MOHAMED SATHAK A J COLLEGE OF ENGINEERING

(Approved by AICTE, New Delhi and affiliated to Anna University, Chennai)
Siruseri IT Park, Egattur, Chennai - 603 103

2.3.2

S.No	Content	Page no.
1.	Internet bill	02
2.	Photograph (LCD, Video Conference, Smart Class, TV), Seminar hall photo	03-06
3.	Sample Chart/ Models	07-09
4.	College Membership • NPTEL • Delnet screen shot • SHODHGANGA • NDL	10-25
5.	Online class index and sample screen shots Online classes	26-36
6.	Sample screen shot for Lesson plan and Course materials from college website	37-42

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INVOICE

Billing Address :			
MOHAMED SATHAK A.J COLLEGE OF ENGINEERING 34, Rajiv Gandhi Salai, OMR, Siruseri IT Park, Siruseri, Chennai 603103		**Invoice No**	OPTCPL-ILL-8634
		Invoice Date	09 Jan 2022
		Due Date	09 Jan 2022
		Billing Period	01 Jan 2022 to 31 Mar 2022
		User Name	MSEC CHENNAI
Contact No :	9941344444	**Plan Name**	1=1 LEASED LINE 100 Mbps
Mail :	khalid@eternaautomation.com	**customer Type**	Business

Previous A	Payments B	Adjustments C	Balance amt D=A-(B+C)	Current Bill E	Amount Payable F=D+E	Other Payments
Rs. 77880.00	Rs. 0.00	Rs. 0.00	Rs. 77880.00	Rs. 155760.00	Rs. 233640.00	0.00

S:No	Particular	HSN/SAC	Amount
1	Internet Leased Line 1=1 100 Mbps	99842	Rs. 132000.00
		Sub Total	Rs. 132000.00
		CGST 9.00%	Rs. 11880.00
		SGST 9.00%	Rs. 11880.00
		Grand Total	Rs. 155760.00

Late Fee shall be levied in the next bill @ 2% of the outstanding amount after payment due to date. Min late fee is Rs.10

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2. ONEPIPE TELECOM PRIVATE LIMITED reserves the right to suspend service in case of non payment by due date. The customer shall be responsible continue to be liable for the charges during any period of suspension
3. ONEPIPE TELECOM PRIVATE LIMITED reserves the right to change, the terms and conditions of the contract by giving notice of change from time to time.

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Name:	MOHAMED SATHAK A.J COLLEGE OF
User Name	MSEC CHENNAI
Invoice No:	OPTCPL-ILL-8634
Invoice Date :	09 Jan 2022
Due Date :	09 Jan 2022
Billing Period :	01 Jan 2022 to 08 Jan 2022
Amt due Rs. :	Rs. 233640.00

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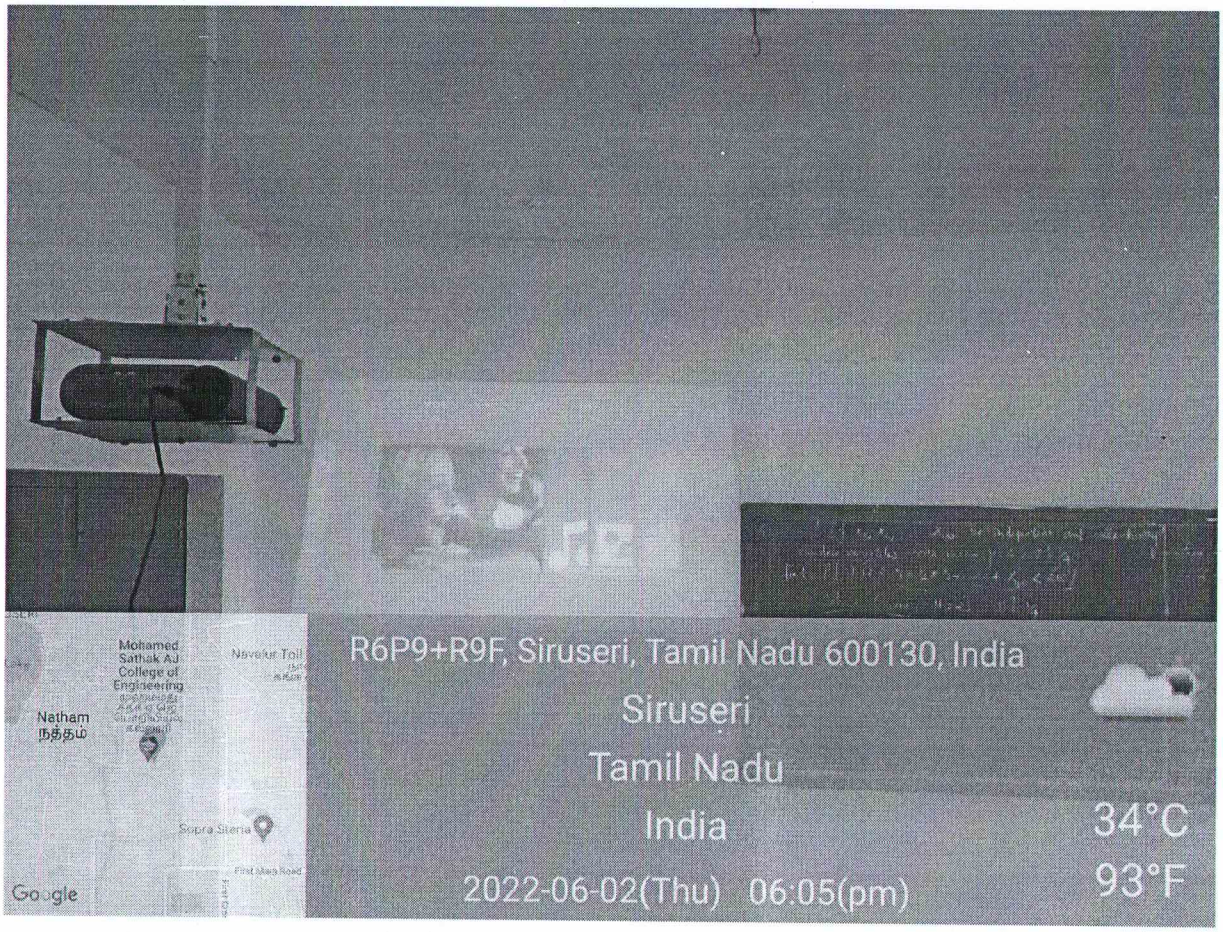

