

EXCELSSIOR EDUCATION SOCIETY'S
K.C. College of Engineering & Management Studies & Research
MithBunder Road, Kopri, Thane (E)
Department of Information Technology
Year 2021-22

INNOVATION IN TEACHING LEARNING

SUBJECT: Engineering Mathematics III

ACTIVITY: Flip classroom (Content beyond syllabus)

ACTIVITY REPORT:

Second year engineering students are having the self learning topics in their syllabus.

The topics are

1. Heaviside's Unit Step function, Laplace Transform of Periodic functions, Dirac Delta Function.
2. Applications to solve initial and boundary value problems involving ordinary differential equations
3. Complex form of Fourier Series, orthogonal and orthonormal set of functions, Fourier Transform.
4. Conformal mapping, linear, bilinear mapping, cross ratio, fixed points and standard transformations
5. Covariance, fitting of exponential curve.
6. Skewness and Kurtosis of distribution (data)

Four to five students have been allotted in each group for preparing the presentations. The students have prepared a proper presentation with a powerpoint presentation using a mind mapping tool. Mini-Project presentations have been taken in the online mode. Two to three groups have written their mini-project reports in IEEE format.

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HEAVISIDE STEP FUNCTION

- The *Heaviside step function*, or the *unit step function*, usually denoted by H or θ , is a step function, named after Oliver Heaviside (1850–1925), the value of which is zero for negative arguments and one for positive arguments.
- The unit step function

Definition: The unit step function, $u(t)$, is defined as

$$u(t) = \begin{cases} 0 & t < 0 \\ 1 & t > 0 \end{cases}$$

Graph of $f(t)=u(t)$, the unit step function

Module 5 Introduction to correlation

This solution technique is called separation of variable. Substituting y back into equation (1),

$$y''(x) = y'(x) \cdot y(x)$$

Since the right hand side depends only on x and the left hand side only on y , both sides are equal to some constant value λ . Thus

$$y''(x) = \lambda y(x)$$

We will now show that constant solutions for (3) for which $\lambda = 0$ do not occur:

- Suppose that $\lambda = 0$. Then there exist real numbers A, C such that $y(x) = Ax + C$.
- From (3) we get $0 = 0$ and thus $A = 0$. This implies $y(x) = C$ is a constant function.
- Suppose that $\lambda < 0$. Then there exist real numbers A, C such that $y(x) = A \cos(\sqrt{\lambda}x) + C$. From equation (3) we conclude in the same manner as in 1 that λ is identically 0.

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OUT COME:

1. The students have adapted the self learning aspect in their Mini-project reporting and presentation.
2. The students have acquired the skill of typing equations in word and PPTs.
3. The students have acquired the presentation skills.

Prepared by ,
A.P.Bhuma Devi

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Department of Information Technology
Year 2021-22

Class: SE (IT)

SEM: III

Subject: SQL

Faculty Name: Devika Rani Roy

Academic Year: (III SEM) (2021-2022)

Activity: Quiz

Activity Report

A online quiz is usually a short test, and often doesn't have a huge impact on your grades as a test has. It's an easy way to keep track of your students and have an insight into the gaps of knowledge. It gives both the teacher and student a reflection. It shows students on what subject they have to focus. There are different kinds of questions that can be used for quizzes.

Analysis of result is done online which helps student in knowing in which area they are strong or weak. Difficulty level in quiz can be increased or decreased in various stages of quiz.




Outcome: Students enjoy playing quiz which helps them in even understanding that in which areas of subject they are strong or weak and improves there remembering skills. Students do not have to wonder if their answer is correct or not as they answer a question, the quiz programs tells the student. Students can answer without feeling badly about having a wrong answer as can happen in a class.









LINK:

<https://forms.gle/dBj5sjdgtt6TMpMY7>

Sample Proof:

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 SQL Quiz 21-22  

Questions

 Responses

59

 Settings

Total points: 20

SQL Quiz

Attempt all the questions.....All the best

Name

Short answer text


☒ Answer key


 (0 points)


Roll no. *


Short answer text


Short answer














Prepared by,
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Department of Information Technology
Year 2021-22

Class: SE (IT)

SEM: III

Subject: DBMS

Faculty Name: Devika Rani Roy

Academic Year: (III SEM) (2021-2022)

Activity: Mind Mapping

Activity Report

A mind map involves writing down a central theme and thinking of new and related ideas which radiate out from the centre. By focusing on key ideas written down in your own words and looking for connections between them, you can map knowledge in a way that will help you to better understand and retain information.

Explore new ideas and concepts

Help students get a better understanding of new ideas by having them create a mind map. A mind map can assist with understanding because it conveys hierarchy and relationships, allowing students to see the big picture.

Brainstorm

Get creative juices flowing with mind mapping. Mind maps are a great brainstorming tool and can help students let their thoughts flow freely while making important connections between ideas and concepts.

Take Notes

Encourage students to engage in active thinking instead of transcription by using mind maps for note taking. Mind maps encourage students to focus on keywords and ideas instead of just writing down what the teacher says.

Write essays

Students can create an essay outline, gather arguments and quotes or brainstorm ideas for your essays with mind maps.

