them to understand how both can be connected. |
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Snapshot :     Experiential Learning for Database Access with PHP/MySQL