LCD Projector in Class Room

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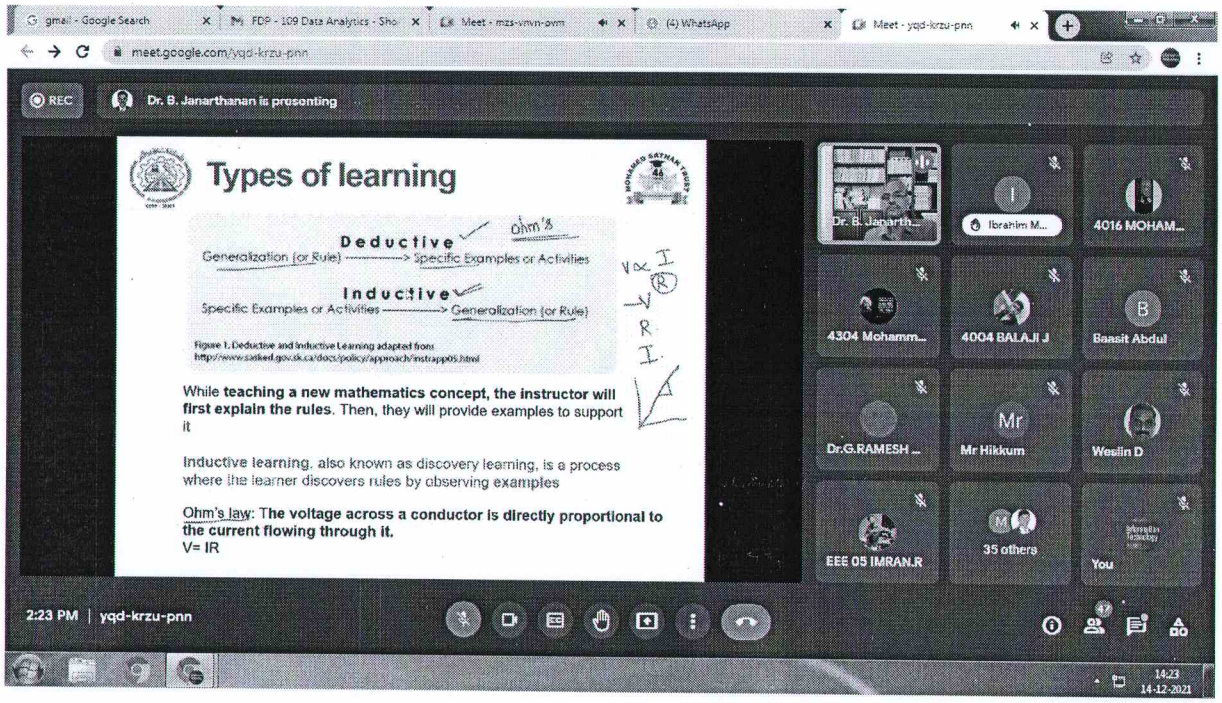

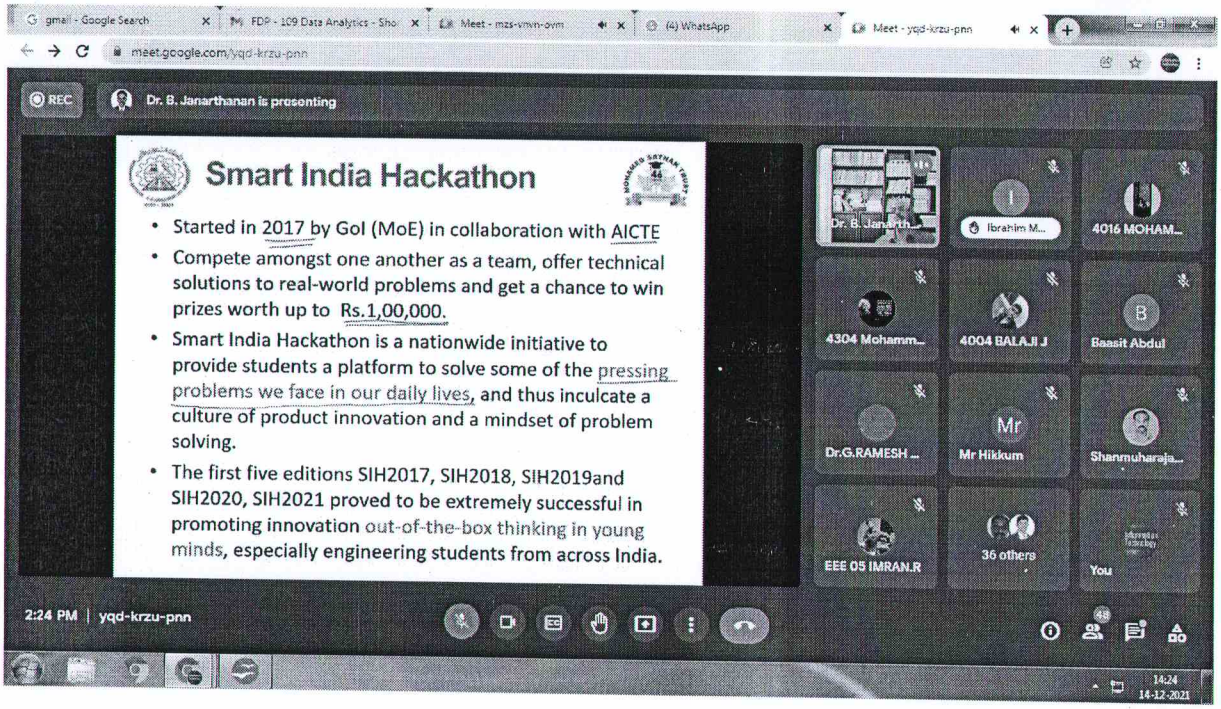

Video Conference

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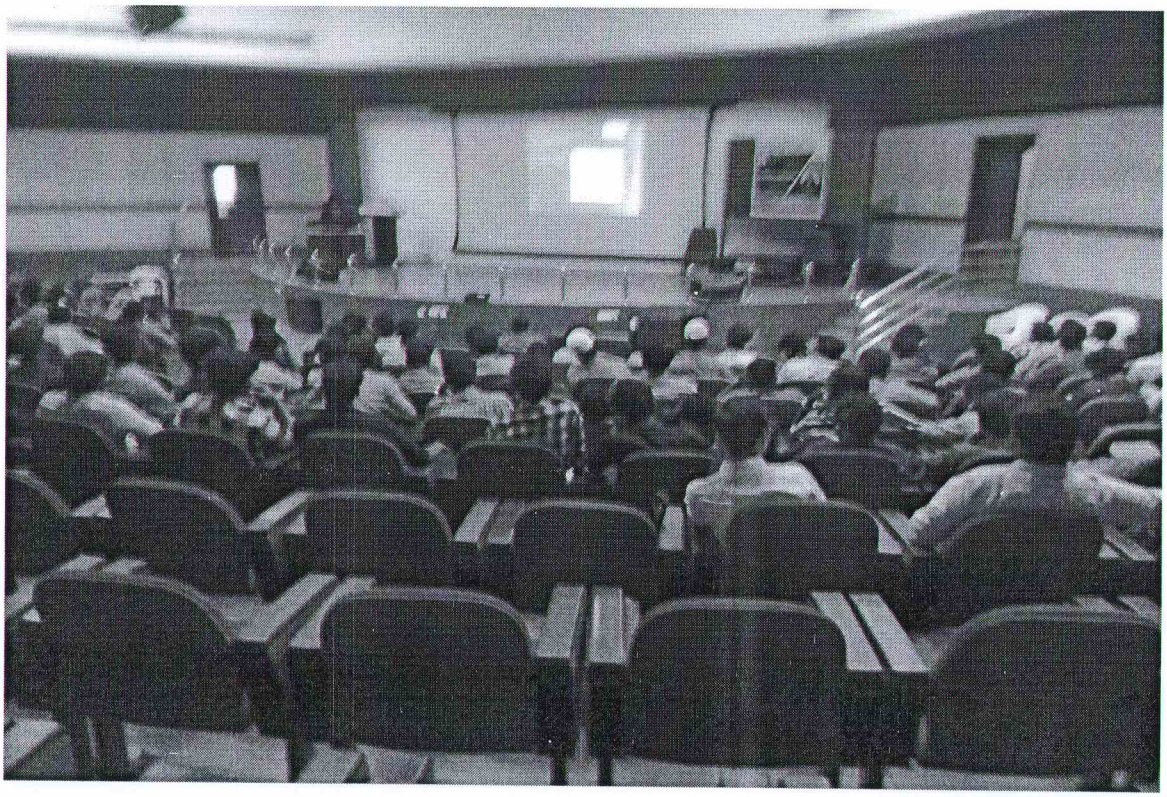