Memorize information

Mind maps activate many levels of brain activity and are a great tool to help with memorization — from vocabulary words to a foreign language.

Create presentations

Have students use mind maps to present information in an interesting and engaging way with mind maps. Students can use mind mapping software to create a presentation in advance or create one on the spot during a live presentation.

Study for an assessment

Mind maps are a great way for students to gather all the information that may be covered on an exam including class notes, textbook chapters and reading lists.

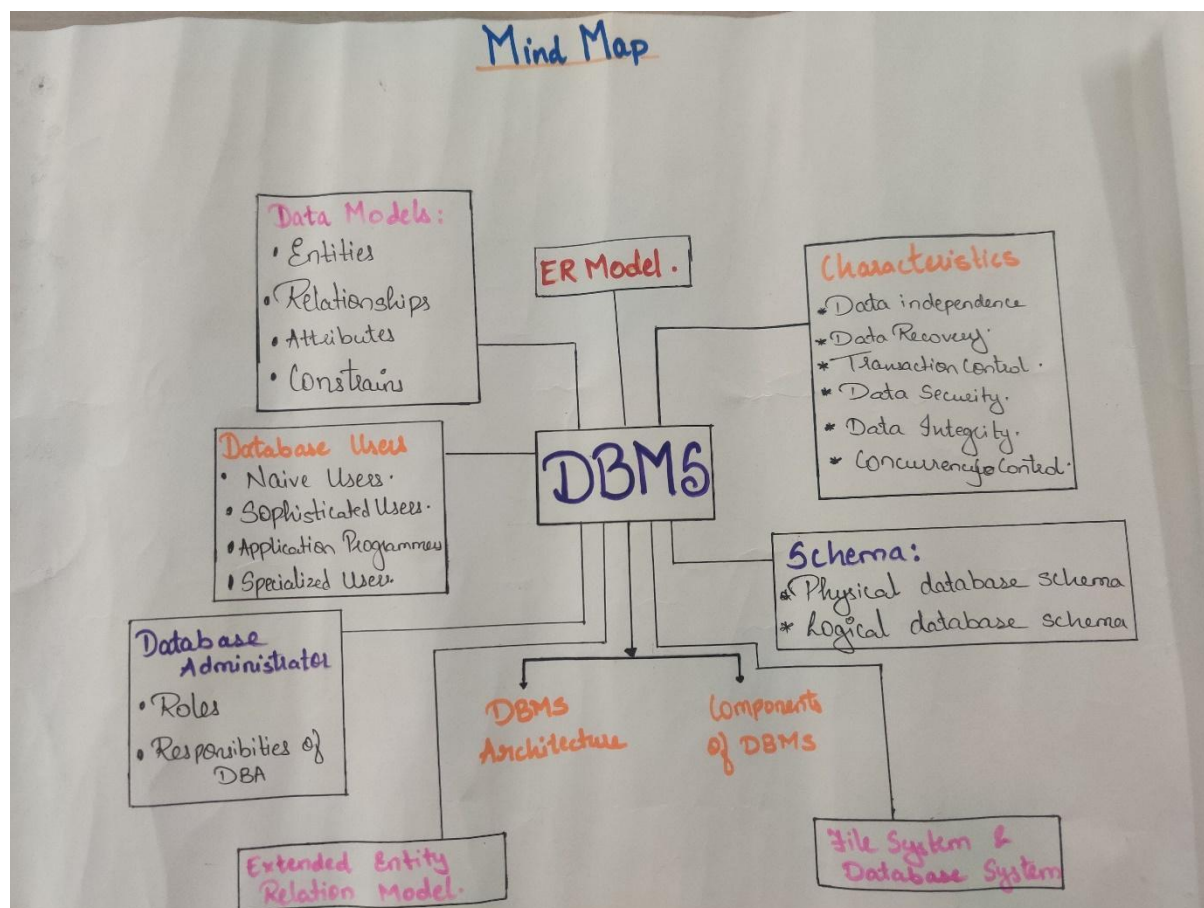
Execute group projects

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By using a mind map, students can visualize what needs to be done and who needs to do it. Using an online mind mapping program is best for group projects so students can easily share it.

Outcome: Mind mapping helps in generating, visualising, organising, note-taking, problem-solving, and decision-making, revising and clarifying your university topic, so that students can get started with assessment tasks. Essentially, a mind map is used to 'brainstorm' a topic and is a great strategy for students.

Sample proof:



Prepared by,
A.P Devika Rani Roy

Class: TE (IT)

SEM: V

Subject: EBB

Faculty Name: Devika Rani Roy

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Year 2021-22

Academic Year: (V SEM) (2021-2022)

Activity: Developing a Business plan

Activity Report

Business planning commonly involves collecting ideas in a formal business plan that outlines a summary of the business's current state, as well as the state of the broader market, along with detailed steps the business will take to improve performance in the coming period. In this first step is Creating a Business Plan, students are introduced to the concepts of entrepreneurship and what it takes to create a business plan. In this developing phase students will work in groups and construct ideas for which they will eventually create business plans. This is the first of a series of lessons designed to build students' understanding and ability to create their own business plans.

