



Estd 2009

Shri Balasaheb Mane Shikshan Prasarak Mandal's **ASHOKRAO MANE GROUP OF INSTITUTIONS**

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Phone : (0230) 2407740, 2407760 **Fax :** (0230) 2407750 **Email :** director@amgoi.edu.in **Website :** www.amgoi.org

Approved by : AICTE, New Delhi No. F-No. MS (NewInt) 2009 / 08, Higher & Technical Education Department, Govt. of Maharashtra, Directorate of Technical Education, Mumbai. **Affiliated to :** Dr. Babasaheb Ambedkar Technological University, Lonere - Raigad. (B.Tech. & M.Tech. Programs), Shivaji University, Kolhapur. (MBA Program).

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Founder President
Late Shri. Ashokrao Mane

Director
Dr. A. V. Deshmukh, M.E., Ph.D.

President
Hon. Shri. Vijaysinh A. Mane

Ref. No. :

Date :

Criteria 2 :TEACHING-LEARNING AND EVALUATION

Summary Sheet

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process.

Sr. No.	ICT Tools
1.	Google classroom
2.	Animation Video
3.	Flipped Classroom
4.	Virtual Lab
5.	Power Point Presentation
6.	You tube Channel
7.	Virtual lab
8.	Socrative App
9.	Slido App
10.	Group Discussion
11.	Snap Talk
12.	Think Pair And Share
13.	Google Form
14.	GATE Tutor
15.	Chart and Model Based Learning



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Criterion 2 : Teaching-Learning and Evaluation

2.3 - Teaching-Learning Process

2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

Sr. No.	Activity	Name of Faculty	Subject
1.	Google Classroom	Mr. J. A. Patil	Project Management
			Professional Practices
		Mr. S. S. Patil	Mechanics of Solids
			Design of Steel Structures
		Mr. D. G. Patil	Bridge Engineering
		Mr. H. M. Bhosale	Construction Techniques
			Building Construction Drawing
		Mr. S. S. Chokakar	Applied Geology
2.	Flipped Classroom	Mr. G. N. Chavan Patil	Design of Prestress Concrete Structures
		Mr. P. S. Koli	Surveying
3.	Virtual lab	Mr. J. M. Shinde	Hydraulics - I
		Mr. H. M. Bhosale	Environmental Engineering
4.	YouTube Chanel	Mr. S. A. Dopare	Bridge Engineering


Prepared By:

Prof. H. M. Bhosale


Verified By:

Prof. J. M. Shinde

HOD

Civil Engineering

AMGOI, Faculty of Engineering

Vathar Tarf Vadgaon, Tal. hatkanangale, Dist. Kolhapur





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Google Classroom Link / QR Code

Sr. No.	Name of Faculty	Class	Name of Subject	Google Classroom link	Google Classroom QR Code
01	Mr. J. A. Patil	TY	Project Management	https://classroom.google.com/c/Njl2O TQyMjE4Njl5?cjc=5ah3qu3	
02	Mr. S. S. Patil	TY	Design of Steel Structures	https://classroom.google.com/c/NT15N TI2MTU30TEx?cjc=ewrznxs	
03	Mr. J. A. Patil	B.Tech	Professional Practices	https://classroom.google.com/c/Njl2O TQzMDY0Mjc0	
04	Mr. D. G. Patil	B.Tech	Bridge Engineering	https://classroom.google.com/c/Njl2O TQzNDcxMDY0?cjc=jckth37	
05	Mr. H. M. Bhosale	B.Tech	Construction Techniques	https://classroom.google.com/c/NjlxNj kwMzA5NTQ3?cjc=bh33k2f	





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06	Mr. G. N. Chavan Patil	B.tech	Design of Prestress Concrete Structures	https://classroom.google.com/c/NTI5NTI2MzI5NDMz	
06	Mr. H. M. Bhosale	S.Y	Building Construction Drawing	https://classroom.google.com/c/NTI0MTU2ODg0NTU3	
07	Mr. S. S. Patil	S.Y	Mechanics of Solids	https://classroom.google.com/c/NjI2OTQyNDYzMzU2?cjc=7bqrbgq	
08	Mr. S. S. Chokakar	T.Y	Applied Geology	https://classroom.google.com/c/NjI2OTQzMTI2Njc2?cjc=wuvfxdn	
09	Mr. S. S. Chokakar	S.Y	Applied Geology	https://classroom.google.com/c/NTI5NTI3MDU0NTcy?cjc=7gkoxzr	





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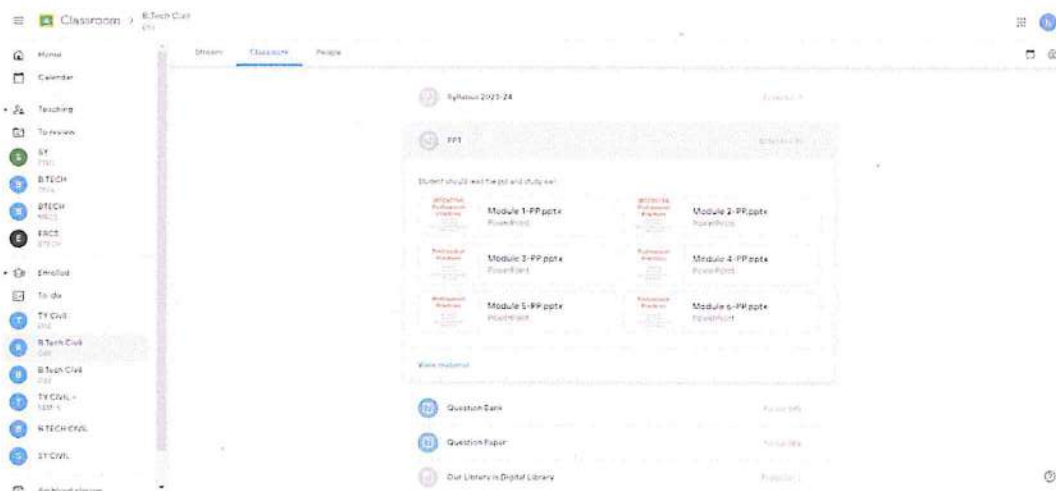
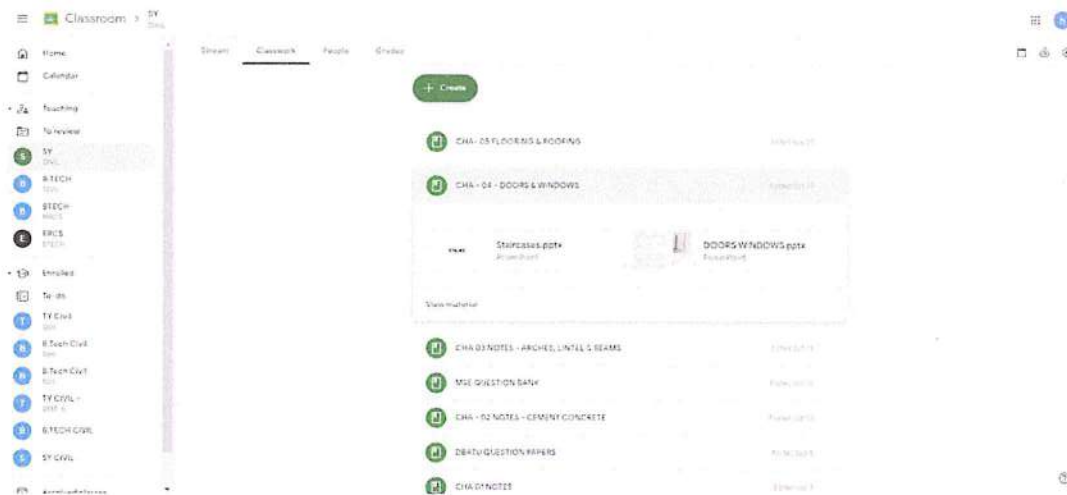
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USE OF GOOGLE CLASSROOM FOR SHARING STUDY MATERIAL





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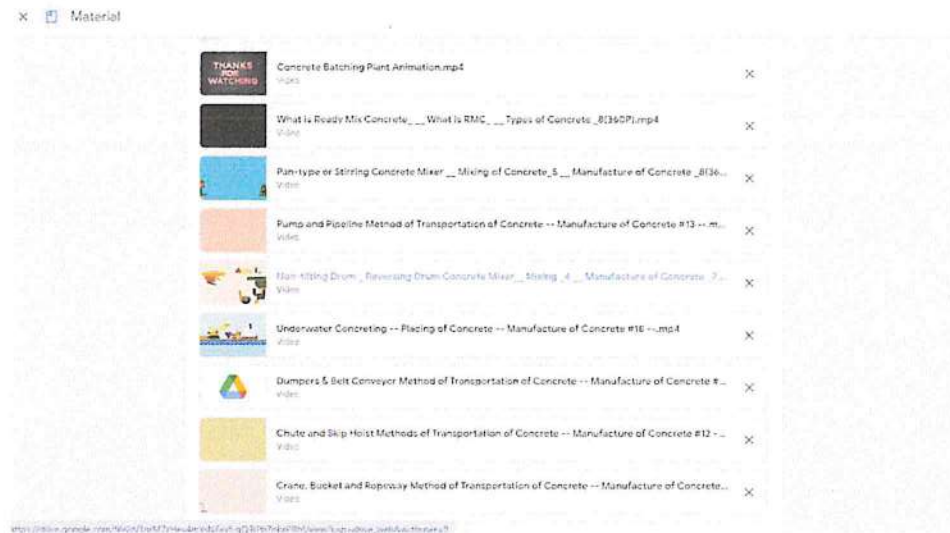
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USE OF GOOGLE CLASSROOM FOR SHARING YOUTUBE LINKS





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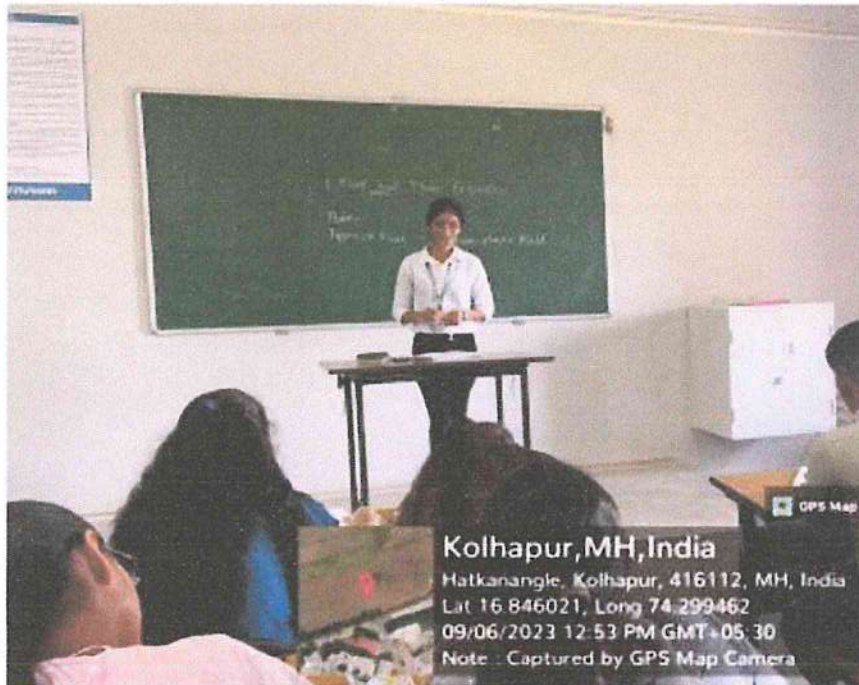
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FLIPPED CLASS APPROACH FOR SY CIVIL ENGINEERING STUDENTS





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USE OF PROJECTOR



USE OF POWER POINT PRESENTATION

(BTHM505) Project Management (PM)

Presented By,
Prof. J. A. Patil
Head, Civil Engg. Dept.,
AMGOI, Vathar

Course Outcomes:

- ☐ On completion of the course, the students will be able to:
- ☐ Understand various steps in project Management, different types of charts. Construct network by using CPM and PERT method.
- ☐ Determine the optimum duration of project with the help of various time estimates.
- ☐ Know the concept of engineering economics, economic comparisons, and linear break even analysis problems.
- ☐ Understand the concept of total quality Management including Juran and Deming's philosophy.



Model 1

- ☐ **Introduction:**
- ☐ The word 'project' came from the Latin word projectum from the Latin verb proicere (to throw something forwards) which in turn comes from 'pro' which denote something that proceeds the action of the next part of the word.
- ☐ A project is a combination of interrelated activities with well defined objectives to be completed in a specific time period. Project is something special which is different from routine and regular activities.
- ☐ Application of knowledge, skills, tools & techniques to project activities in order to meet stakeholder (owner) needs & expectations from a project.





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USE OF ONLINE MEETING APP



USE OF YOUTUBE VIDEOS





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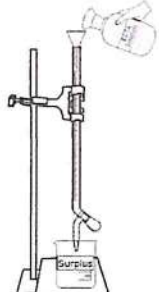


USE OF VIRTUAL LAB

Determination of Hardness in Water

DETERMINATION OF HARDNESS IN WATER

STEP 1 Fill the burette with standard EDTA solution upto zero mark.



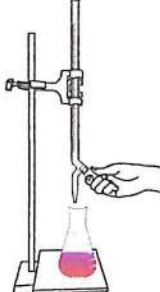
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Determination of Hardness in Water

DETERMINATION OF HARDNESS IN WATER

STEP 4 Titrate the EDTA solution till the colour changes to blue.