Auditorium

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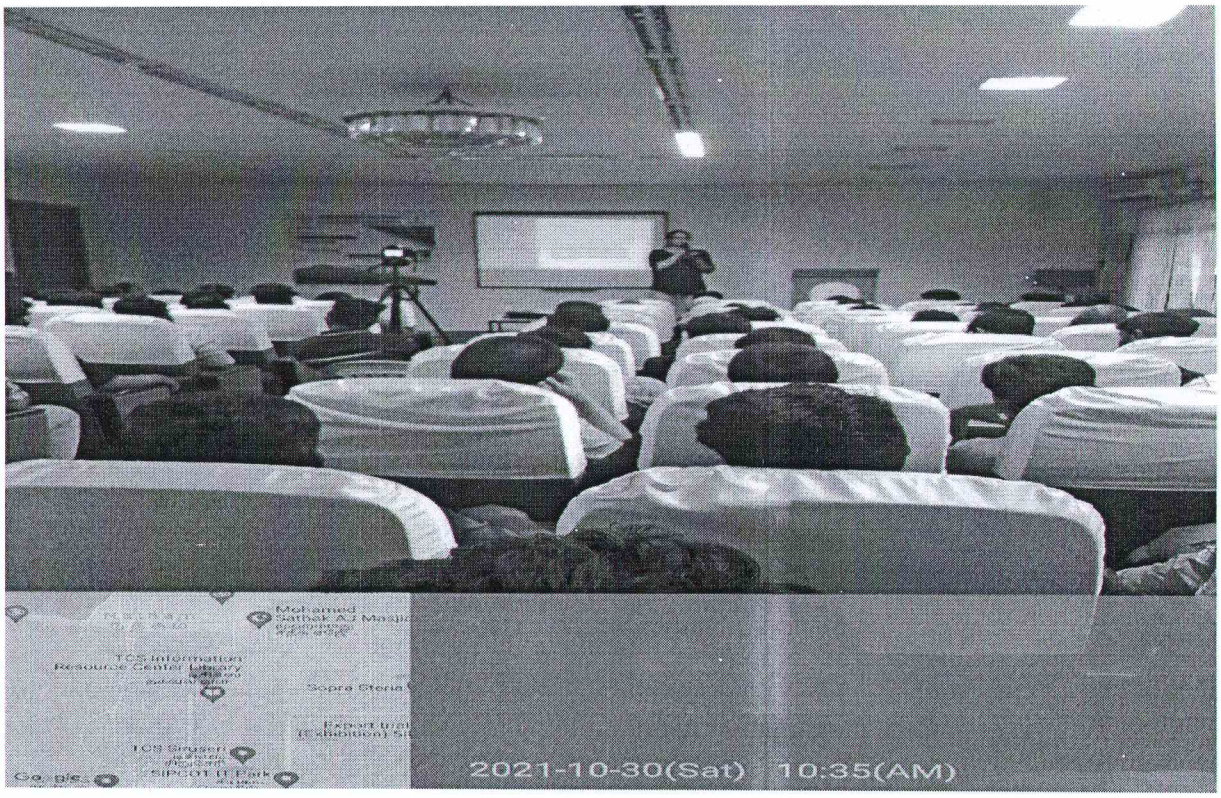

Seminar Hall

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DEPARTMENT OF INFORMATION TECHNOLOGY

LIST OF CHARTS		LABORATORY LIST
1	Network topology Diagram	CENTRE FOR CISCO NETWORKING
2	Network Diagram Multi-office connection using IPsec VPN	
3	Routing WAN & NETWORK management Icons	
4	Cisco intent based networking for the the WAN	
5	Cyper security predictions	
6	Network diagrams	
7	What is a VPN	
8	Cyper threats and Empowering	
9	WAN Definition	
12	What is Cloud Computing	CLOUD COMPUTING LABORATORY
13	Task based education and problem solving	
14	Cloud computing networks	
15	Cloud adoptation	
16	A survey of mobile cloud computing	
17	Cloud storage	
18	A layered technology	PROJECT LABORATORY
19	Process framework activities	
20	SDLC models	
21	V-models	
22	Agile model	
23	Computer basic	COMPUTER CENTRE LABORATORY
24	Basic operations of OS algorithms	
25	Real world applications of C	
26	Scheduling algorithm in OS	
27	Structured programming Language vs object oriented programming languages	
28	Types of UML Diagram	CASE TOOLS LABORATORY
29	What are usecases	
30	Class diagram	
31	Sequence diagram	

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Routing WAN and Network Management Icons