Steps Involved in activity:

1. Do Now: Think about a piece of furniture or an appliance in your house that you would like to change and/or make better. What is it? What would you like to change about it? Why? (5 mins)

2. Teacher introduces the idea of entrepreneurship and business plans: This is what being an entrepreneur is all about. Someone who has an idea, sees a need in the market place, and designs a plan to make it possible. Many entrepreneurs are scientists, inventors and engineers who look at ways to improve things. Many entrepreneurs are business people in the work place and see that they could make it better. An entrepreneur can be anyone who has an idea, sees a need and makes a plan. That is what you will be doing. Before you all become entrepreneurs you need to come up with an idea.

3. In small groups: Students in groups are going to come up with an idea that you would like to design a business plan around. You can use the idea you came up with from your do now, or you can come up with something new. For example, you might want to design a multi-purpose stock checking website. An all-in-one site to invest and learn. The sky is the limit. In your group you will have to brainstorm ideas. It would be best to narrow it down to two ideas and then by the next lesson you will have to select the one idea. Students will work in small groups to brainstorm ideas. (15 min)

4. As the students are ready, the teacher writes the words "Business Plan" on the board/ online platform, and asks the class what they think needs to be included in a business plan. (5 min)

5. From there the teacher will pass out /guide outline of business template "How Entrepreneurs Can Create Effective Business Plans".

6. After reading template, the teacher will instruct students to form "business plan." In groups students should try to outline a concept statement for the item they have picked. If groups are

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still unsure, they can start outlining two concept statements to see, this might help them pick the stronger product. Student should design the whole business plan. Students should keep working on this until the end of class.

7. Wrap-up: The teacher should ask students to tell them one thing they learned today from class or one thing they are looking forward to doing and submit the designed plan via provided platform (google form).

Outcome: students will be able to: (1) describe what an entrepreneur is, (2) describe what a business plan is, and (3) begin creating a concept statement.

Link:

<https://drive.google.com/file/d/19DKVkX7BP6wSGxtaGnDatRN2HfoRHTZO/view?usp=sharing>

https://drive.google.com/file/d/1sbrqzjHuw_76p57yVK879IpMqp3CFdO_/view?usp=sharing

Sample proof:

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ancies - ALOK SALIAN.pdf

Open with Google Docs

Name: Sublime Web Consultancies

Business Plan for: Full Stack Development

(Please use this template in conjunction with the guide [Prepare a business plan](#))

Document Version:	0.1
Date:	20-09-2021
Completed by:	Sublime Web Consultancies

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Business experience and any training undertaken: 1.5 years

Academic/professional qualifications: B.E, Stock Market Course

Most recent salary £ None

Other key personnel (including shareholders):

Name: Shubham More

Omkar Mandavkar

Durgesh Kolhe

Shriyash Jadhav

Baliram Pansare

Atharva Mulgund

Ashutosh Rajput

Position/main responsibilities: Shareholders,

Experience and knowledge Page 7 of 23: 2 years 🔍 +

Prepared by,
A.P Devika Rani Roy

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Department of Information Technology
Year 2021-22

Class : BE IT

Sem: VIII

Subject: Internet of Every Thing Lab

Name of Activity: IOT Simulator Demonstration

Date: 11-3-2022, 14-03-2022, 15-03-2022

Activity Report:

Topic name for activity: IOT Simulator

Activity was conducted by Prof Nikhat Fatma Mumtaz Husain Shaikh in BE-IT online class.

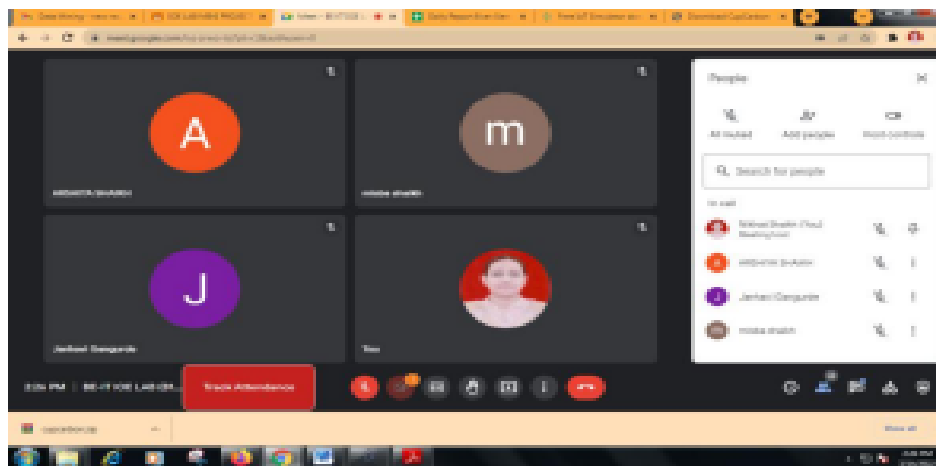
A demonstration of IOT Simulator was given to develop applications in IOT. **Course**

Outcome:

Students able to Study and enhance software/ hardware skills.