Initial burette reading = 0 ml



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Criterion 2 : Teaching-Learning and Evaluation

2.3 - Teaching-Learning Process

2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

Sr.No.	Activity	Name of Faculty	Subject
01	Google classroom	Prof. S. R. Patil	"R" Programming
02	Animation Video	Prof.S. J. Vibhute	Cloud Computing
		Prof.A. B. Desai	Software Engineering
		Prof.S. S. Kibile	Computer Architecture and Organization
03	Flipped Classroom	Prof.S. S. Redekar	Data Structure
04	Virtual Lab	Prof.P.S.Powar	Machine Learning
05	Power Point Presentation	Prof.P.S.Powar	Machine Learning
		Prof.S. J. Vibhute	Consumer Behaviour
		Prof.P.P.Nagrale	Block ChainTechnology
		Prof.D.A.Jadhav	Human Computer Interaction

Prepared By: Prof. S. J. Vibhute

Verified By: Prof. S. S. Redekar

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Use of Google classroom

Name of Faculty: - Prof. S. R. Patil

Subject: - "R" Programming

```
print("welcome r Programming language")
S=6
sum1<-S6+78
print(sum1)
demo<-"hello R Programming"
#this is r studio introduction
demo1<-2+3
demo2<-5+6
print(demo1)
print(demo2)
sessionInfo()
x<-1:10
plot(x)
a=10
A=10
```

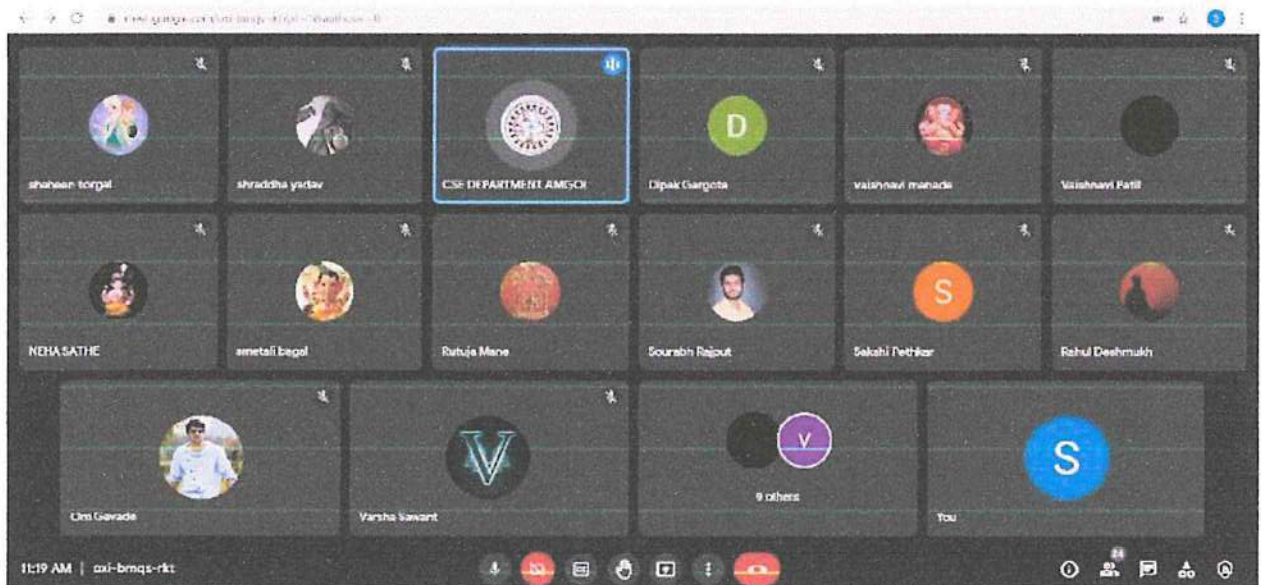
Console output:

```
system locale page: 03000
attached base packages:
[1] stats    graphics grDevices utils    datasets methods base

loaded via a namespace (and not attached):
[1] compiler_4.0.0 tools_4.0.0
> x<-1:10
> plot(x)
> ?plot
> a=10
```

Global Environment:

Variable	Value
a	10
A	10
demo	"hello R Programming"
demo1	5
demo2	11
sum1	134
x	Int [1:10] 1 2 3 4 5 6 7 8 9 10





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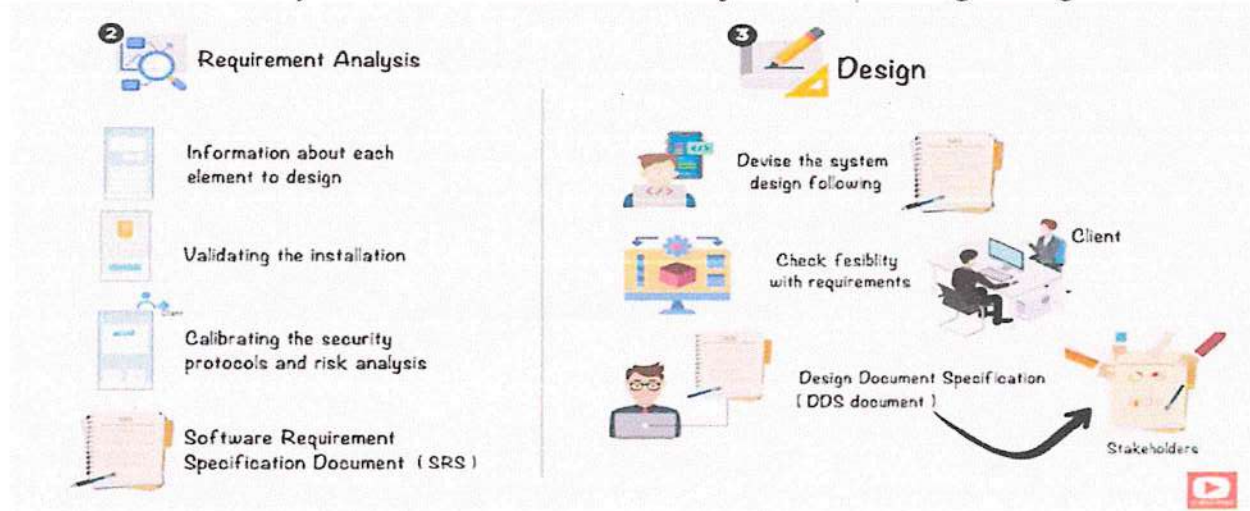
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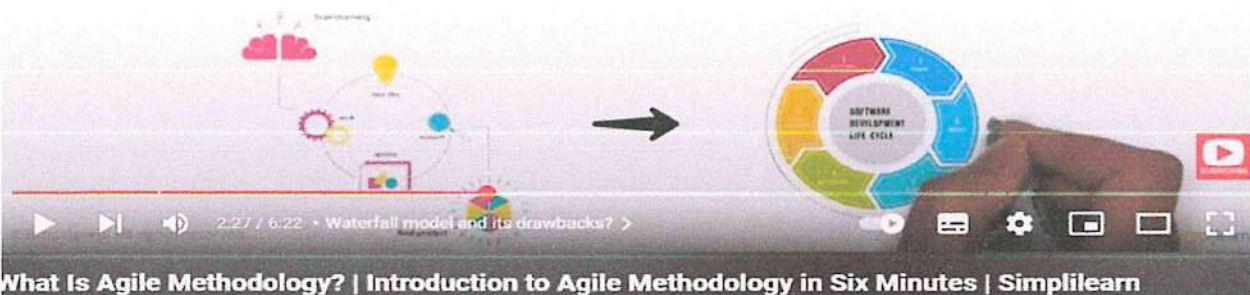
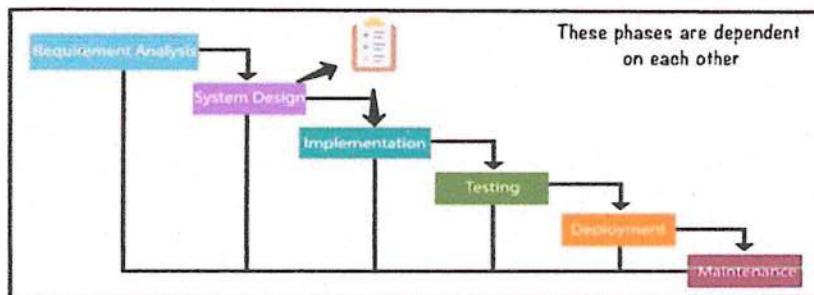
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B. Name of Faculty :- Prof. A. B. Desai

Subject:- Software Engineering



Introduction To Software Development LifeCycle | What Is Software Development? | Simplilearn



Youtube Video Link:- https://www.youtube.com/watch?v=Fi3_BjVzpqk



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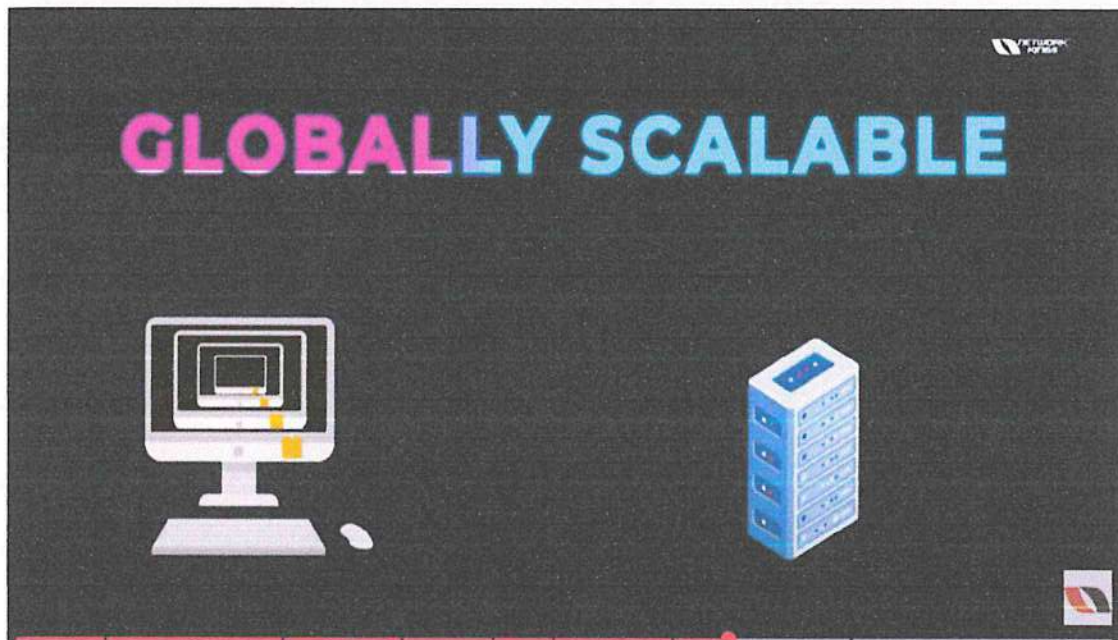
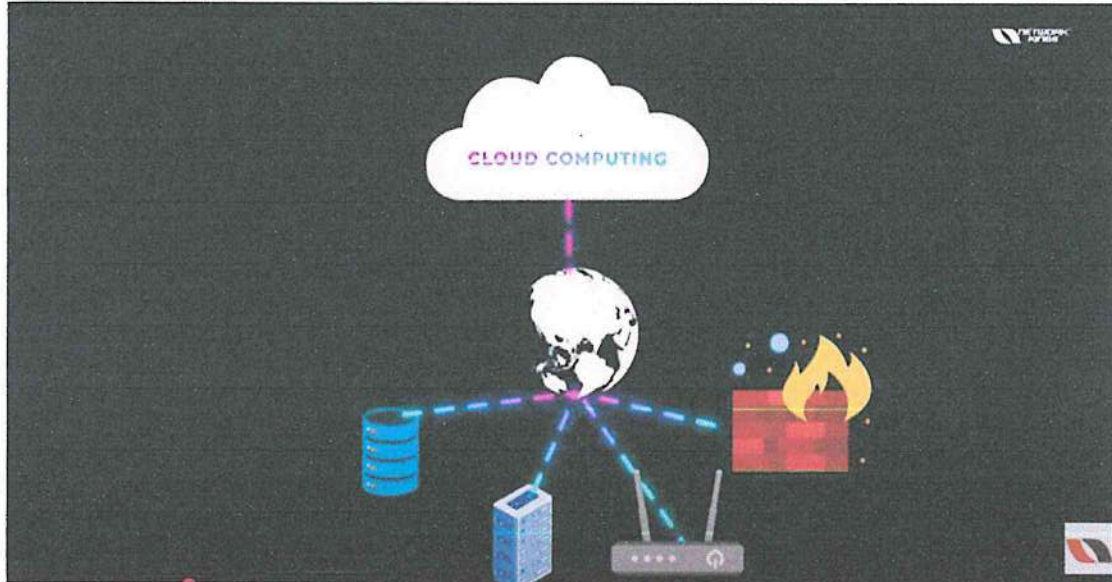


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Use of Animation Video

A. Name of Faculty :- Prof. S. J. Vibhute

Subject:- Cloud Computing



Youtube Video Link:- https://www.youtube.com/watch?v=5IE_zejtBhQ



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1. Use of Flipped Classroom





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C. Name of Faculty :- Prof. S. S. Kibile

Subject:- Computer Architecture and Organization

Magnetic Disk : Introduction



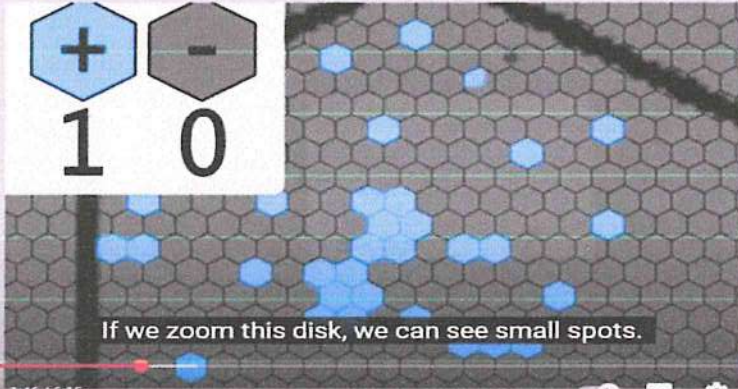
- ** Magnetic Disk is a type of secondary memory that is a flat disc covered with a magnetic coating to hold information.
- ** Magnetic disks are less expensive than RAM
- ** It can store large amounts of data.
- ** It's data access rate is slower than main memory.