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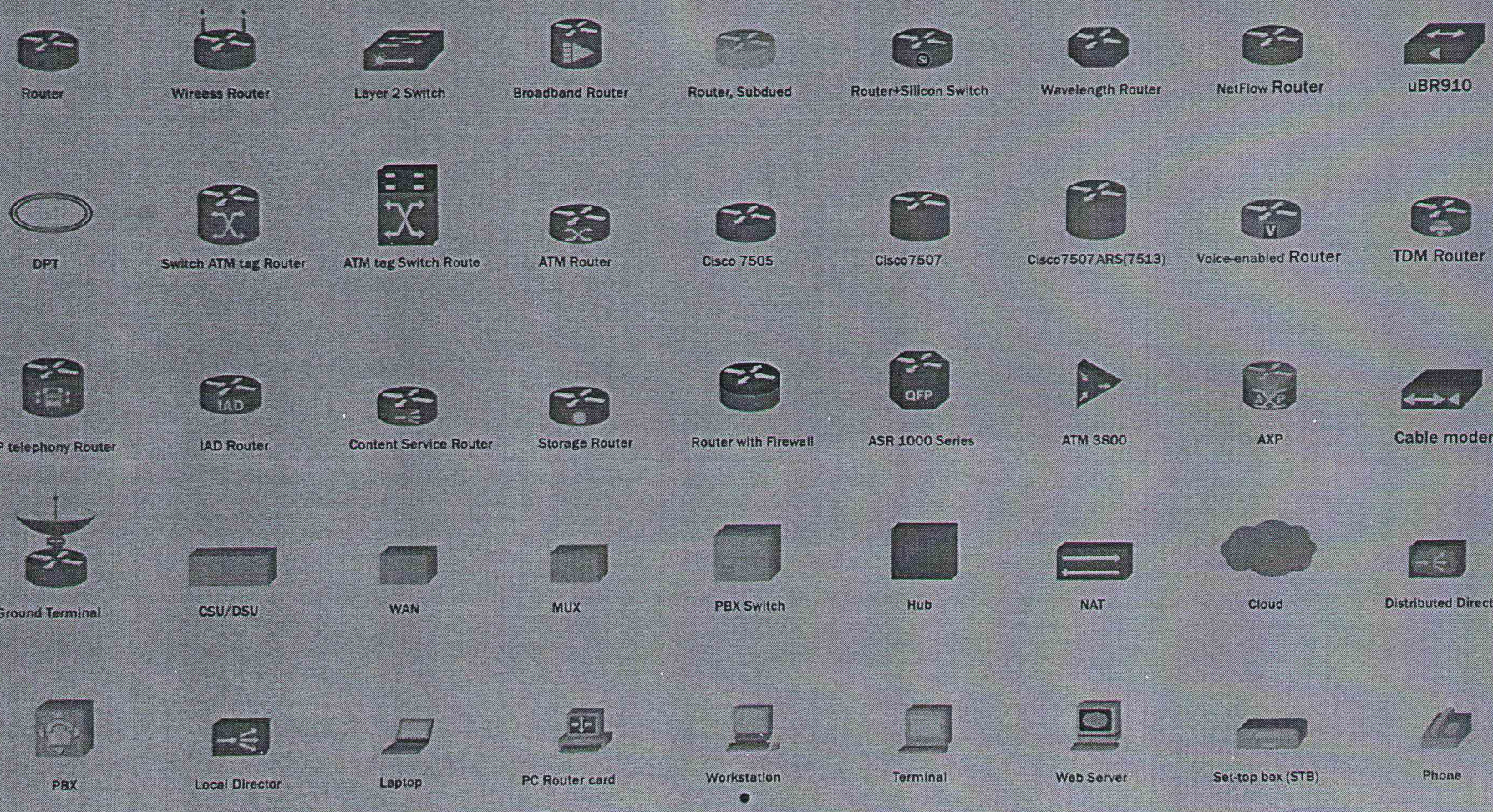

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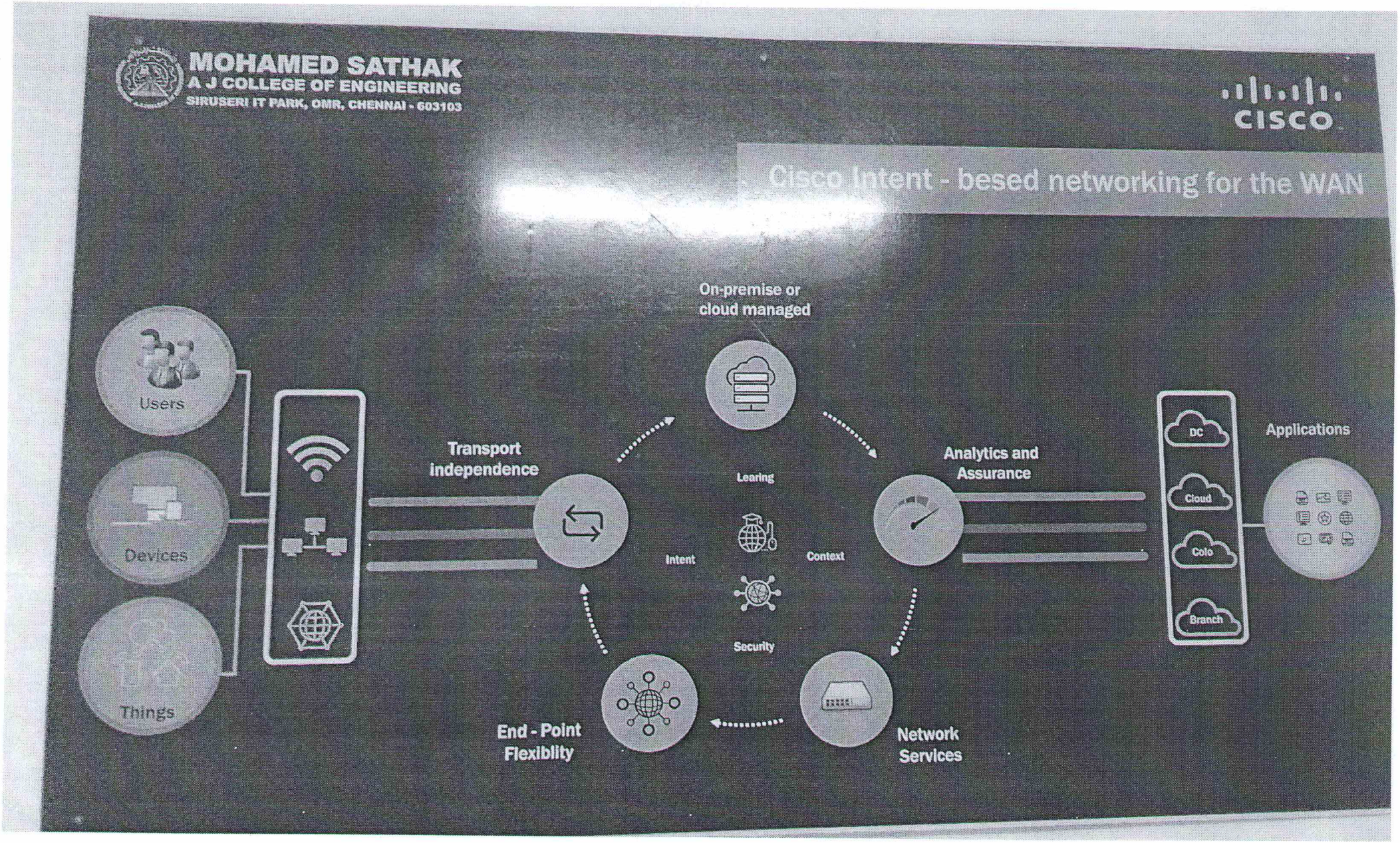

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SPOC Change Request Letter

Ref No: MSAJCE/PRL/NPTEL/001/2019-20

Date: 19-11-2019

To,

Prof. Andrew Thangaraj,
NPTEL Coordinator,
NPTEL, 3rd floor, IC&SR
IIT Madras
Chennai – 600036

Subject: Request for Change of SPOC

We kindly request you to accept our change of SPOC for our college **MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**

Details of Current SPOC
Name: T.A. ANNIE
Mobile number: 8072138874
Email id: nptelspocmsajce@gmail.com

We nominate **Dr.E.Dhiravidachelvi** as the Single Point of Contact (SPOC), whose details are as follows:
Name: Dr.E.Dhiravidachelvi
Designation: PROFESSOR
Department: ELECTRONICS& COMMUNICATION ENGINEERING
Email id: nptelspocmsajce@gmail.com
Mobile No: 9442046457

We request that you kindly update your database accordingly.