Proof:

<https://drive.google.com/file/d/1ErMhTRY9oQ1fPNzAJbJYKI7zPXbybDeU/view>



Prepared by ,

A.P.Nikhat Shaikh

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Year 2021-22

Class : BE IT

Sem: VIII

Subject: Internet of Everything

Name of Activity: Game Playing

Date: 1-4-2022

Activity Report:

Topic name for activity: Game to understand Map Reduce

Activity was conducted by Prof Nikhat Fatma Mumtaz Husain Shaikh in BE-IT online class.

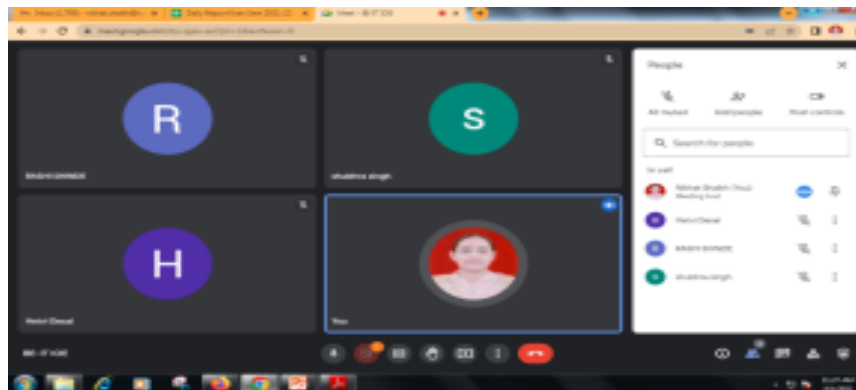
A gaming problem was given to students and 20 minutes time was given to solve the problem.

Course Outcome:

Students able to analyze and evaluate the data received through sensors in

IOT. Proof:

https://drive.google.com/drive/folders/1uu8z_Ts6cDhzByRArWthdkZKQn8boG91DptWq8A5g_vbTdW9fvdJPQ23ZHiU_EAyK5CCyMiU



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Department of Information Technology
Year 2021-22

Class : TE IT

Sem: VI

Subject: Wireless Technology

Name of Activity: THINK-PAIR SHARE

Activity Report:

Think-pair-share is a collaborative teaching strategy used to help students form individual ideas, discuss and share with the others in-group.

Topic name for activity: **Comparison between OSI Model and TCP/IP Model? Justify your answer?**

Activity was conducted by Prof. Punam Bagul on TE IT class.

I have made group of 4-5 students. Topic name was given to students.

Then I have asked each students to thoughts on the topic (group pair wise) and write their opinions on paper.

After 15 minutes one by one group share their thoughts to each other.

Outcome: Students able to conclude their knowledge about Wireless Technology Terminologies.

Proof:



Prepared by ,

A.P.Punam Bagul

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Department of Information Technology
Year 2021-22

Class : TE IT

Sem: VI

Subject: WEB X.0

Name of Activity: THINK-PAIR SHARE

Activity Report:

Think-pair-share is a collaborative teaching strategy used to help students form individual ideas, discuss and share with the others in-group.

Activity Report:

Topic name for activity: **Semantic web is good or bad? Justify your answer?**

Activity was conducted by Prof Priyanka sananse madam on TE IT classroom.

I have made group of 2 students. Topic name was given to students.

Then I have asked each students to thoughts on the topic (group pair wise) and write their opinions on paper.

After 15 minutes one by one group share their thoughts to each other.

Outcome: Students able to conclude their knowledge of semantic web.

Proof:

https://drive.google.com/drive/folders/1Zpv6NJ4njfH78S6QmxYMbUGU_rO1gzx8?usp=sharing



Prepared by ,

A.P.Priyanka sananse

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Department of Information Technology
Year 2021-22

Class : BE IT

Sem: VIII

Subject: UID

Name of Activity: THINK-PAIR SHARE

Activity Report:

Topic name for activity: **what is good design and bad design ? Justify?**

Activity was conducted by Prof Priyanka sananse madam on BE IT classroom.

I have made group of 2 students. Topic name was given to students.

I gave 15 minutes to each students to thoughts on the topic (pair wise) and write their opinions on paper.

After 15 minutes 2 groups share their thoughts to each other respectively other group also.

Outcome: Students able to conclude their knowledge of design.

Proof: https://drive.google.com/drive/folders/11P9KfC6RtLmX-7Ex5Zyxut_qxIq-fFK



Prepared by ,

A.P.Priyanka sananse

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Department of Information Technology
Year 2021-22

Class : SE IT

Sem: IV

Subject: CNND

Name of Activity: THINK-PAIR SHARE

Activity Report:

Topic name for activity: **Comparison between OSI Model and TCP/IP Model? Justify your answer?**

Activity was conducted by A.P.Nutan Dolzake madam on SE IT classroom.

She made group of 2 students. Topic name was given to students.

She gave 15 minutes to each students to thoughts on the topic (pair wise) and write their opinions on paper.

After 15 minutes 2 groups share their thoughts to each other respectively other group also.

Outcome:

Students able to conclude their knowledge about OSI model and TCPIP model.



Prepared by ,

A.P.Nutan Dolzake

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Department of Information Technology
Year 2021-22

Class : SE IT

Sem: IV

Subject: CNND

Name of Activity: Windows file sharing over network

Activity Report:

Topic name for activity: Windows file sharing over network perform in virtual lab

Activity was conducted by A.P.Nutan Dolzake madam on SE IT classroom.