Magnetic Disk is a Direct Access Storage Device.

** Data can be modified or can be deleted easily in the magnetic disk memory

Magnetic Disk | Magnetic Disk Working | @quicklearnerss

Magnetic Charges & Spots in Magnetic Disk



If we zoom this disk, we can see small spots.

Magnetic Disk | Magnetic Disk Working | @quicklearnerss

Youtube Video Link:- <https://www.youtube.com/watch?v=v5KjtAQEvHY>



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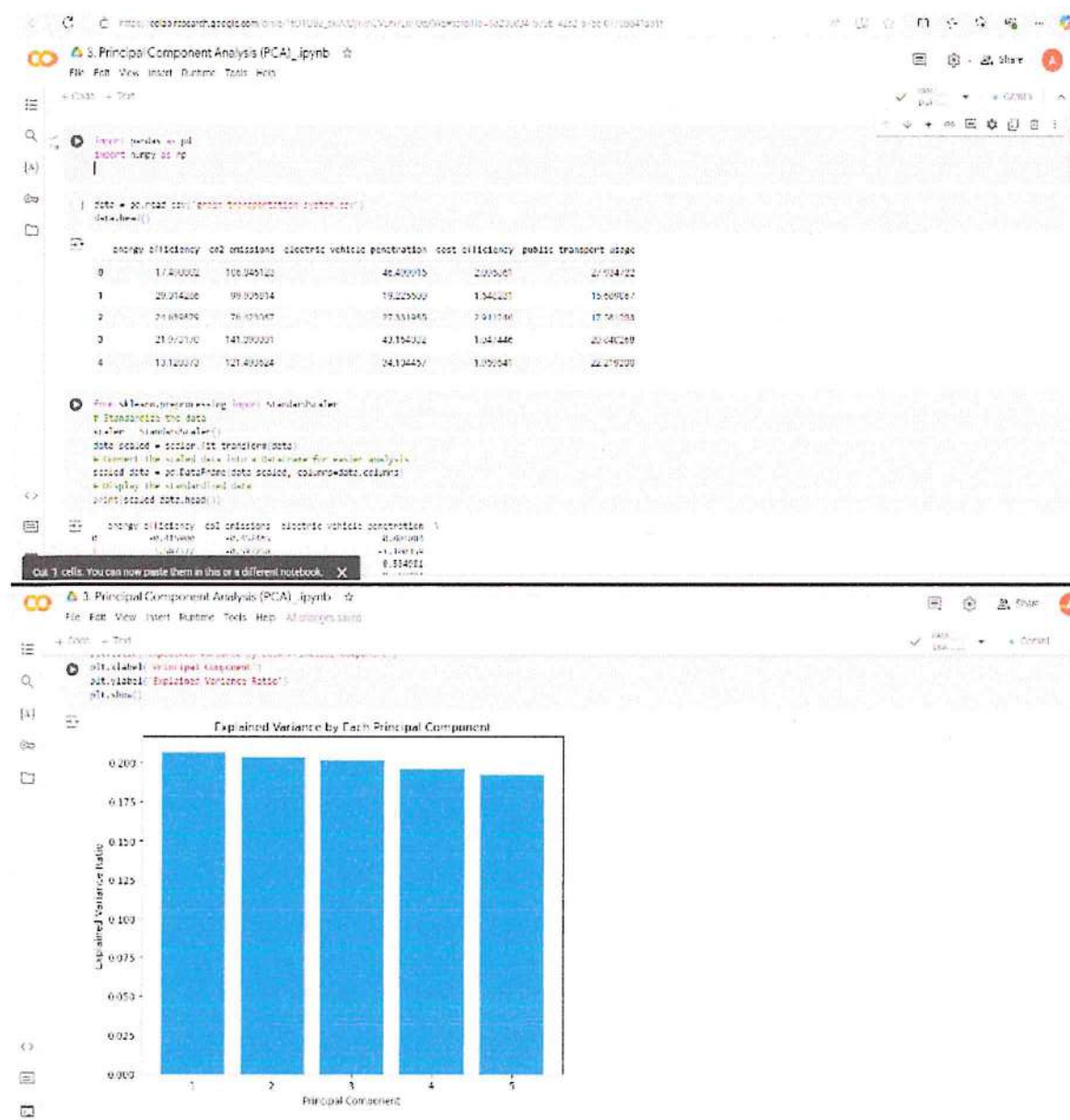
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Use of Virtual Lab



Machine Learning Practical's done on Google Colab



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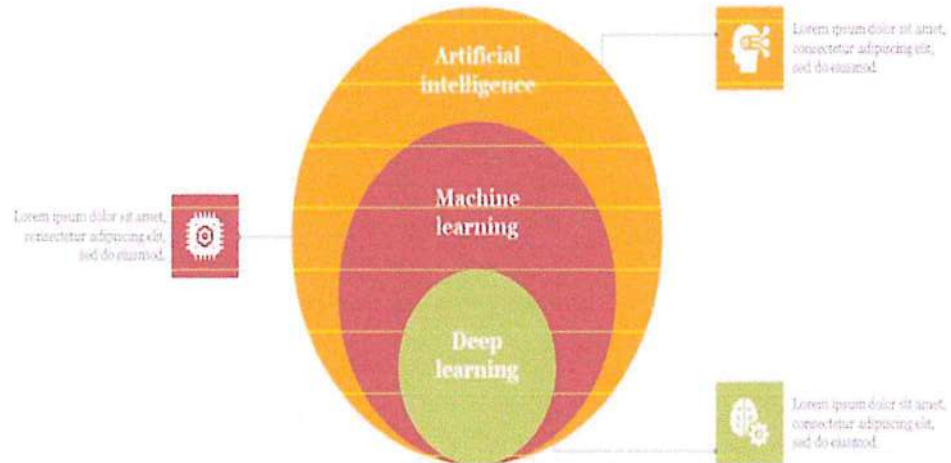
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Use of Power Point Presentation

Machine Learning Presentation PPT





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Use of Power Point Presentation



Consumer Behaviour





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Blockchain technology presentation ppt

Greater Transparency

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Better Security

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Cryptocurrencies

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Increased Efficiency

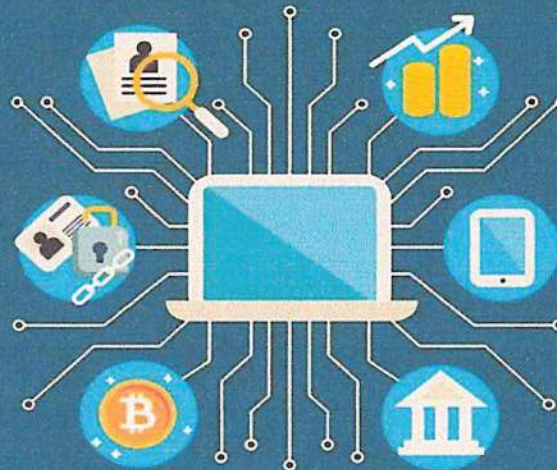
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Improved Traceability

This slide is an editable slide with all your needs.

Baking usage

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List of Blockchain Application Areas



Cryptocurrencies

Write your description here.
Sample text.



Legal

Write your description here.
Sample text.



Banking

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Insurance

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Sample text.



Healthcare

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Trade finance

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Sample text.



Sharing economy

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Internet of Things

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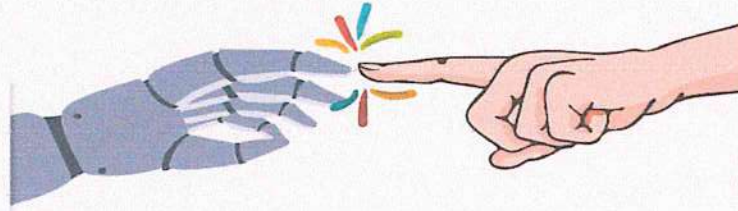
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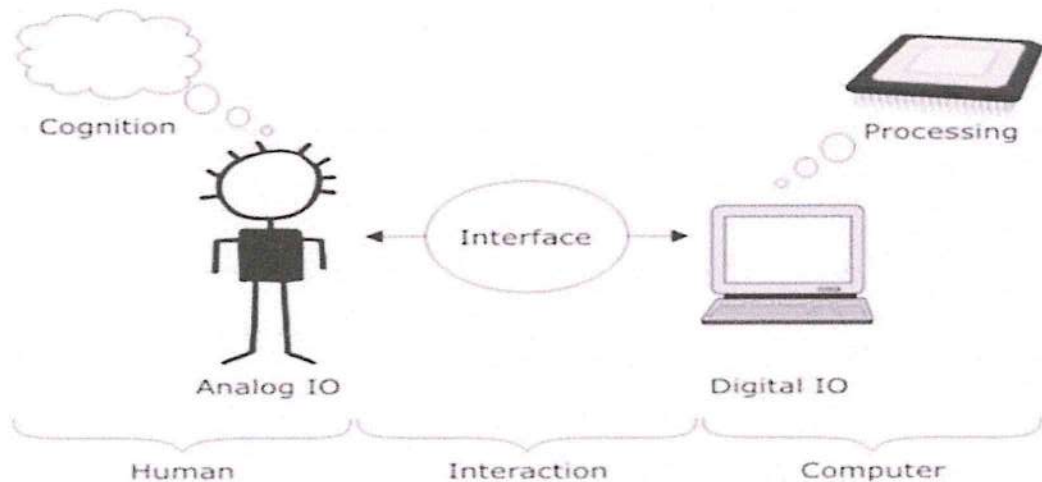
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HUMAN-COMPUTER INTERACTION

What is Human-Computer Interaction (HCI)?



Human-Computer Interaction (HCI) is a multidisciplinary field of study focusing on the design of computer technology and, in particular the interaction between humans (the users) and computers. While initially concerned with computers, HCI has since expanded to cover almost all forms of information technology design.



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Criterion 2 : Teaching-Learning and Evaluation

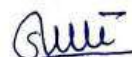
2.3 - Teaching- Learning Process

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process.

Sr. No.	Activity	Name of Faculty	Subject
01	Google classroom	Prof. D. S. Patil	Power System Operation & Control
02	YouTube Channel	Prof. K.R. Jadhav	Basic Electrical and Measurements
		Prof. D .D. Ved	Electronic and Embedded System
03	Socrative App	Prof. A. V .Kumbhar	Technical Aptitude
04	Animations	Prof. V . K . Thombare	Power System
05	Virtual Lab	Prof. A. V .Kumbhar	Measurements
		Prof. S. A. Gaikwad	High Voltage Engg.
		Prof. S. H .Shete	Electrical Machine –I
06	Use of Power Point Presentations	Prof. A. V .Kumbhar	Electric Traction
		Prof. K.R. Jadhav	HVDC
07	Flipped Classroom	Prof. S .A. Shankardas	Power Electronics
		Prof. D .S. Patil	Electrical Machine Design
		Prof. A. V .Kumbhar	Measurements
		Prof. K.R. Jadhav	HVDC
08	Group Discussions	Prof. D .D. Ved	Analog Electronics


Prepared By : Prof. D. D. Ved




Verified By : Prof. S. H. Shete



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Use of Google classroom

The screenshot shows the Google Classroom interface for the class "T.Y .B.Tech AMGOI". At the top, there is a header with the class name and a background image of a laptop and a smartphone. Below the header, there is a section for sharing the class link, followed by a list of posts. The first post is by Kshitija Bargale, dated 29 Jan 2022, titled "Kshitija Suresh Bargale-PSOC Experiment". The second post is a new assignment titled "New assignment: chapter 3", dated 30 Jun 2021. Below the posts, there is a navigation bar with icons for Stream, Classwork, and People. The Stream tab is selected, showing a list of assignments: "chapter 3" (Posted 30 Jun 2021), "Chapter no 6" (Posted 24 Jun 2021), "Chapter no 5" (Posted 18 Jun 2021), "chapter no 4" (Posted 4 Jun 2021), "chapter no 2" (Posted 16 May 2021), "chapter 1 V.K.Mehta" (Posted 16 May 2021), and "chapter 1" (Posted 27 Apr 2021). At the bottom, there is a navigation bar with icons for Stream, Classwork, and People.

T.Y .B.Tech AMGOI

Share with your class...