Thank you.

Warm regards

15/11/19

Dr.K.S.Srinivasan

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NATIONAL PROGRAMME ON TECHNOLOGY ENHANCED LEARNING

A JOINT INITIATIVE OF INDIAN INSTITUTES OF TECHNOLOGY & INDIAN INSTITUTE OF SCIENCE

NPTEL

2016-04-12

To
The Principal
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING
IT PARK, SIRUSERI,OLD MAHABALIPURAM ROAD
CHENNAI - 603103
TAMIL NADU

Dear Sir/Madam,

Sub: Establishing SWAYAM NPTEL Local Chapter in your college

Greetings from the NPTEL office.

This is to acknowledge the receipt of your letter accepting to host SWAYAM NPTEL Local Chapter in your institution.

The **Single Point of Contact (SPOC)** nominated from your college is

Name of SPOC: DR. E. DHIRAVIDACHELVI
Designation: PROFESSOR
Department:ELECTRONICS AND COMMUNICATION ENGINEERING
Contact No(s):9442046457
E-mail id: nptelspocmsajce@gmail.com

We wish to inform you that all future correspondence related to NPTEL contents and online courses will be made to the afore-mentioned SPOC. He/she will be routinely updated with all the latest NPTEL initiatives which then may be circulated among the students.

We are also happy to share that a dedicated SWAYAM NPTEL Local Chapter web page is being created and your institution will have a separate page on it (http://nptel.ac.in/LocalChapter).

Thanking you.

Sincerely

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT MADRAS

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S.NO	Name of the e-resources	Access URL
1	e-journals	http://164.100.247.26/
2	e-Books	http://ndl.iitkgp.ac.in/
3	e-Database	http://nptel.ac.in/
4	Open Access Resources	http://www.proquet.com/
5	Shodhganga	http://shodhganga.inflibnet.ac.in

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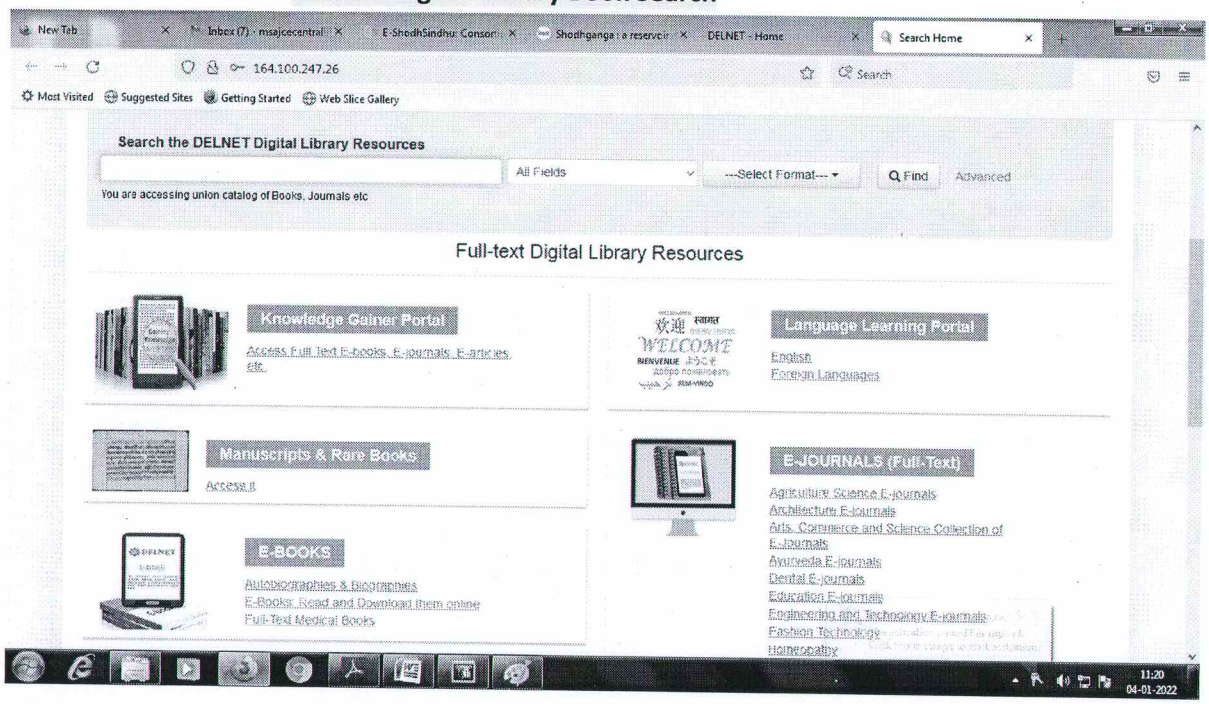
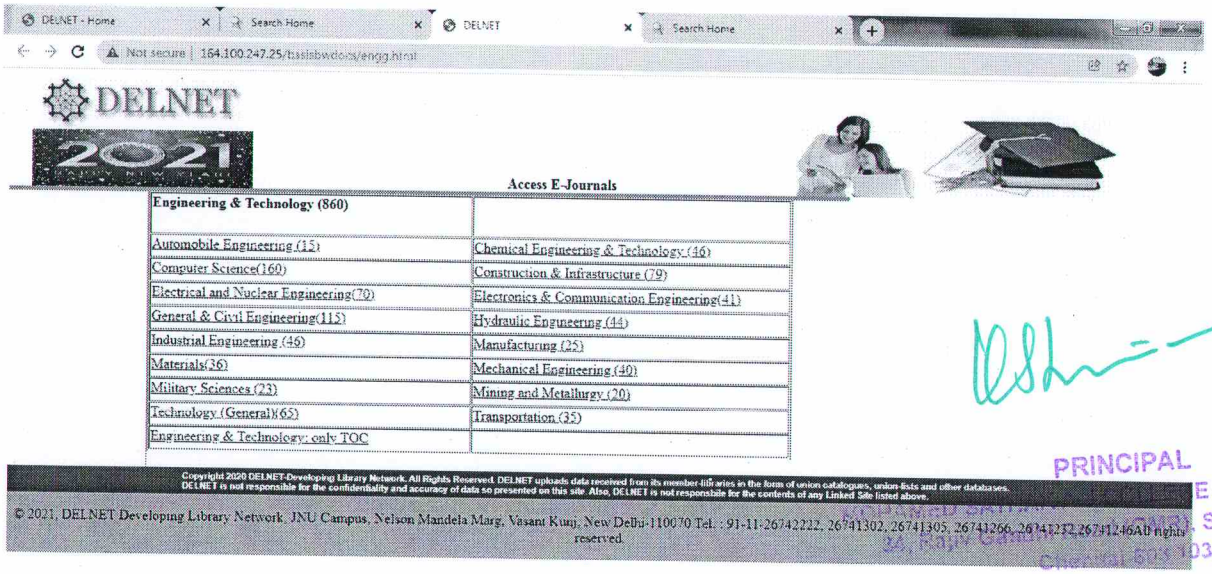
DELNET Digital Library Book Search