She explains the performance of Windows file sharing over network in virtual lab. Student done this performance in virtual lab.

Outcome:

Students able to perform the windows file sharing over network in virtual lab



Prepared by,

A.P.Nutan Dolzake

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Department of Information Technology
Year 2021-22

Class : BE IT

Sem: VIII

Subject: BDA

Name of Activity: THINK-PAIR SHARE

Activity Report:

Topic name for activity: **Real time applications of Big data.**

Activity was conducted by A.P.Shraddha Shrivastav BE IT classroom.

She made group of 2 students. Topic name was given to students.

She gave 15 minutes to each students to thoughts on the topic (pair wise) and write their opinions on paper.

After 15 minutes 2 groups share their thoughts to each other respectively other group also.

Outcome:

Students able to conclude their knowledge about real time application of Big data

Prepared by,

A.P.Shraddha Shrivastav

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Department of Information Technology
Year 2021-22

Year 2021-22

Class : SE

Semester: IV

15/3/2022

Subject: Automata Theory

Name of Activity: Assignment on Applications of Automata

Proof: Link/photo etc.

<https://drive.google.com/file/d/1kP5mT7xRN1ybPD8vLMtpdNl8K8pBjiGr/view>

Prepared by ,

A.P.Amarja Adgaokar

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Department of Information Technology
Year 2021-22

SUBJECT: Engineering Mathematics IV

ACTIVITY: Mini-Project Presentation / Flip classroom (**Content beyond syllabus**)

ACTIVITY REPORT:

Second year engineering students are having the self learning topics in their syllabus.

The topics are

1. Matrices derogatory and non-derogatory
2. Applications of Complex Integration
3. Boundary values problems of Z-Transform
4. Test significance for Large samples, and Yate's Correction
5. Sensitivity Analysis, Two-Phase and Revised Simplex Method
6. Problems with two inequality constraints, Gradient search Method.

Four to five students have been allotted in each group for preparing the presentations. The students have prepared a proper presentation with a powerpoint presentation using a mind mapping tool. Mini-Project presentations have been taken in the online mode. Two groups have written their mini-project reports in IEEE format.

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This screenshot shows a Google Meet interface during a presentation. The main window displays a slide titled "Computer Graphics: The definition of a matrix as computer graphics is the ability to convert geometric data from different coordinate systems. A matrix is composed of elements arranged in rows and columns. To change format, the conversion of a matrix into another form represents the scale as well as a vector with a single value during a transformation." The slide also lists topics: "Cryptography: The key matrix is used to encrypt the messages, and the inverse is used to decrypt the original messages." and "Mathematics: In geometry, matrices are widely used for specifying and representing geometric transformations, to determine the image relations via coordinate changes." and "Wireless communication and signal processing: Among the other applications, matrices are used in signal processing, image processing, and data compression." The right sidebar shows a grid of participants: Shruti Chavan, Disha Temi, KUSHAL AMIN, Niveditha Sherugar, Vaishnavi Chaithe, Niveditha Sherugar, and 15 others. The bottom status bar indicates the time is 2:27 AM on 8/11/2022.

This screenshot shows a Google Meet interface during a presentation. The main window displays a slide titled "3 Transition Matrices and Similarity". The slide contains mathematical definitions and formulas: $T: V \rightarrow V$ (a L.T.), $B = \{v_1, v_2, \dots, v_n\}$ (a basis of V), $B' = \{w_1, w_2, \dots, w_n\}$ (a basis of V), $A = [T(v_1), T(v_2), \dots, T(v_n)]_B$ (matrix of T relative to B), $A' = [T(w_1), T(w_2), \dots, T(w_n)]_{B'}$ (matrix of T relative to B'), $P = [w_1, w_2, \dots, w_n]_B$ (transition matrix from B to B'), $P^{-1} = [v_1, v_2, \dots, v_n]_{B'}$ (transition matrix from B' to B), $[v]_B = P^{-1}[v]_{B'}$, $[w]_{B'} = P[w]_B$, $[T(v)]_B = A[v]_B$, and $[T(w)]_{B'} = A'[w]_{B'}$. The right sidebar shows a grid of participants: KUSHAL AMIN, ABHISHEK JOSHI, MOHAMMED ASIF MOHA..., SAMEER SHRIKHANDE, Megha Atale, TEJAS SHINDE, and 19 others. The bottom status bar indicates the time is 2:02 AM on 8/11/2022.

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OUT COME:

1. The students have adapted the self learning aspect in their Mini-project reporting and presentation.
2. The students have acquired the skill of typing equations in word and PPTs.
3. The students have acquired the presentation skills.
4. Then students have acquired the digital skills.

Prepared by ,
A.P.Bhuma Devi

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Department of Information Technology
Year 2021-22

2021-22

Innovation In Teaching Learning Process

Year:SE

Class :IT

Sem: IV

Subject: ITC405 - Computer Organization and Architecture

Name of Activity: Flip Classroom

Activity Report:

Flipped classroom is a “pedagogical approach in which the educator guides students as they apply concepts and engage creatively in the subject matter”. 6 easy steps for implementing flipped classrooms. Plan, Record, Share, Change, Group, Regroup.