Kshitija Bargale
29 Jan 2022
Kshitija Suresh Bargale-PSOC Experiment
Add class comment

New assignment: chapter 3
30 Jun 2021
Add class comment

Stream Classwork People

T.Y .B.Tech AMGOI

chapter 3
Posted 30 Jun 2021

Chapter no 6
Posted 24 Jun 2021

Chapter no 5
Posted 18 Jun 2021

chapter no 4
Posted 4 Jun 2021

chapter no 2
Posted 16 May 2021

chapter 1 V.K.Mehta
Posted 16 May 2021

chapter 1
Posted 27 Apr 2021

Stream Classwork People



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ASHISH PATIL



Abhijeet Jadhav



Akshata Saptasagare



Daud Mulla



Juhi Mankumbare



Jyotsna Bansode



Komal Thorat



Stream



Classwork



People



Komal Thorat



Kshitija Bargale



Monika Patil



Nilesh Lad



Omkar Khurd



Omkar Magdum



Pooja Madane



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Stream



Classwork



People



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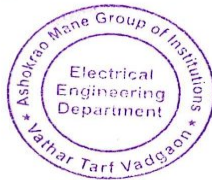
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Use of YouTube Channel

SR N O.	NAME OF STAFF	TOPIC	LINK	QR
1	Prof.K.R.Jadhav	Ohm's Law	https://youtu.be/kt43eHgtgQA?si=e8H7C_FbV43v4Uuv	
2	Prof.K.R.Jadhav	Resistors in series	https://youtu.be/rCszD8YiU7A?si=pQN_EsljuylbWKdy	
3	Prof.K.R.Jadhav	Resistors in Parallel	https://youtu.be/5T-Zvv6aXeY?si=4ANe-nm4IFV5FrSw	
4	Prof.K.R.Jadhav	Problems on Equivalent Resistance	https://youtu.be/TQ_EwI3pGTU?si=ljcliqecBt4626xo	
5	Prof.K.R.Jadhav	Problems on Parallel circuit	https://youtu.be/TLGQ5isSjT8?si=zyJaAnEYolMjwXjT	





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6	Prof.K.R.Jadhav	Problems on Series circuit	https://youtu.be/x3MIblw3jSg?si=OvfJFjX7ZfzoR7mO	
7	Prof.K.R.Jadhav	Statement of KVL & KCL	https://youtu.be/f6vMpo3o7k0?si=PSKAOimSJ-FsvVJB	
8	Prof.K.R.Jadhav	Problems on KVL	https://youtu.be/7MH8Ry_VFKc?si=5BVYEevaFEJOaFZg	
9	Prof.K.R.Jadhav	Problems on KCL	https://youtu.be/KoU92zCK0MY?si=1mpcPIzGBXY96k6S	
10	Prof.K.R.Jadhav	PSM & TSM	https://youtu.be/jvjFPvRyi5Q?si=24Ywt4N0um_Q-YQa	



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11	Prof.K.R.Jadhav	Induction Directional relay	https://youtu.be/0aLK2S-Xboc?si=Ur1Z8ogPKseUITLY	
12	Prof.K.R.Jadhav	Thermal relay	https://youtu.be/Q-Mr_FTKoaw?si=gp8O4JRnUP-yl17e	
13	Prof.K.R.Jadhav	Static relay	https://youtu.be/uo_8IRzrmde?si=RSGEpRwiFi2sKBDa	
14	Prof.K.R.Jadhav	Microprocessor Relay	https://youtu.be/5gr31QB-m2E?si=9DAF71Xa9fl1kDNY	
15	Prof.K.R.Jadhav	Distance and Impedance relay	https://youtu.be/zBTCNTDS6JA?si=vAYRcKJ72H6MIs97	





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16	Prof.K.R.Jadhav	Differential relay	https://youtu.be/ZUKac_LAAws?si=nrpITAutlyZ_xBcl	
17	Prof.K.R.Jadhav	Reverse Power Protection	https://youtu.be/9UfdyO8TxvQ?si=oyV_MlfVLvdbZYZW	
18	Prof.K.R.Jadhav	Calibration on of Single Phase Electronic Energy meter	https://youtu.be/Rl5QpVxeDZI?si=DJJiIDA2ectjVGoi	
19	Prof.K.R.Jadhav	Measure Insulation Resistance By Using Megger	https://youtu.be/rBFQe1gh5U?s=hD5iVVwFjhgsH5HP	
20	Prof.K.R.Jadhav	Range Extension By Using CT	https://youtu.be/q5UbSHNv6Ug?si=z9qQQsMtoprRwwye	





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21	Prof.K.R.Jadhav	Single Phase Power Measurement	https://youtu.be/7laUpFn79IE?si=aKeWVc8gjOtlhZEg	
22	Prof.K.R.Jadhav	Measurement of AC and DC Quantities	https://youtu.be/pCUomptvk3A?si=LRXlr0rECBKR09L_	



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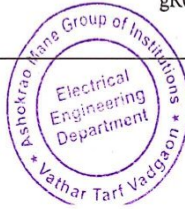
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SR. No.	NAME of Staff	Topic	Link	QR
1	Prof. D. D. Ved	Embedded C program for LED Blinking	https://www.youtube.com/watch?v=eTVctkHFZks&list=PLr9oy0_1y2w1eciiHgR0ILB9a2CbKNXCI&index=1	
2	Prof. D. D. Ved	Programs on Timers of 8051	https://www.youtube.com/watch?v=gJRtHhmcaHA&list=PLr9oy0_1y2w1eciiHgR0ILB9a2CbKNXCI&index=2	
3	Prof. D. D. Ved	Programs on 8051	https://www.youtube.com/watch?v=MxENp61axig&list=PLr9oy0_1y2w1eciiHgR0ILB9a2CbKNXCI&index=3	
4	Prof. D. D. Ved	Timers & counters of 8051	https://www.youtube.com/watch?v=K6NNZKYLCTc&list=PLr9oy0_1y2w1eciiHgR0ILB9a2CbKNXCI&index=4	
5	Prof. D. D. Ved	Max 232	https://www.youtube.com/watch?v=YSdc5knSKfE&list=PLr9oy0_1y2w1eciiHgR0ILB9a2CbKNXCI&index=9	
6	Prof. D. D. Ved	I2C Communication	https://www.youtube.com/watch?v=FN8qFtYpo&list=PLr9oy0_1y2w1eciiHgR0ILB9a2CbKNXCI&index=10	





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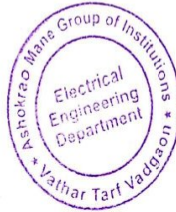
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7	Prof. D. D. Ved	PCI	https://www.youtube.com/watch?v=87tE1S95upU&list=PLr9oy0_1y2w1eciiHgR0ILB9a2CbKNXCI&index=11	
8	Prof. D. D. Ved	Interfacin Input and Output devices	https://www.youtube.com/watch?v=VdVfpDJELmk&list=PLr9oy0_1y2w1eciiHgR0ILB9a2CbKNXCI&index=12	
9	Prof. D. D. Ved	DAC interfacing	https://www.youtube.com/watch?v=sf-gS0ndLHo&list=PLr9oy0_1y2w1eciiHgR0ILB9a2CbKNXCI&index=14	
10	Prof. D. D. Ved	Class A Power Amplifier	https://www.youtube.com/watch?v=APKGIRj-CBM&list=PLr9oy0_1y2w3hbKfTp1rgWOn27jeC52Gj&index=3	
11	Prof. D. D. Ved	Feedback Amplifiers	https://www.youtube.com/watch?v=2uVm8uITg44&list=PLr9oy0_1y2w3hbKfTp1rgWOn27jeC52Gj&index=4	

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MS. D. D. Ved



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Use of Socrative App



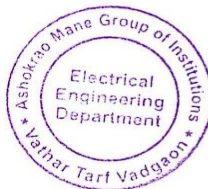
Name _____

Date _____

electrical

Score _____

1. In a current-voltage relationship graph of a linear resistor, the slope of the graph will indicate
 - (A) conductance
 - (B) resistance
 - (C) resistivity
 - (D) a constant
2. Ohm's law is not applicable to
 - (A) dc circuits
 - (B) high currents
 - (C) small resistors
 - (D) semi-conductors
3. In case of ideal current sources, they have
 - (A) zero internal resistance
 - (B) low value of voltage
 - (C) large value of current
 - (D) infinite internal resistance
4. A practical current source can also be represented as
 - (A) a resistance in parallel with an ideal voltage source
 - (B) a resistance in parallel with an ideal current source
 - (C) a resistance in series with an ideal current source
 - (D) none of the mentioned
5. If the resistances 3Ω , 5Ω , 7Ω , 9Ω are in series, then their equivalent resistance(Ω) is
 - (A) 24
 - (B) 9
 - (C) 20
 - (D) 32





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6. If the resistances 1Ω , 2Ω , 3Ω , 4Ω are parallel, then the equivalent resistance is?
- (A) 0.46
(B) 0.48
(C) 0.5
(D) 0.52
7. Which of the followings is/are active element?
- (A) Current source
(B) voltage source
(C) resistance
(D) both A and B
8. Capacitor does not allow the sudden change of
- (A) Current
(B) voltage
(C) resistance
(D) Both A and B
9. KCL works on the principle of which of the following
- (A) law of conservation of charge.
(B) law of conservation of energy.
(C) both
(D) None of the above
10. KVL works on the principle of
- (A) law of conservation of charge.
(B) law of conservation of energy.
(C) both
(D) None of the above
11. Rms value is defined based on which of the following?
- (A) Heating effect
(B) Charge transfer
(C) Current
(D) Voltage





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electrical

October 18, 2023 10:35 AM

STARDELTA

Student Name	Score (%)	Score (#)
		11
02 SANKET	90.91	10
04 TAHIR DHAGE	54.55	6
05, DNYANESHWAR	27.27	3
06,SHUBHAM	45.45	5
07 Swaranjali	81.82	9
09 Pratiksha	45.45	5
11 ATISH ANIL KHOT	90.91	10
12 Vishwajit Korane	90.91	10
15Anushka	81.82	9
18 ATHARV NANGARE	72.73	8
19-Chaitanya	72.73	8
20MEGHARAJ	72.73	8
20MEGHARAJ	9.09	1
21- PRACHI	81.82	9
24, Sakshi Patil	90.91	10
25 Uvesh Tamboli	54.55	6
25 soham patil	63.64	7
28 tushar	81.82	9
28-Tushar	18.18	2
29 Abhishek	90.91	10
30 ANIKET P SHINDE	81.82	9
32 ADITYA	63.64	7
37 KOMAL	72.73	8
38 Omkar Dandavate	9.09	1
41 , Sushant bajirao havaladar	54.55	6
41 sushant	0	0
43Nirjala	54.55	6
44 NAGESH	81.82	9
48- Nilam	81.82	9
49 shraddha	90.91	10
50 shreyas	81.82	9
50 shreyas	36.36	4
51 Tanmay	63.64	7
52 Vaishnavi	63.64	7
53PRANAV	72.73	8
54 UVESH TAMBOLI	81.82	9
54 Uvesh Tamboli	0	0
56 Sopiya	36.36	4
56 sopiya	72.73	8
57 pradnya	72.73	8
58 Gayatri	72.73	8





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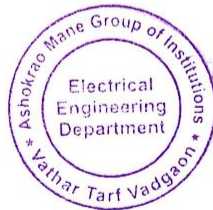
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59 Prachi	72.73	8	
61 Shubham	18.18	2	
63 Kiran	81.82	9	
64 Prathamesh	54.55	6	
65 Aditya kamble	27.27	3	
67 Farman.	72.73	8	
69 Sakshi	81.82	9	
70 Rasika	63.64	7	
71 Aditya	72.73	8	
72 Tejas	9.09	1	
72,Tejas	27.27	3	
73 Pruthviraj	54.55	6	
75 shivraj	27.27	3	
ANIS	63.64	7	
Akanksha -45	81.82	9	
Akanksha-45	0	0	
Akanksha-45	0	0	
ISHWARI 10	63.64	7	
Nihal	81.82	9	
Roll No 46 Aparna patil	81.82	9	
Roll No-40, Sonali	90.91	10	
Roll No. 26 Sushant	63.64	7	
Roll No.26 Sushant	0	0	
Roll no	0	0	
Roll no.-17 Pranav	81.82	9	
Roll-39, Sayali Bajirao Ekshing	90.91	10	
Saloni Uttam Patil	54.55	6	
Saloni Uttam Patil	0	0	
Sayali -03	81.82	9	
Class Scoring	58.05	6.39	

Report Generated: October 18, 2023 5:05 AM +00:00





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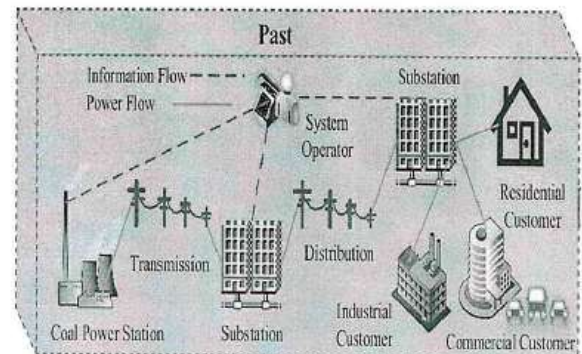
Use of Animations

Unit 1 Electrical Power Generation

By
Vinaya K Thombare (chavan)
Assistant Professor
Electrical Engineering Department
AMGOI Vatar