DELNET E- JOURNAL



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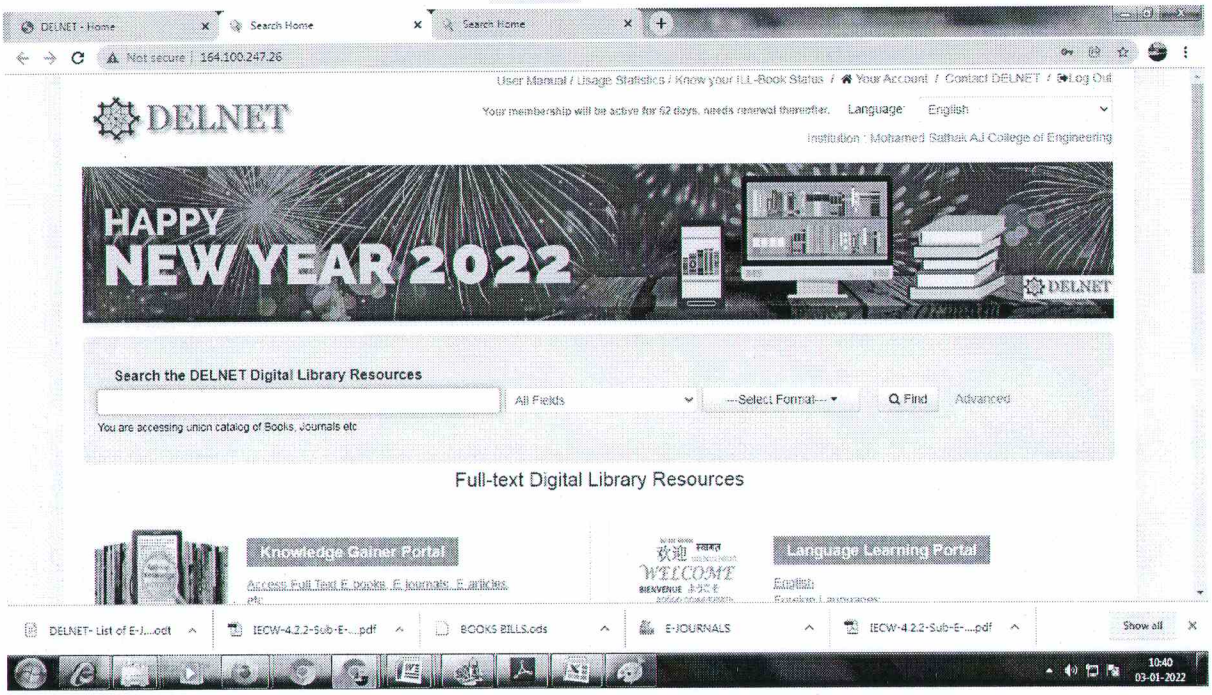
1. Screenshot of Remote access to e-resources

DELNET



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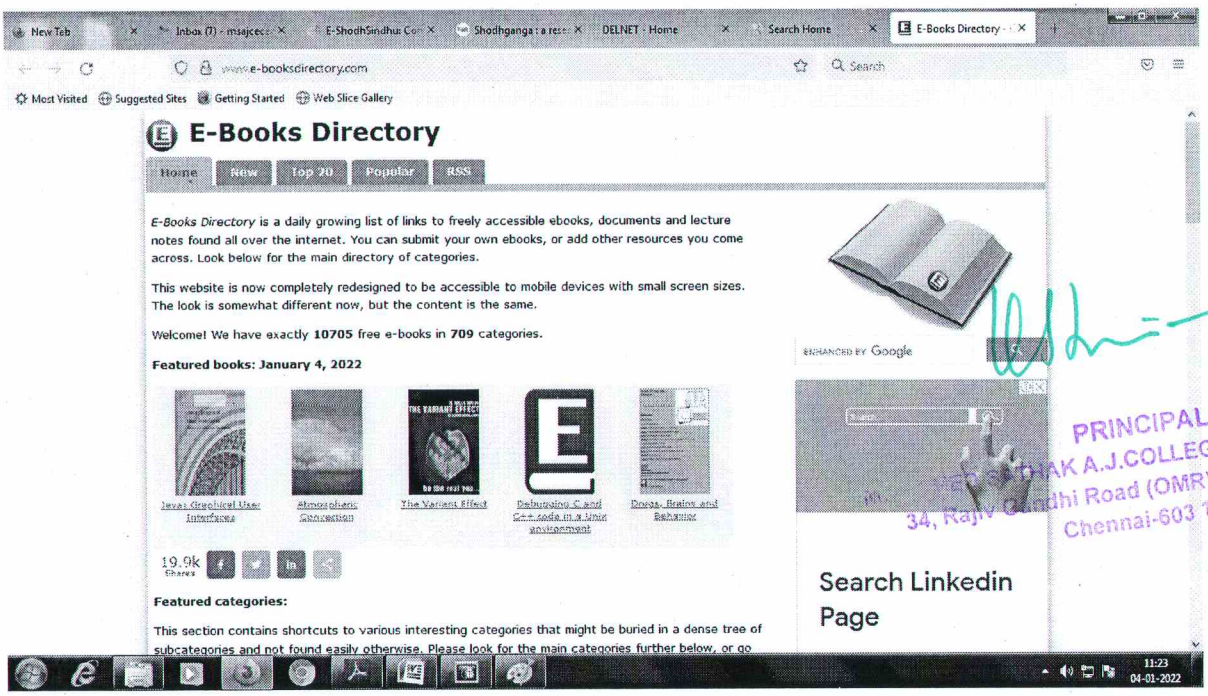