Flip Classroom activity was conducted on 5/4/22 for SE/IT (even Sem) students. The topic selected for the session was “**Common Memory Types and its Application**”. Two interested students (Rishabh, Priyanka) were selected to perform this session. The relevant documents are collected from various sources and shared with the above students. They prepared the topics well and delivered on the stage in front of other students and staff. Students were very excited about the session and they expressed their willingness to participate in the future. The same type of exercise will be repeated with different topics in regular intervals.

Outcome:

ITC405.5 - Categorize memory organization and explain the function of each element of a memory hierarchy.

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Proof:

Document Link:

<https://www.rose-hulman.edu/Class/ee/yoder/ece332/Papers/RAM%20Technologies.pdf>

https://mswista.files.wordpress.com/2015/04/typesofmemory_updated.pdf



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Year 2021-22

~~2021-22~~

Innovation in Teaching Learning Process

Year:SE

Class :IT

Sem: IV

Subject: ITC405 - Computer Organization and Architecture

Name of Activity: Mind Mapping

Activity Report:

Mind mapping is a visual representation of information. It is a powerful graphic tool that can assist students with many aspects of their learning. It can help them map out new ideas, explore concepts in more detail and facilitate a better understanding of relationships and connections.

Mind mapping activity was conducted on 06/04/22 for SE/IT (even Sem) students. The topic selected for the session was "memory management / I/O organization". This activity was conducted for the whole classroom. Students were very excited about the session and they expressed their willingness to participate in the future. The same type of exercise will be repeated with different topics in regular intervals.

Outcome:

Students are able to memorize the concept of memory organization and I/O organization.

Prepared by ,

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Year 2021-22

2021-22

Innovation in Teaching Learning Process

Year:SE

Class :IT

Sem: IV

Subject: ITC404 – Python Lab

Name of Activity: Certified Course (EDX)

Activity Report:

All the Students of SE/IT are advised to undergo python related certified Courses like Edx. Many of the students did their courses in edx. Students were very eager to learn more certified courses in the future.

Outcome:

Students can able develop projects

Prepared by ,

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Department of Information Technology
Year 2021-22

2021 - 22

Innovation in Teaching Learning Process

Year:SE

Class :IT

Sem: IV

Subject: ITC403 – Microprocessor Lab

Name of Activity: Virtual Lab

Activity Report:

Virtual labs are **interactive, digital simulations of activities that typically take place in physical laboratory settings.**

Virtual lab activity was conducted on 11/2/22 for SE/IT (even Sem) students. The experiment selected for the session was “**Construction of half/full adder using XOR and NAND gates and verification of its operation**”. This activity was conducted for the whole classroom. The usage of virtual lab was explained to the students. Students were very excited about the session and they expressed their willingness to participate in the future. The same type of exercise will be repeated with different topics in regular intervals.

Outcome:

ITC403.2 - Analyse and design combinational circuits.

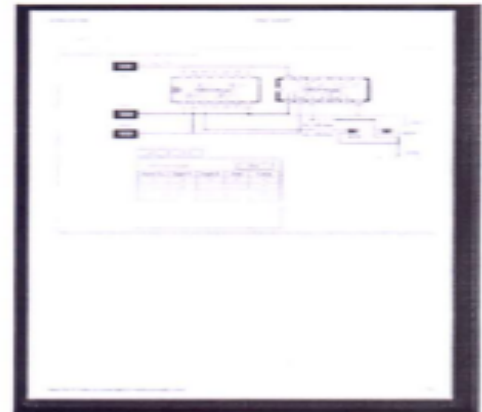
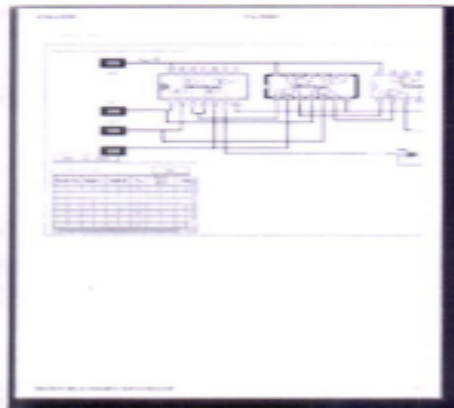
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Year 2021-22

Proof:

Document Link:

<https://de-iitr.vlabs.ac.in/exp/half-full-adder/simulation.html>

Half Adder & Full Adder:



Prepared by ,
A.P.Brinthakumari S.

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Year 2021-22

Class: TE (IT)

SEM: VI

Subject: GREEN IT

Faculty Name: Devika Rani Roy

Academic Year: (VI SEM) (2021-2022)

Activity: FLIP CLASSROOM

Activity Report: Flipped classroom is a “pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter” Flipping speaks the language of today’s students. Flipping helps busy students. Flipping helps struggling students. Flipping helps students of all abilities to excel. Flipping allows students to pause and rewind their teacher. Flipping increases student-teacher interaction. Flipping allows teachers to know their students better. Flipping increases student-student interaction. Flipping allows for real differentiation. Flipping changes classroom management.