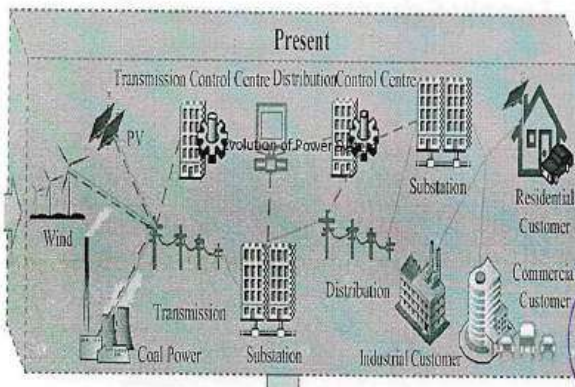
Architecture of Past Electric Grid

Evolution of Power System- PAST



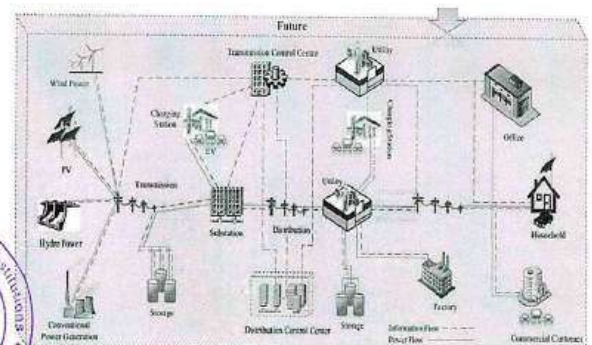
Architecture of Present Electric Grid

Evolution of Power System- PRESENT



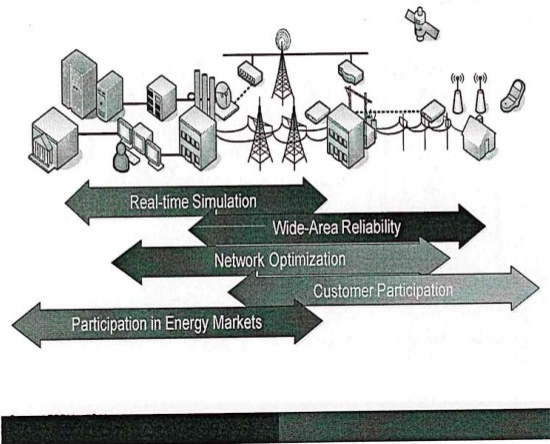
Architecture of Future Smart Electric Grid

Evolution of Power System- FUTURE





Changing the Face of the Grid

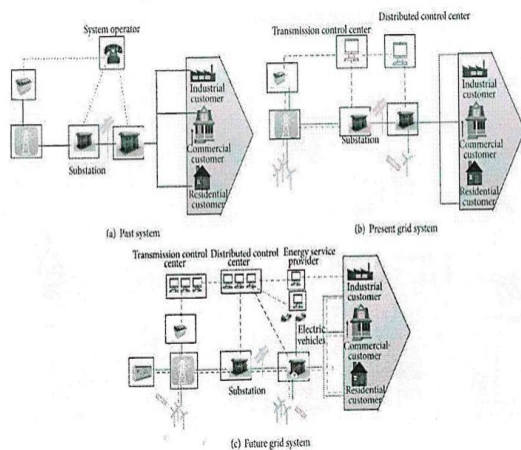


comparison between smart grid and conventional grid

Conventional grid	Smart grid
Electromechanical	Digital
One-way communication	Two-way communication
Centralized generation	Distributed generation
Few sensors	Sensors throughout
Manual monitoring	Self-monitoring
Manual restoration	Self-healing
Failures and blackouts	Adaptive and islanding
Limited control	Pervasive control
Few customer choices	Many customer choices

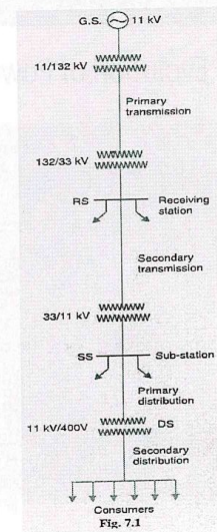
6

Past, Present and Future Grid System



10

Typical Power Supply Scheme



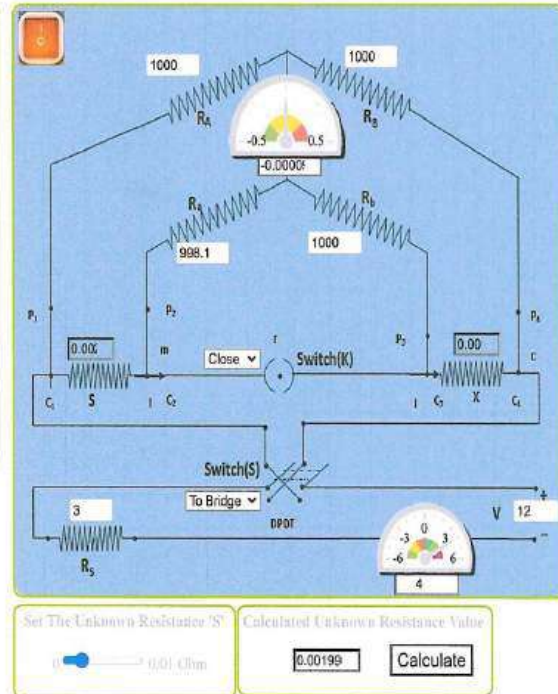


Use of Virtual Lab

Measurement of Low Resistance by Kelvin Double Bridge

Procedure:

1. Set the voltage ($V=12V$) and switch on the board. Keep Switch(S) in 'Short' mode and adjust the rheostat(R_s) to maintain the current 2A, 3A, 4A or 5A in the circuit.
2. Then set Switch(S) to 'Open' mode and set Low resistance(S) value within 0.001 to 0.01 ohm from 'Set The Unknown Resistance 'S' box.
3. Then set Switch(S) to 'Bridge' mode and Switch(K) to 'Open' mode.
4. Vary the values of R_A , R_B , R_a and R_b from the control box below or directly put the values in the boxes of respective elements to get a zero deflection on the millivoltmeter pointer.
5. Now, set Switch(K) to 'Close' mode and again vary the values of R_A , R_B , R_a and R_b to get a zero deflection on the millivoltmeter pointer.
6. If "NULL" is achieved, click on 'Calculate' on 'Calculated Unknown Resistance Value' box to observe calculated value of unknown resistance (S).



CONTROLS	
R_A : 1 Ohm	1000 Ohm
R_B : 1 Ohm	1111 Ohm
R_a : 1 Ohm	1000 Ohm
R_b : 1 Ohm	1111 Ohm





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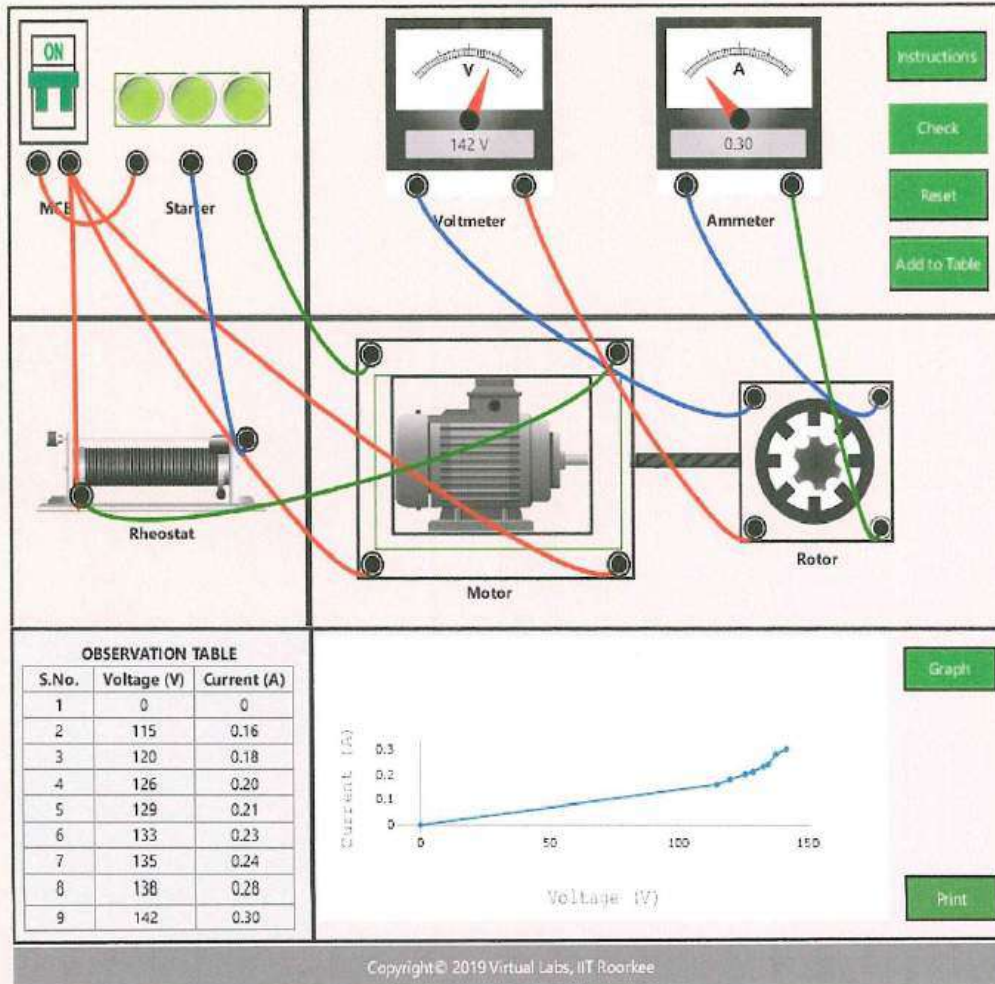
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CRITICAL FLASH OVER OF A SPHERE GAP USING IVG

SET PARAMETER VALUES: Sphere Diameter: 2 cm Sphere Gap: 0.05 cm Voltage/Stage: 0.79 kV

OBSERVATION TABLE											
Temperature: °C	Humidity:		Pressure:		mb						
Voltage Level / Stage (kV)	Pulse No.										Probability of Flashover
	1	2	3	4	5	6	7	8	9	10	
0.79											

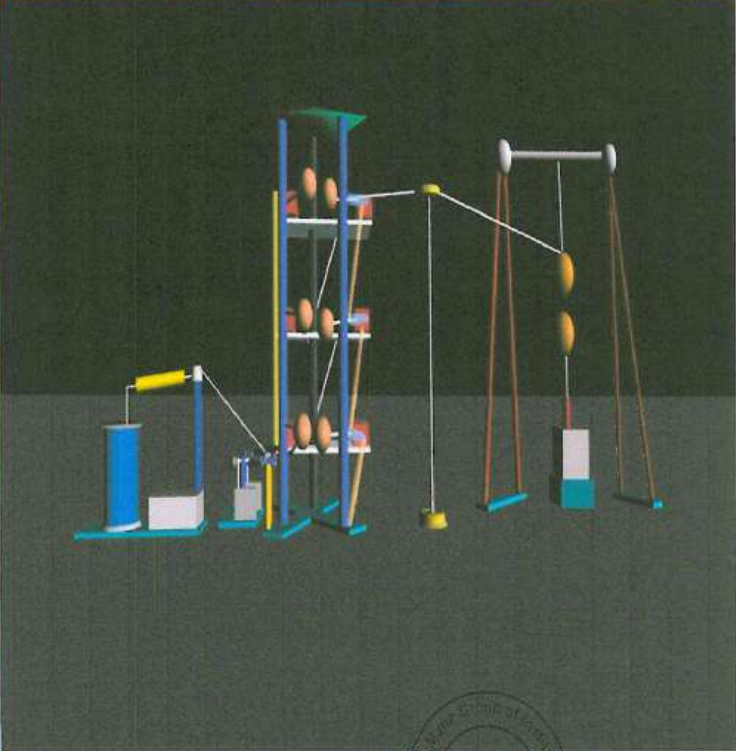
* F - Flashover * W - Withstand

Voltage for 50% Flashover:

SIMULATOR

INSTRUCTIONS

EQUIVALENT CIRCUIT DIAGRAM



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labs.iiitkgp.ernet.in/vhvexp7/impulse-voltage-generator-webgl-simulator.html





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Use of Power Point Presentations

BTEEE704B: ELECTRIC TRACTION & UTILIZATION

UNIT I: ELECTRIC TRACTION SYSTEM

UNIT II: POWER SUPPLY FOR ELECTRIC TRACTION

UNIT III: TRACTION MOTORS

UNIT IV: TRACTION CONTROL

UNIT V: TRAIN MOVEMENT AND BRAKING

UNIT VI: ILLUMINATION

Prof. A. V. Kumbhar

Mr. A. V. Kumbhar (AMGOI)

UNIT I: ELECTRIC TRACTION SYSTEM

- Electrical transmission: Electrical transmission system employing D.C. generator
- Electrical transmission system employing D.C. series motor
- Electrical transmission system employing 3 phase alternator supplying D.C. traction motors
- Electrical transmission employing 3 phase alternator supplying induction motors
- Choice of traction system
- battery drive, hybrid drive
- flywheel drive
- tramways
- trolley bus.
- Track electrification: D.C. System
- single phase low frequency A.C. system
- single phase high frequency A.C. system
- 3 phase A.C. system and composite system.

Mr. A. V. Kumbhar (AMGOI)

Introduction to Electric Traction

- An act of drawing or state of being drawn; propulsion of vehicle is called the traction and the system of traction involving the use of electricity is called the electric traction system.
- The systems of traction may be classified as:
 - 1) The traction systems which do not involve any use of electricity at any stage: NON ELECTRIC traction system. E.g. steam engine drive, IC engine drive etc.
 - 2) The traction systems which involve any use of electricity at some stage or other: ELECTRIC traction system. E.g. diesel electric drive, straight electric drive etc.