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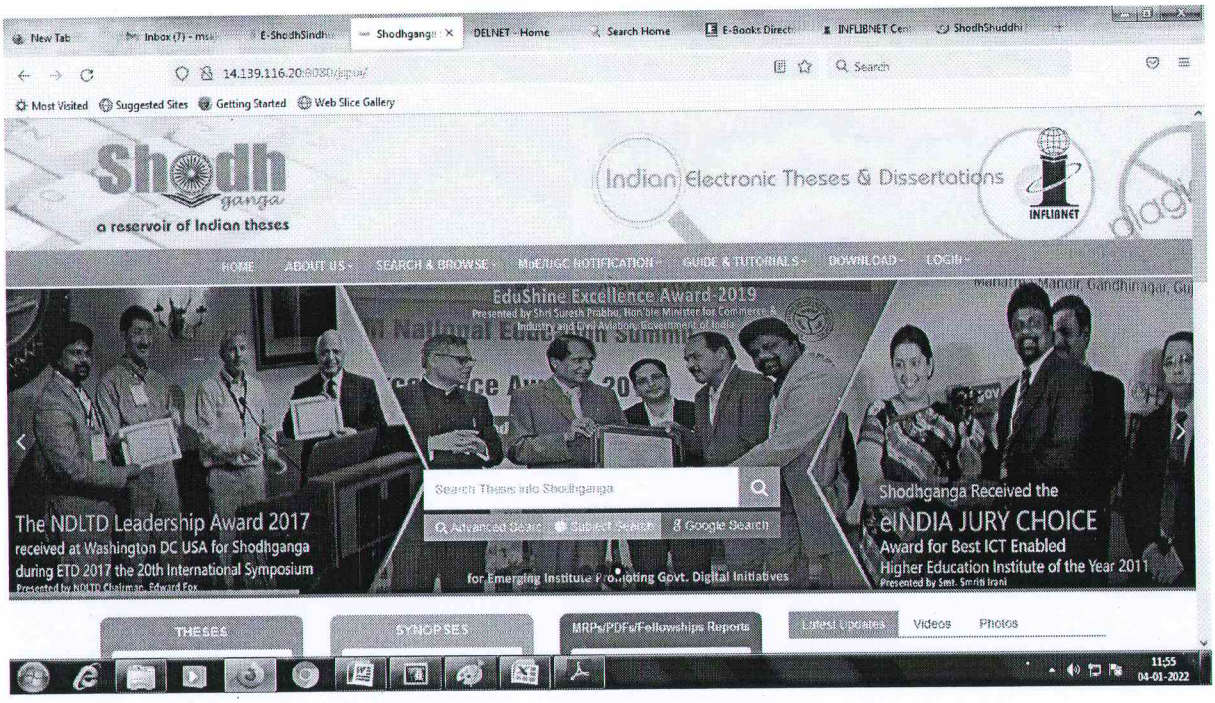
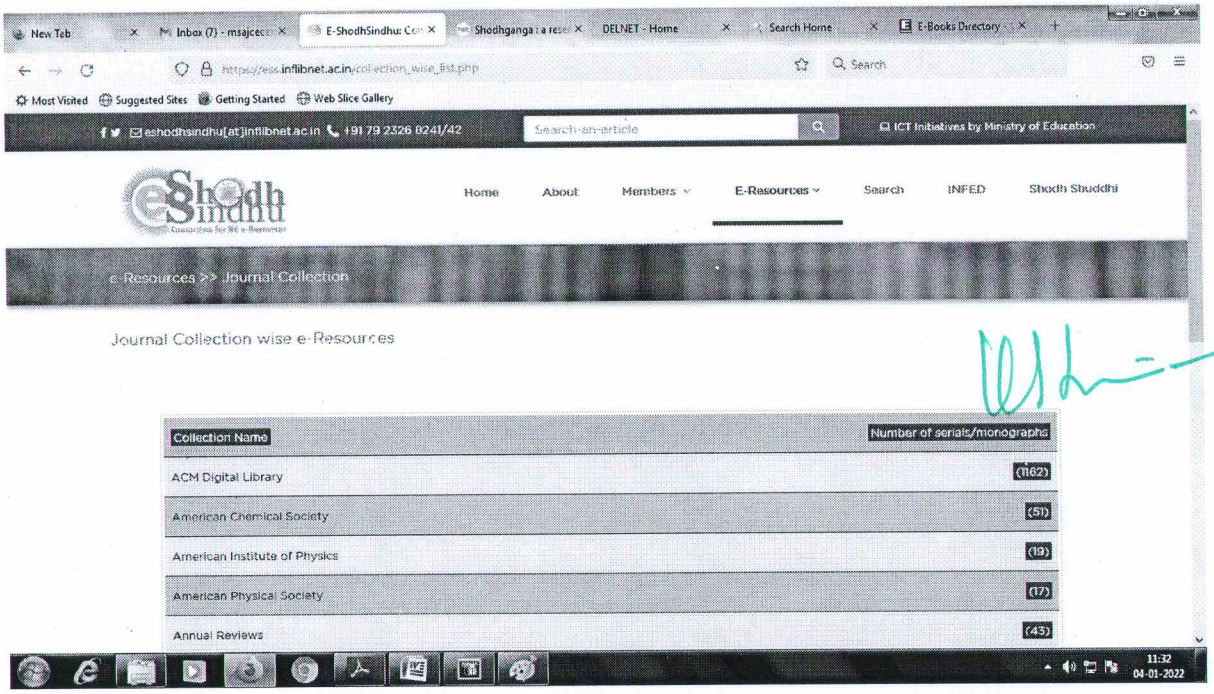
SHODHGANGA- HOME PAGE



Screen Shot of E-Shodhsindhu



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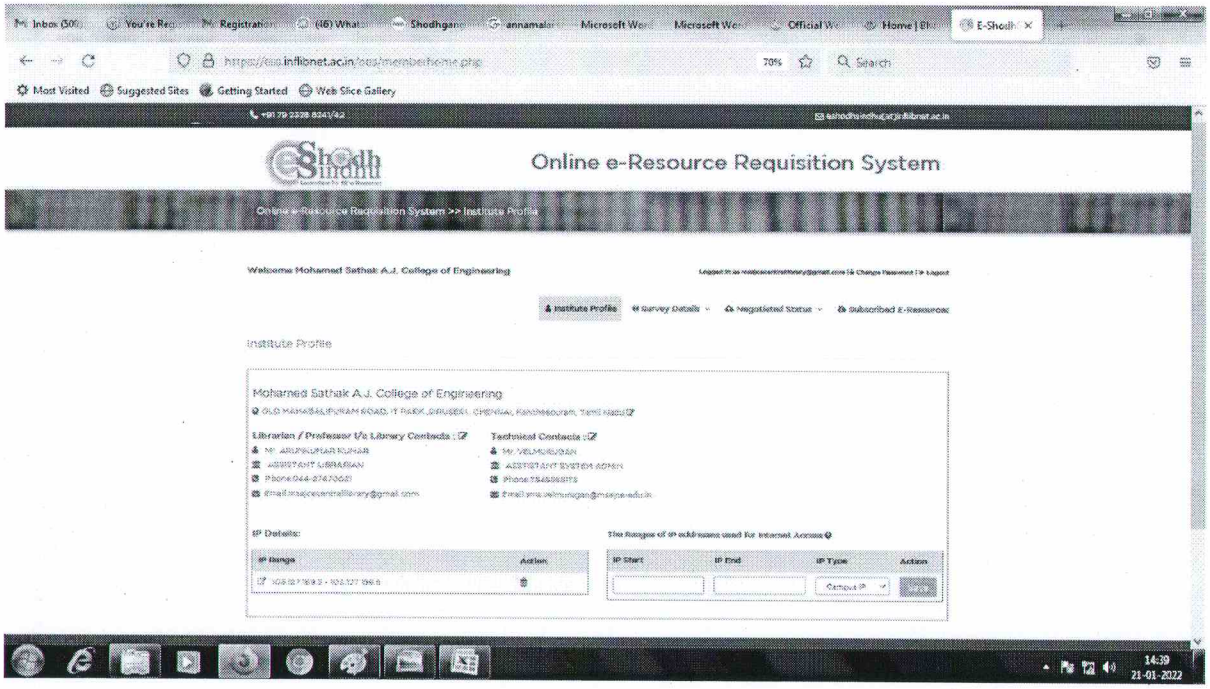

