Use of Various instructional methods and pedagogical initiatives:

Pedagogies play an important role in delivering of content and it varies with the audience. Course allocation is made based on the choice/ expertise of the faculty members one month before the commencement of semester. Once the courses are allocated, the faculty meeting is held course wise and discuss about the content to be delivered and decides assignments questions for a particular course. Course handout and materials are prepared keeping in mind the lesson plan and course outcomes. Faculty members use various pedagogical methods for effective teaching learning process. A well-defined process for course at the department level.

1. Course Delivery Methods

The details of various Teaching and Learning Pedagogies Implemented are :

- i) JigSaw
- ii) TPS
- iii) PBL
- iv) Formative Tests using Kahoot and Plickers
- v) Gallery Walk
- vi) Muddiest Point
- vii) Learning Ticket

Examples of innovative pedagogical practices among faculty

1. Class room response systems:

1.1 Plickers: One way to encourage student engagement is by using electronic devices that allow students to record their answers to multiple choice questions & allow you to instantly display the results. The anonymity encourages participation, and their answers help the teacher know when further discussion is needed. Use of Plickers can serve as a catalyst for discussion.

Details of use of Plickers Tool: Course name: Data Structures Using C Topic: Trees

Key points of the activity:

- Prepared 20 questions on strings topic
- Faculty has to logged into the plickers app.
- Questions were displayed to the students and the students need to answer using the plicker cards.
- Students answers were captured using the plickers app and the correct answer can be revealed once the sharing process is completed.

Photographs:

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Fig 1: Sample Qustions added

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Fig 2 : Status of scanned responses



Fig 3: Students projecting responses using Plicker Cards

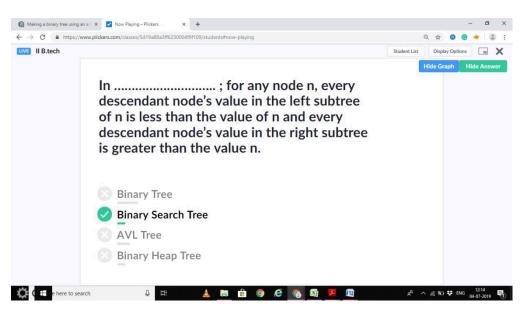


Fig 4: Capturing responses thru Mobile App

1.2 Kahoot: "Kahoot" is used to conduct quizzes, opinions and surveys that allows the learners to actively involves in the learning process This app can be accessed via a web browser or Mobile Phone.

Details of use of Kahoot App: Course Name: Data Base Management System

Key Points of the activity:

- Prepared 10 questions from the ER model and 10 Questions from the SQL Queries
- Students can login to Kahoot. it to play this quiz and they can form their own teams before playing quiz
- 20 seconds time was set to answer the each question consisting of four options
- Game Link <u>https://create.kahoot.it/k/cbf0cc19-7a01-4b8b-b545-888075548012</u>

Photographs:

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Fig 1: Quiz Using Kahoot

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Fig 1: Summarized overall performance

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Fig 3: Summarized result and team standings



Fig 4: Students particiaption in Kahoot as teams

1.3 Moodle: It helped the students for blended learning, flipped classrooms and conducting the quizzes

Details of use of Moodle:

Course name: C Programming

Key points of the activity:

- Prepares 20 questions on basics of "Programming in C"
- Students were provided with the moodle logins to answer the quiz questions.
- Quiz duration was set to 30 min and quiz is opened for 1 day to ensure all the students complete their exam.
- Evaluation of quiz has been done to check the student performance.

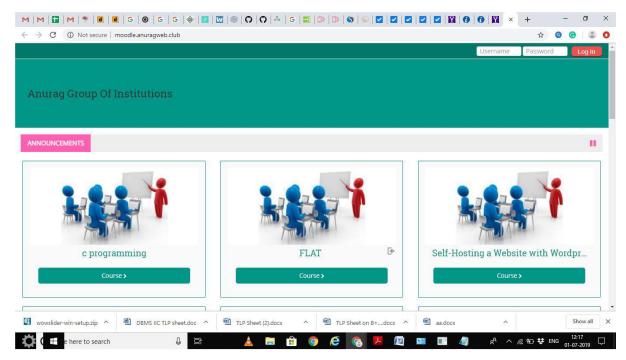


Fig 1: Courses Created using moodle

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Fig 2: Shows the Quiz created using Moodle

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Fig 2: Shows the count of students attempted the quiz

1.4 **Google Classroom:** Google classroom helped students and teachers organize assignments, boost collaboration, and foster better communication. The practicing of Google Classroom implemented for II B.Tech to offer Python Programming. Using Google Classroom Easy to maintain Material of the course as well to conduct the assignments, Quizzes for better understanding and learning of the course

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Fig 1: Creating Assignements in Goog, le Class room

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Fig 2: Quiz

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Fig 3: Quiz