Dr. A. V. Kumbhar (AMGOI)

Requirements of ideal traction system:

- 1) High starting tractive efforts in order to have rapid acceleration
- 2) Minimum wear on track
- 3) Equipments capable of withstanding large temporary overloads.
- 4) Easy speed control.
- 5) Pollution free.
- 6) Equipments required should be minimum, of higher efficiency, and low initial and maintenance cost.
- 7) No interference to the communication lines running along the track.
- 8) Self contained and compact locomotive or train unit so that it may be able to run on any route.
- 9) Regeneration of energy while braking.

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SYSTEMS OF ELECTRIC TRACTION

Divided into two main groups:

1) Group consisting of vehicles which receives electric power from a distributing network fed at a suitable point from either central power station or substations.

- a) Systems operating on DC systems
- b) Systems operating on AC systems

2) Group consisting of vehicles which are self contained locomotives.

- a) Diesel electric trains and ships
- b) Petrol electric trucks and lorries
- c) Battery driven road vehicles

Mr. A. V. Kumbhar (201620)

Tramways

- The power is supplied to a tramcar usually at 600 V DC from a single overhead conductor (of positive polarity) fed at a suitable point. From a central power station or substation, the rail track forms a return path.
- The tramcar is provided with at least two driving axles with which proper adhesion and control is possible from Either end. The use of two driving axles leads to use of two motors with series parallel control.
- **Field weakening method** is employed to obtain higher speeds for suburban services.
- Disadvantage of tramways: it needs laying of overhead supply system and track for its use which is costly to Maintain and constitutes a source of danger for other users.
- For very dense traffic in large cities, the tramways is most economical way of transportation.
- The life of tramcar equipment is much more than internal Combustion engine omnibuses.
- Regenerative braking is not possible.

Rheostatic and mechanical braking are employed for normal service.



Trolley Buses

- The serious drawbacks of tramways is lack of maneuverability in congested areas and noise. These are overcome by trolley buses.
- Trolley buses is an electrically operated pneumatic tyred vehicle and fed usually at 600 V DC from two overhead contact wires by means of two collectors.
- The overhead equipment required by the trolley buses is more expensive and more dangerous than That of tramcars.
- **Field weakening method** is employed to obtain Speed control for suburban services.
- A DC compound motor of output 50 to 100 kW Is usually employed.
- Regenerative braking is not employed.



Mr. A. V. Kumbhar

SYSTEMS OF TRACK ELECTRIFICATION

This consist of: 1) DC Systems

- 2) Single phase AC system
- 3) three phase AC system
- 4) Composite system

1) DC Systems:

- In this, electric motors employed for propulsion are generally DC series motors, although the compound motors Are coming into favour for tramways and trolley buses.
- The operating voltage: 600 V to 750 V DC (for tramways and suburban railways) and 1500 V to 3000 V (for main line railways).
- The driving motors receives power from distribution system.
- The distribution system consist of one contact wire (for tramways) and two contact wire (for trolleybuses) which Is fed from substations which are suitably spaced.

Mr. A. V. Kumbhar (201620)



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Department of Electrical Engineering



b) Single Phase to DC System:

- It combines the advantages of two systems viz, DC systems and AC systems
- Single phase high voltage AC system for distribution purpose and DC series motor for propulsion.
- The locomotive carries transformer and converting machinery to step down the voltage and convert into DC.
- The voltage employed for overhead distribution system is 25 kV at normal frequency 50 Hz.
- This system is adopted in all the areas of major traffic density on main lines.
- Gives combination advantage of low cost of single phase overhead distribution system and desirable characteristics of DC series motor.

Mr. A. V. Kumbhar (AMG01)

Different Systems of Traction:

1) Battery Electric Drive:

- The locomotive carries number of batteries which supply power to dc motors employed for driving the vehicle.
- This drive is particularly suited for frequently operated service such as for local delivery of goods in large towns with maximum daily run of 50 to 60 km, traction in industrial works.
- Battery driven vehicle is easy to control and very convenient to use.
- Other advantages are low maintenance cost, absence of fumes (smoke/gas)
- Major limitation: small capacity of batteries, necessity of frequent charging, limited speed range.

Mr. A. V. Kumbhar (AMG01)

2) Fly wheel Drive:

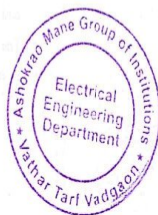
- In this, drive is made of use of Kinetic Energy of flywheel for driving the vehicle.
- The vehicle is equipped with three phase induction motor which is coupled to flywheel and DC generator.
- At each hauling station, three phase induction motor is supplied with power for sufficient time to bring the flywheel to full speed.
- K.E. of flywheel on the way between two hauling stations drive the dc generator which supplies the traction motor.
- K.E. of flywheel is sufficient to move the vehicle over longest distance between two adjacent halting stations.
- Main advantage of this drive is that no electric supply is needed between the two stations

Mr. A. V. Kumbhar (AMG01)

2) Hybrid Drive:

- In this, locomotive drives are powered for part of a journey from overhead dc systems and for other part from batteries.
- This system proves economical where

Mr. A. V. Kumbhar (AMG01)



Signature

Signature
HOD
Electrical Engineering
AMGOI, Faculty of Engineering
Vathar Tarf Vadgaon,
Tal. Hatkanangale, Dist. Kolhapur



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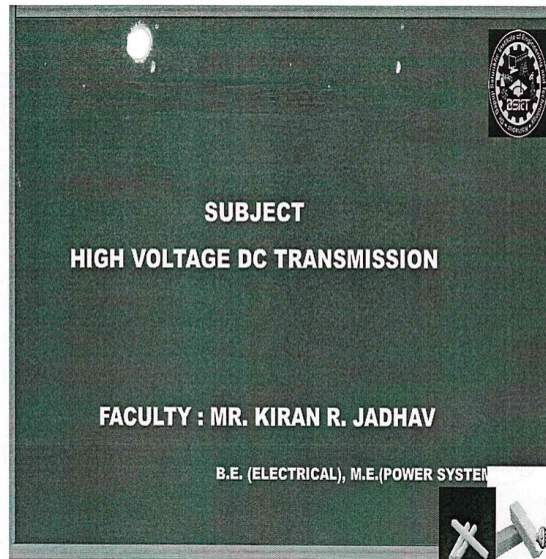
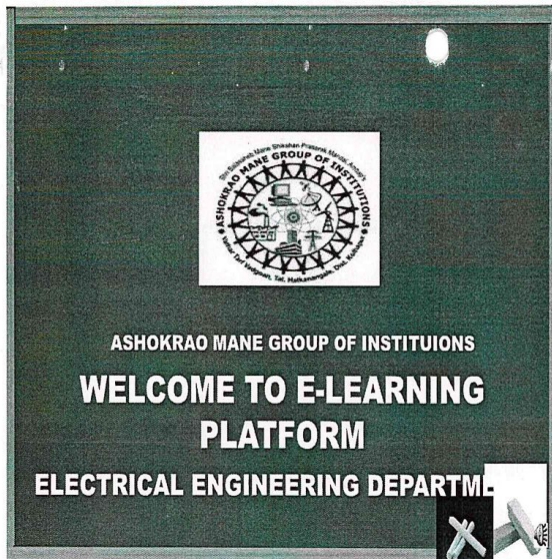
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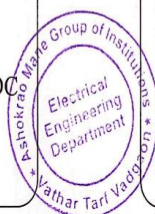


Department of Electrical Engineering



COURSE OUTCOMES

- C504.1 **Analyze** the various types of HVDC links in Transmission
- C504.2 **Analyze** the operation of various converters used in HVDC transmission systems
- C504.3 **Analyze** the Control of HVDC Converter Systems .
- C504.4 **Apply** the HVDC and AC filters to eliminate the harmonics.
- C504.5 **Determine** the Over Voltages and currents in HVDC Systems and their protection methods.



History of HVDC Transmission

The first commercial HVDC scheme was connected between the island of Gotland to the Sweden mainland in 1954. During the subsequent 55 years, great advances in HVDC technology and economic opportunities for HVDC have been achieved.

The first HVDC link to be commissioned in the country was Rihand-Dadri in 1991 connecting Thermal power plant in Rihand, Uttar Pradesh(Eastern Part of Northern Grid) with Dadri(Western Part of Northern Grid). It has a line length of about 816 km. It was built by ABB and is currently owned by PGCIL.



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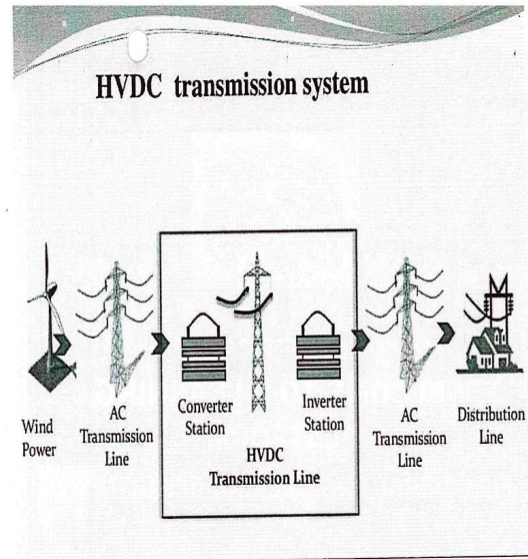
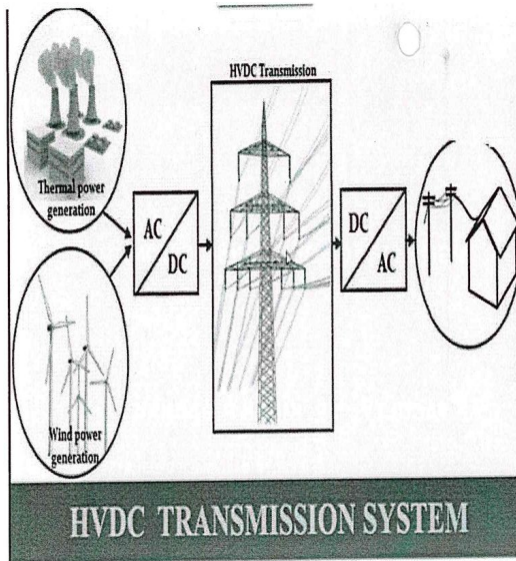
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Department of Electrical Engineering



WHY DC TRANSMISSION ?

- Losses are less in DC transmission while comparing to AC transmission.
- Only two conductors are required for DC with positive and negative polarities.
- DC overhead lines or cables are less expensive.
- DC lines are useful for long distances above 500km.



Limitations of HVAC

- Reactive power loss
- Stability
- Current carrying capacity
- Skin and Ferranti effect
- Power flow control is not possible.



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DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING

Criterion 2 : Teaching-Learning and Evaluation

2.3 - Teaching-Learning Process

2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

Sr.No.	ICT Tool Used	Name of Faculty	Subject
01	Google classroom	Prof. S. A. Bhosale	Control System Engineering
		Prof. S. V. Sagavkar	Digital Signal Processing
		Prof. D. J. Pawar	Network Theory
		Prof. D. M. Mali	Digital Electronics
		Prof. S. S. Patil	Computer Network
02	You tube Channel	Prof. S. A. Bhosale	Python Programming
03	Socrative App	Prof. D. M. Mali	Programming for C
04	Slido App	Prof. S. A. Bhosale	Antennas and Wave Propagation
05	Animations	Prof. S. V. Sagavkar	Microwave Engineering
		Prof. D. J. Pawar	Electrical Machines and Instruments
06	Virtual Lab	Prof. D. M. Mali	Digital Electronics
		Prof. S. V. Sagavkar	Microwave Engineering
07	Power Point Presentation	Prof. S. V. Sagavkar	Signals and Systems, Signal Processing Algorithms and Applications
		Prof. D. J. Pawar	Electrical Machines and Instruments
		Prof. S. A. Bhosale	Fiber Optic Communication
		Prof. D. M. Mali	Employability and Skill Development
		Prof. S. S. Patil	Digital Communication
		Dr. S. V. Vanmore	Microprocessors and Microcontrollers
08	Flipped Classroom	Prof. S. V. Sagavkar	Microwave Engineering
		Prof. D. J. Pawar	Network Theory





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09	Group Discussions	Prof. S. S. Patil	Computer Network
		Prof. S. A. Bhosale	Fiber Optic Communication
		Prof. D. J. Pawar	Network Theory
		Prof. S. A. Bhosale	Antennas and Wave Propagation



HODD.