Outcome: Free from the constraints of the classroom-based lecture, a flipped classroom allows students to engage in self-paced learning, as well as think critically and collaborate with classmates, all with their instructors close at hand benefits for students and instructors alike.

Sample proof:

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Year 2021-22



Prepared by,
A.P Devika Rani Roy

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Department of Information Technology
Year 2021-22

Class: SE (IT)

SEM: IV

Subject: OPERATING SYSTEM

Faculty Name: Devika Rani Roy

Academic Year: (IV SEM) (2021-2022)

Activity: FLIP CLASSROOM

Activity Report: Flipped classroom is a “pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter” Flipping speaks the language of today’s students. Flipping helps busy students. Flipping helps struggling students. Flipping helps students of all abilities to excel. Flipping allows students to pause and rewind their teacher. Flipping increases student-teacher interaction. Flipping allows teachers to know their students better. Flipping increases student-student interaction. Flipping allows for real differentiation. Flipping changes classroom management.

Outcome: Free from the constraints of the classroom-based lecture, a flipped classroom allows students to engage in self-paced learning, as well as think critically and collaborate with classmates, all with their instructors close at hand. By combining the engagement of active learning in the classroom, the flipped classroom holds benefits for students and instructors alike.

Link of PPT:

<https://docs.google.com/presentation/d/1nl4UIDMNOaSVU3CFAIvI93Cu4hHthc8X/edit?usp=sharing&ouid=105360548376709413595&rtpof=true&sd=true>

Sample proof:

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Prepared by,
A.P Devika Rani Roy

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Department of Information Technology
Year 2021-22

Class: BE (IT)

SEM: VIII

Subject: R Programming

Faculty Name: Devika Rani Roy

Academic Year: (VIII SEM) (2021-2022)

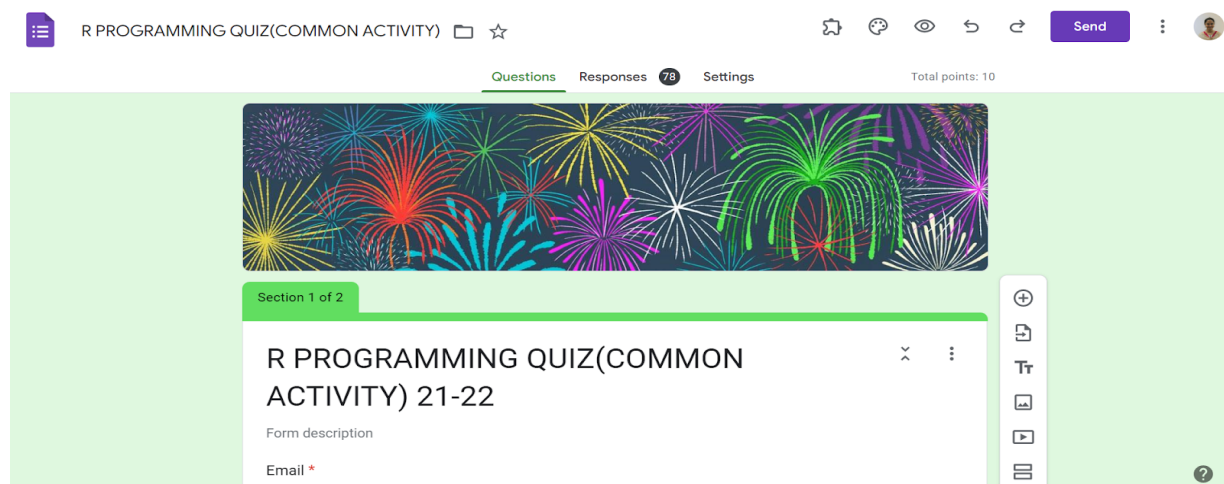
Activity: Quiz

Activity Report

A online quiz is usually a short test, and often doesn't have a huge impact on your grades as a test has. It's an easy way to keep track of your students and have an insight into the gaps of knowledge. It gives both the teacher and student a reflection. It shows students on what subject they have to focus. There are different kinds of questions that can be used for quizzes.

Analysis of result is done online which helps student in knowing in which area they are strong or weak. Difficulty level in quiz can be increased or decreased in various stages of quiz.

Outcome: Students enjoy playing quiz which helps them in even understanding that in which areas of subject they are strong or weak and improves their remembering skills. Students do not have to wonder if their answer is correct or not as they answer a question, the quiz programs tell the student. Students can answer without feeling badly about having a wrong answer as can happen in a class.



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The screenshot shows a Google Forms interface for a quiz titled "R PROGRAMMING QUIZ(COMMON ACTIVITY)". The top navigation bar includes icons for a menu, star, eye, undo, redo, and a "Send" button. Below the title, there are tabs for "Questions", "Responses" (with a count of 78), and "Settings". The "Total points: 10" is displayed on the right. The main content area contains two questions, each with four radio button options. The first question asks for the length of a vector 'b' created with the R syntax `b <- 2:7`. The second question asks for the output of `typeof(x)` and `mode(x)` for the R syntax `x <- 1:3`. A vertical toolbar on the right side of the question area contains icons for adding, deleting, duplicating, and other form elements. A small question mark icon is visible in the bottom right corner of the form area.