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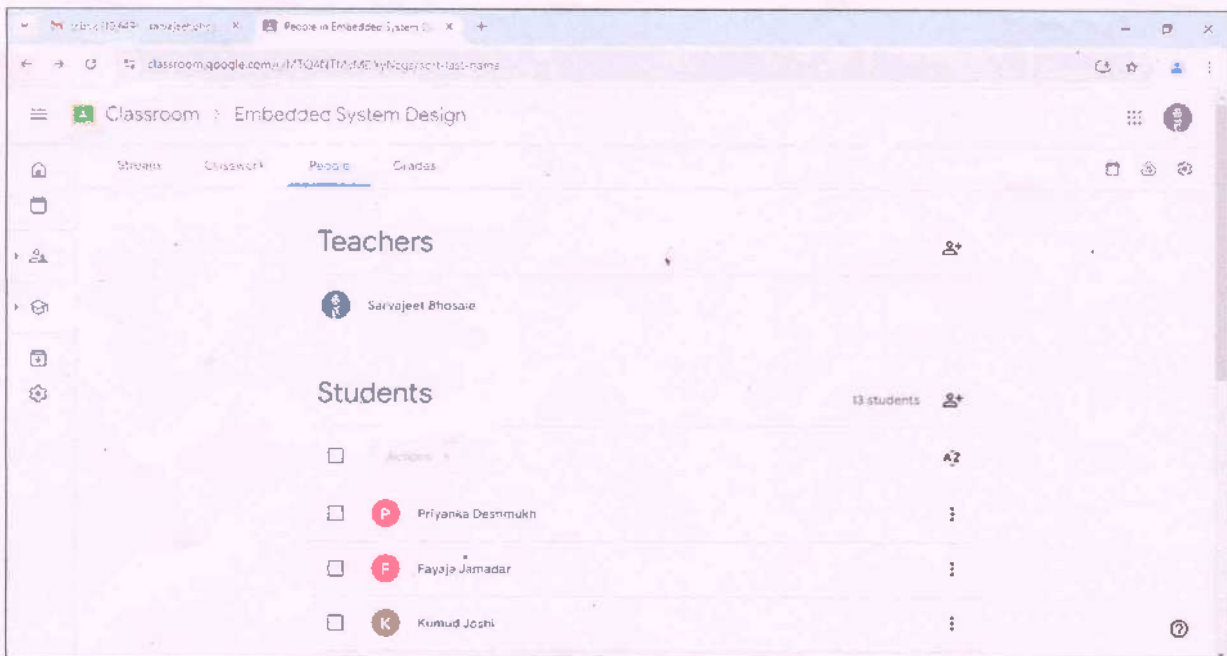
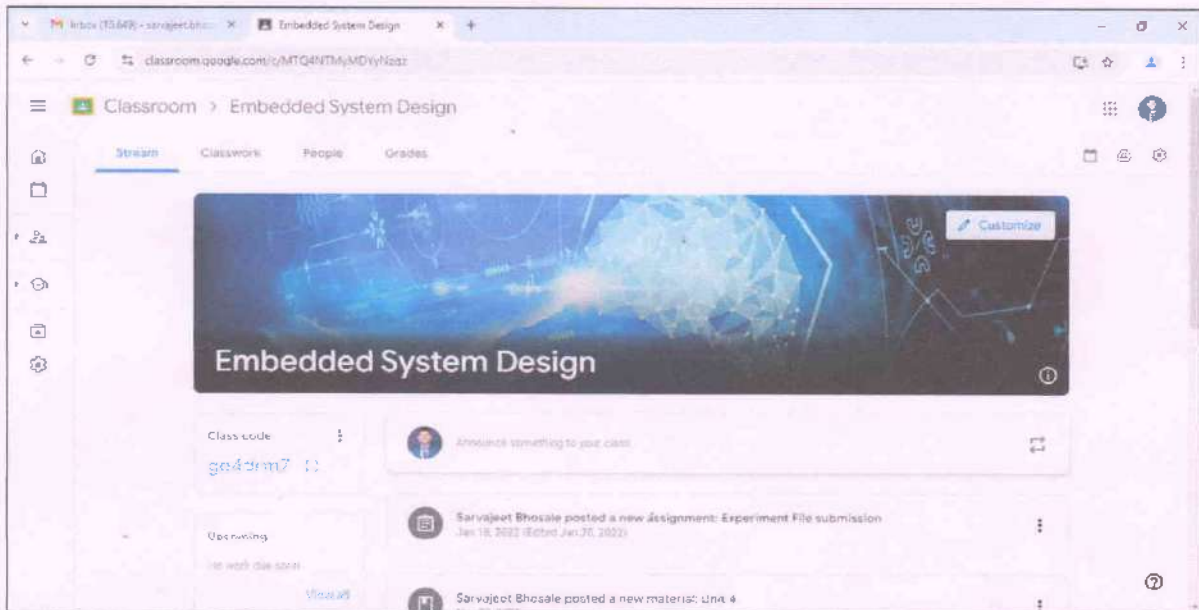
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Google classroom





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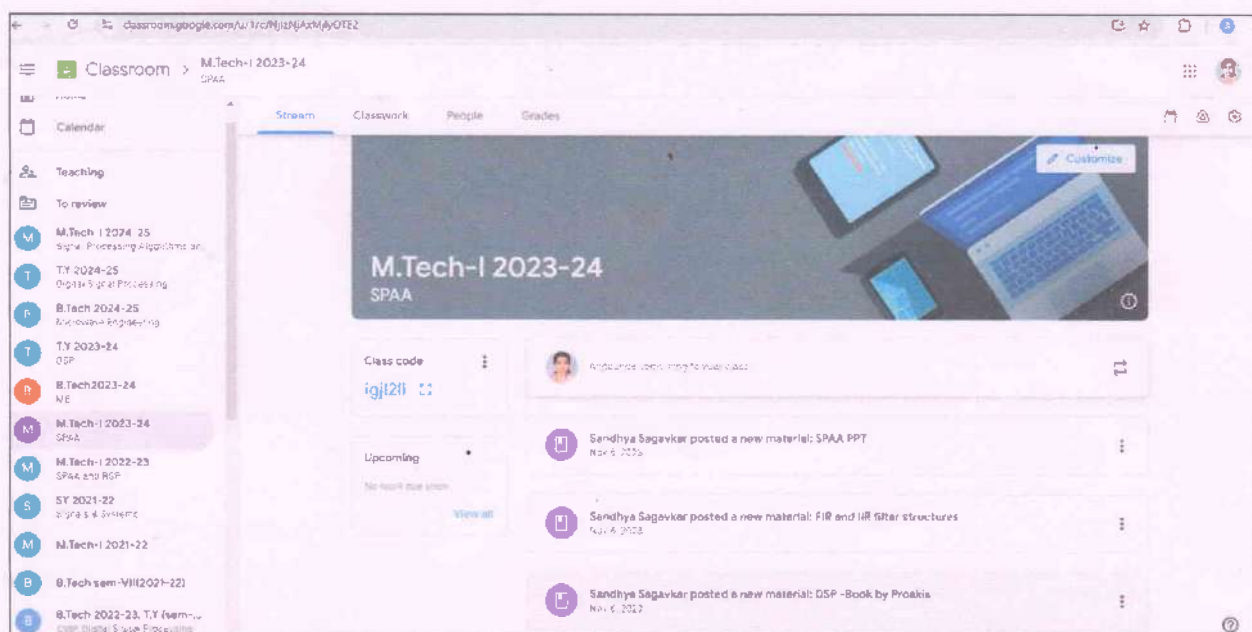
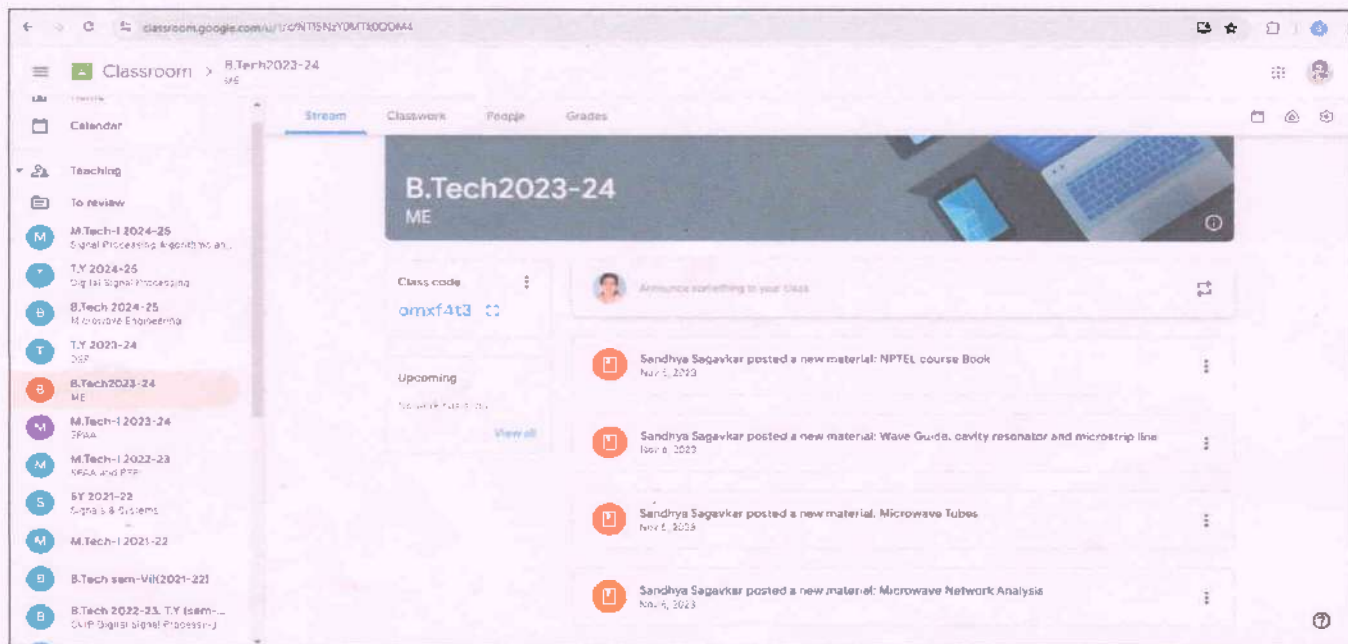
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Google classroom





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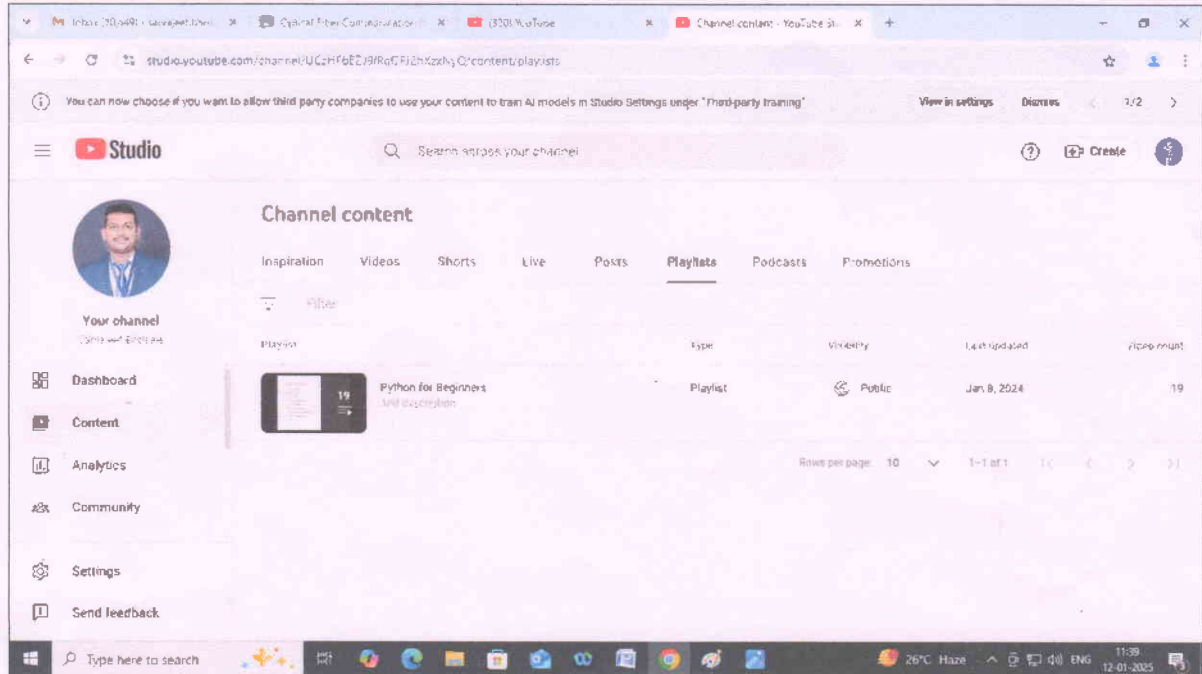
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You tube Channel



FY_CP_test

10 Questions

1. What is used to convert a program written in assembly language to a machine language ?

- 3/50 A interpreter
26/50 B compiler
4/50 C operating system
23/50 D Assembler

2. If a program is error free then program is linked with appropriate libraries?

- 52/53 T True
1/53 F False





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3.is the diagrammatic and pictorial representation of the algorithm for solving the problem?