R PROGRAMMING QUIZ(COMMON ACTIVITY) ☆

Questions Responses 78 Settings Total points: 10

What is the length of b? `b <- 2:7` *

☐ a) 4

☐ b) 5

☐ c) 6

☐ d) 0

What are the typeof(x) and mode(x) in the following R syntax? `x <- 1:3` *

☐ a) Numeric, Integer

☐ b) Integer, Numeric

☐ c) Integer, Integer

Links of Quiz: <https://forms.gle/fkd3zRQS5MmgGb2r5>

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Year 2021-22

Class: TE (IT)

SEM: VI

Subject: GREEN IT

Faculty Name: Devika Rani Roy

Academic Year: (VI SEM) (2021-2022)

Activity: Mind Mapping

Activity Report

A mind map involves writing down a central theme and thinking of new and related ideas which radiate out from the centre. By focusing on key ideas written down in your own words and looking for connections between them, you can map knowledge in a way that will help you to better understand and retain information.

Explore new ideas and concepts

Help students get a better understanding of new ideas by having them create a mind map. A mind map can assist with understanding because it conveys hierarchy and relationships, allowing students to see the big picture.

Brainstorm

Get creative juices flowing with mind mapping. Mind maps are a great brainstorming tool and can help students let their thoughts flow freely while making important connections between ideas and concepts.

Take Notes

Encourage students to engage in active thinking instead of transcription by using mind maps for note taking. Mind maps encourage students to focus on keywords and ideas instead of just writing down what the teacher says.

Write essays

Students can create an essay outline, gather arguments and quotes or brainstorm ideas for your essays with mind maps.

Memorize information

Mind maps activate many levels of brain activity and are a great tool to help with memorization — from vocabulary words to a foreign language.

Create presentations

Have students use mind maps to present information in an interesting and engaging way with mind maps. Students can use mind mapping software to create a presentation in advance or create one on the spot during a live presentation.

Study for an assessment

Mind maps are a great way for students to gather all the information that may be covered on an exam including class notes, textbook chapters and reading lists.

Execute group projects

By using a mind map, students can visualize what needs to be done and who needs to do it. Using an online mind mapping program is best for group projects so students can easily share it.

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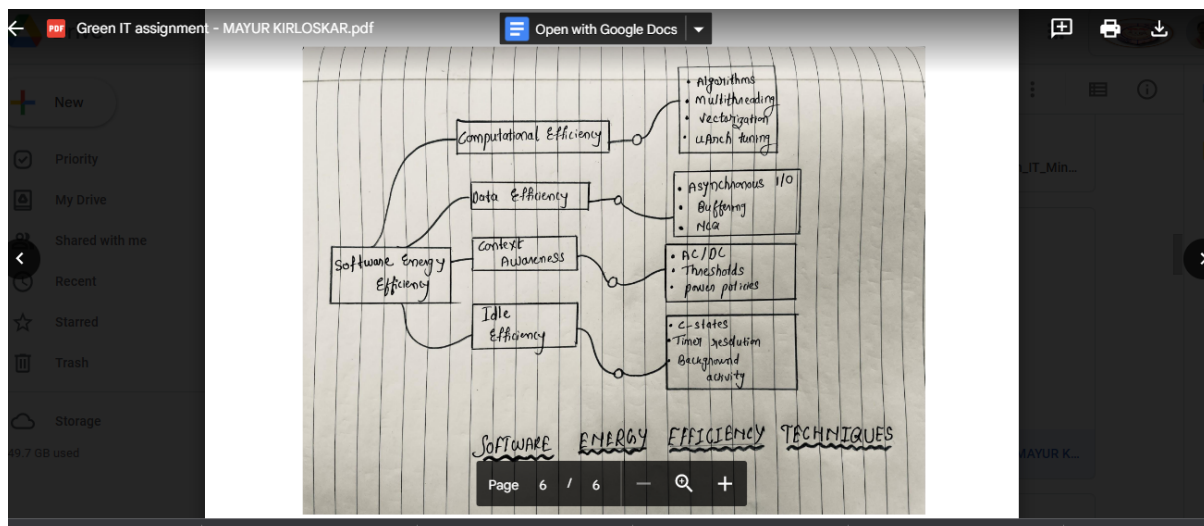
Outcome: Mind mapping helps in generating, visualising, organising, note-taking, problem-solving, and decision-making, revising and clarifying your university topic, so that students can get started with assessment tasks. Essentially, a mind map is used to 'brainstorm' a topic and is a great strategy for students.

Sample Link:

https://drive.google.com/file/d/11vJBZqhI_MXitwJsryOz6cB5a1Jw4AXw/view?usp=sharing

<https://docs.google.com/document/d/1rursQtB5Wqe06HpXNwqCMQ2MRwOconVi/edit?usp=sharing&oid=105360548376709413595&rtpof=true&sd=true>

Sample proof:



Mind Map Link : <https://mm.tt/map/2219301983?t=M3OHPzwE1j>

Prepared by,
A.P Devika Rani Roy