0/52 A Algorithm

52/52 B flowchart

0/52 C compilation

0/52 D testing

4. C is not a case sensitive language.

3/52 T True

49/52 F False

5. The format specifier used for character is

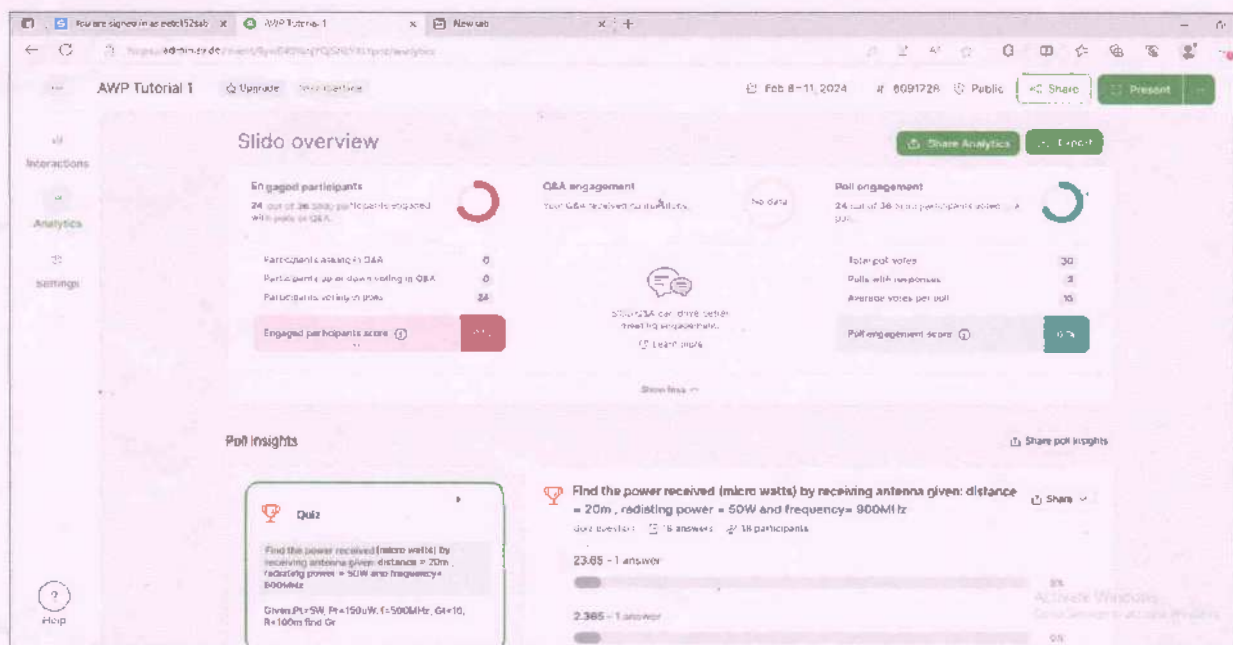
9/52 A %d

35/52 B %c

8/52 C %f

0/52 D %s

Socrative App



Slido App





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Link: <https://youtu.be/Fvud81pYGOg?feature=shared>

Animations

INSTRUCTIONS

Verification of truth table for AND gate

A B

out

TRUTH TABLE

Serial No.	A	B	Output	Remarks
1	1	0	0	Correct
2	1	0	0	Correct
3	0	0	0	Correct
4	0	1	0	Correct
5	1	1	0	Incorrect

Virtual Lab





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GPS Map Camera

Kolhapur, Maharashtra, India

AMGOI, R7WX+2M4, Kolhapur, Vathar Tarf Vadgaon, Maharashtra 416112, India

Lat 16.844979°

Long 74.299249°

28/02/24 10:35 AM GMT +05:30



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AMG

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Affiliated to Dr. Babasaheb Ambedkar Technological University (DBATU), Lonere.

B. Tech. in Electronics & Telecommunication Engineering

• Course- **Electrical Machines and Instruments** (Code - BTES304)

(4 Credits)

• Unit 1 :- DC Machines

Dr. Digvijay J. Pawar

(M- 9665159556)



Power Point Presentation





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Flipped Classroom





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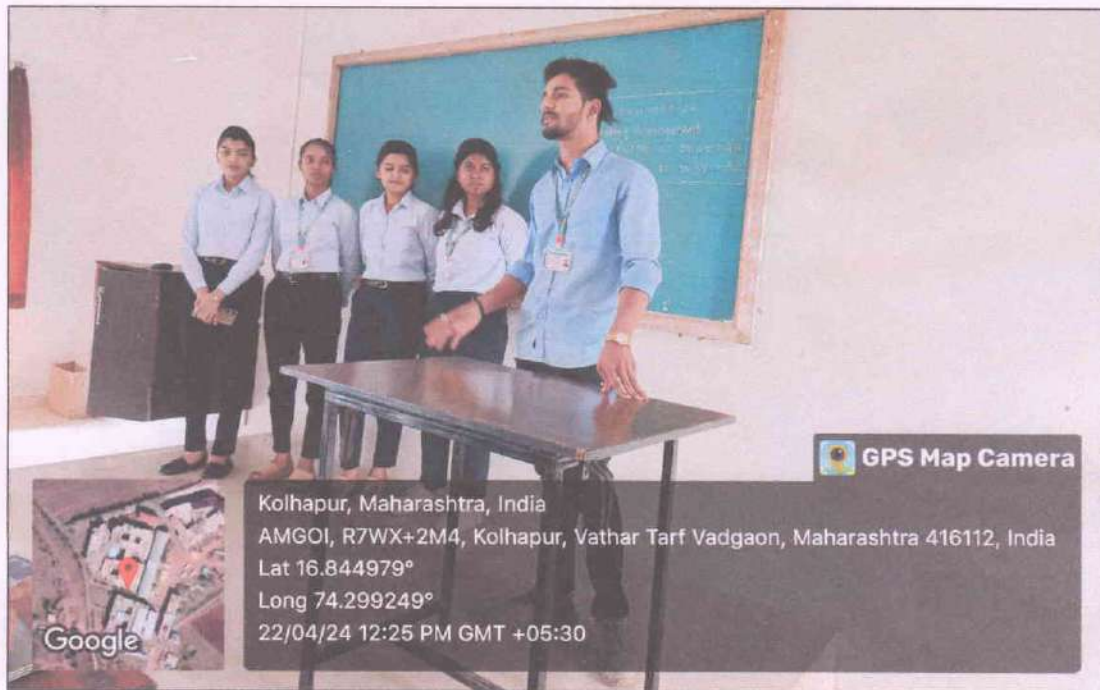
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Group Discussions





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Department of Mechanical Engineering

Criterion 2 : Teaching-Learning and Evaluation

2.3 - Teaching-Learning Process

2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

Sr. No.	ICT Tool Used	Name of Faculty	Subject
01	Google classroom	Prof.P.S.Ladgaokar	Refrigeration and Air Conditioning
02	You tube Channel	Prof.S.S.Petkar Prof.R.A.Pasale	Engineering Graphics, Mechatronics, CATIA,
03	Animations	Prof. R.P.Patil Prof.P.S.Ladgaokar Prof.S.S.Petkar Prof.R.A.Pasale	I.C.Engine, Applied Thermodynamics. Refrigeration and Air Conditioning, Engineering Graphics
04	Power Point Presentation	All Faculty Use PPTs	For All Subjects
05	Flipped Classroom	Prof. R.P.Patil Prof.P.S.Ladgaokar Prof.S.S.Petkar Prof.R.A.Pasale Prof.M.A.Sutar Prof.S.V.Dafade	I.C.Engine, Applied Thermodynamics. Refrigeration and Air Conditioning, Engineering Graphics, Basic Human Rights Mechatronics
06	Group Discussions	Prof.A.K.Patil Prof.Dr.H.V.Shete	Wind Energy Product Design and Development
07	Smart Class room	All Faculty Use PPTs	
08	Snap Talk	Prof.G.R.Gaikwad	Machine Design Non Conventional Design
09	Think Pair And Share	Prof.S.S.Petkar Prof.R.A.Pasale Prof.M.A.Sutar Prof.S.V.Dafade Prof.A.K.Patil Prof.Dr.H.V.Shete	and Air Conditioning, Engineering Graphics, Basic Human Rights Mechatronics Wind Energy Product Design and Development
10	Google Form	For Required data collection	



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Department of Mechanical Engineering

11	GATE Tutor	All Faculty	For All Subjects
12	Chart and Model Based Learning	All Faculty	For All Subjects

Patil

Prepared By: Prof. R.P.Patil

HcH

Verified By: Prof. M.A.Sutar





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Cooperative Teaching/ Peer learning

Students share knowledge or discuss topics in a small group or peer mode as shown in figure. The students are taught to work as a team to improve their knowledge and working skills. Solving assignments/question papers in groups usually during coaching classes/whenever required. The bright students of the class are helping the weak students to solve the problems under the guidance of the course coordinator.



Think, Pair and Share conducted in FY (Engineering Graphics)



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Think, Pair and Share conducted in FY (Engineering Graphics)



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Snap Talk

Faculty members conduct a five minutes snap talk during their lecture hour and review it to help students understand where they stand. Snap talk is a technique that helps the students to improve their English communication and to overcome stage fear.



Snap Talk conducted in TY (Fluid Mechanics & Machinery)



Snap Talk conducted in TY (Heat Transfer)



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Smart Classroom

Almost all faculty members follow advanced lecture methods besides conventional teaching and learning processes. However, chalk and talk methods have traditionally occupied a pivotal place in teaching the students with lucid illustrations. All classrooms are provided with LCD projector and internet facility. Faculty members are using SMART classrooms to provide interactive sessions through video lectures, PPT, Animated videos, and lectures by eminent Professors.

Availability of the internet in the classroom has taken the teaching-learning processes to newer heights as shown in figure. The students make the best use of this facility during the lean times for downloading the latest information/ PowerPoint study materials/ YouTube lectures. Thus, this facility made students listen to lectures of eminent teachers and Nobel laureates across the globe.



Smart Class room providing LCD projector with ppts, videos on screen etc



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Seminars

Seminar is **an event where individuals gather to discuss a specified topic**. Generally, these meetings are interactive experiences led by one or two presenters whose role focuses on guiding the conversation along a delineated path.



Seminars on "career opportunities in product and tool design (Final Year)



Seminars on "Energy conservation(AllFinal Year Students)



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Quiz competitions

It is a contest in which participants test what they know by answering questions on one or more topics. Teachers can organize quiz competition to test the knowledge of students apart from studies or about any topic of syllabus. Students who win the quiz competition should be appreciated by the teachers. The quiz can be used to test the knowledge of students, it is like a quick assessment tool. The quiz culture in schools and colleges must be revived to revamp the education system and provide students with a break from regular classroom learning.



Providing Quiz Competitions of First Year students for Gain knowledge of general Knowledge



Quiz Competitions of First Year students



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Department of Mechanical Engineering

Presentation of papers/posters at various technical events

Poster presentations offer researchers and scholars a unique opportunity to disseminate the findings of their work. While formal paper presentations involve verbal sharing with large groups, poster presentations rely on visual impact to communicate with viewers on a more informal, individual basis.





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Department of Mechanical Engineering

Group Discussion

Group discussion (GD) is a comprehensive technique to judge the suitability of an individual and his appropriateness for admission, scholarship, job, etc. GD assesses the overall personality – thoughts, feelings and behaviour - of an individual in a group.



Group Discussion By Final Year Students(Today's advance Technology)



Group Discussion By Final Year Students(Software Coding and Decoding)



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Department of Mechanical Engineering

Flipped Class

The department always believes in innovating the teaching pedagogy & thus from 2017 onwards introduced flipped classrooms for the students. Flipped Learning is a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space and it ensures that this blended learning approach is used against the traditional learning approach. Here in the **flip class**, students watch online lectures on Laboratory experimental procedures (delivered by our faculty) and carry out the experiments in the laboratory with the guidance of a Lab In charge.



Flip Class conducted in FY (Energy Environment Engineering)



Flip Class conducted in FY (Energy Environment Engineering)



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Department of Mechanical Engineering

Chart and Model-based teaching

The faculty use working models and visual charts in the classrooms which creates an interest in the course among the students as shown in figure.



Model based practical conducted to final year student(Mechatronics)



R.P. Patil

Prepared By: Prof. R.P.Patil

M.A. Sutar

Verified By: Prof. M.A.Sutar





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Department of Applied Science & Humanities

Criterion 2: Teaching-Learning and Evaluation

2.3 - Teaching-Learning Process

2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

Sr. No.	ICT Tool Used	Name of Faculty	Subject
01	You tube Channel	Prof.R.S.Pasale	Engineering Graphics
		Prof.A.A.Jadhav	Engineering Mathematics-
06	Power Point Presentation	Prof .S.C.Chonde	Engineering Chemistry
		Prof.Ankita Kulkarni	Engieering Physics
07	Flipped Classroom	Prof.A.T.Tare	Engineering Mathematics-I

Prof.R.A.Pasale

HoD

(Applied Science & Humanties)





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Department of Applied Science & Humanities

YouTube Channel Page of Prof.R.A.Pasale

The screenshot shows the YouTube channel page for Rahul Pasale. The channel name is "Rahul Pasale" with a subscriber count of 1.41K and 48 videos. The banner image features the text "WAY! RAHUL SIR". The video "Projection of Lines Lecture 1" is highlighted, showing a hand drawing on a board. The video description states: "It covers various topics from Engineering Drawing in simple way. Hello friends. By mistake I mark 30 angle in EV but in problem it is 40. Follow the same procedure and refer the next videos based on Projection of lines for more clarification." The left sidebar shows the YouTube navigation menu with options like Home, Shorts, Subscriptions, History, Playlists, Watch later, Liked videos, and Explore. The bottom section shows a row of video thumbnails.





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YouTube Channel Page of Prof.A.A.Jadhav

The screenshot shows the YouTube channel page for Anuradha Jadhav. The channel name is "Anuradha Jadhav" with the handle "@anuradhajadhav4238". It has 18 subscribers and 13 videos. The channel description says "More about this channel ...more". There is a "Subscribe" button. The channel icon is a black circle with a gold "M" logo. The background of the channel banner is black with the same gold "M" logo. The video thumbnails show "Today's Topic Examples On" for "Integrating Factor Rule Fourth", "Integrating Factor Rule Third", and "Integrating Factor Rule Second".





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Use of ICT tool by Dr.S.C.Chonde





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Use of ICT tool by Prof. A.A.Kulkarni





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Flipped Classroom

A student is giving lecture on 'Tracing of Curves' with diagram presentation and showing her confidence in classroom.





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Another student is giving lecture on 'Rose Curves' with diagram presentation and showing her confidence in classroom.