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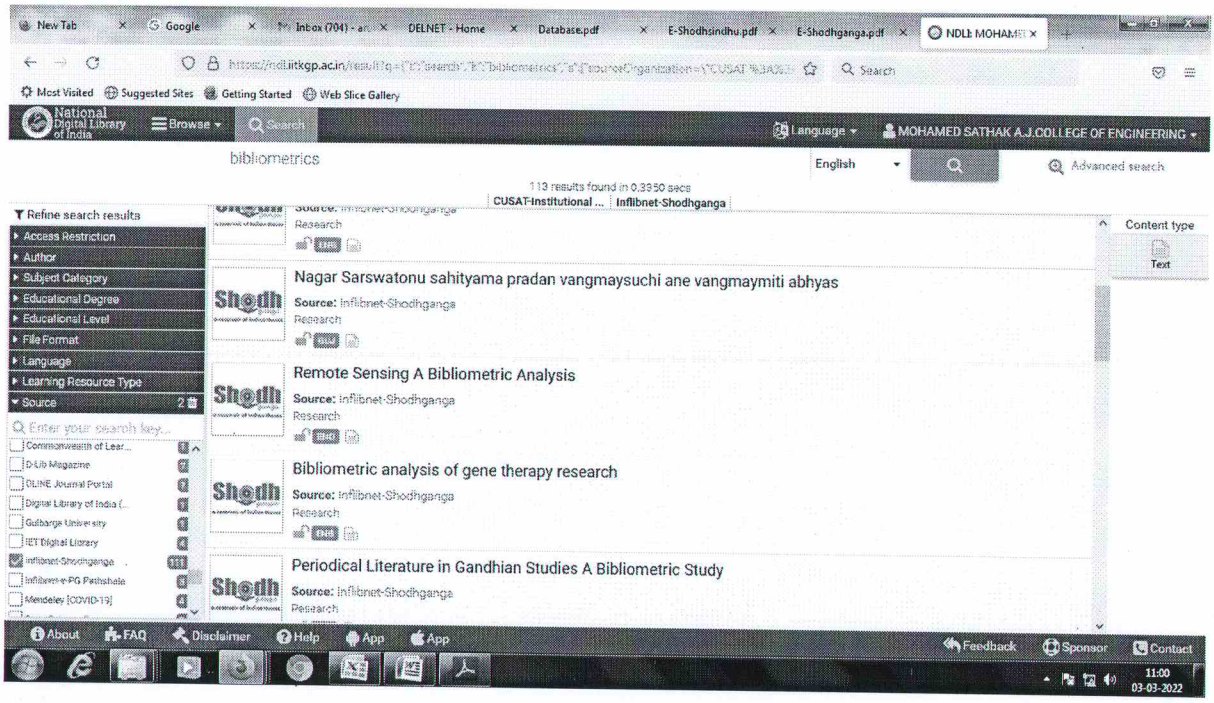
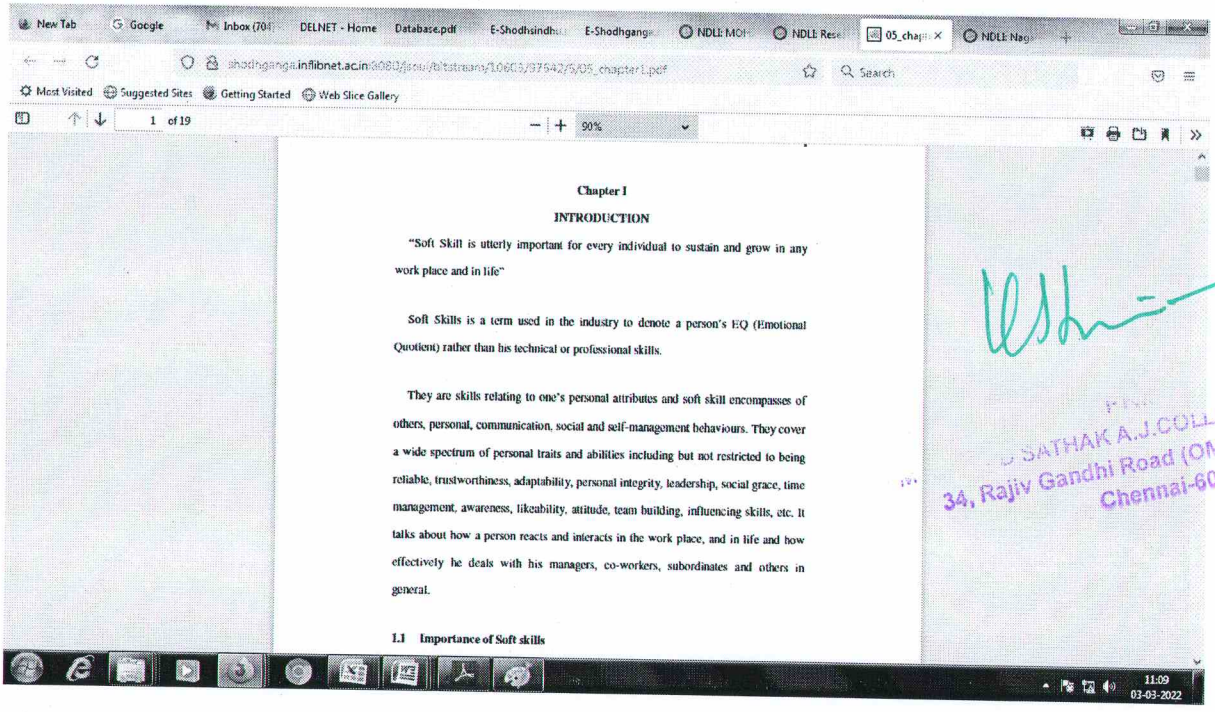
E-SHODHGANGA IN NDLI



Search of Result of Thesis in E-Shodhganga



Chapter I

INTRODUCTION

"Soft Skill is utterly important for every individual to sustain and grow in any work place and in life"

Soft Skills is a term used in the industry to denote a person's EQ (Emotional Quotient) rather than his technical or professional skills.

They are skills relating to one's personal attributes and soft skill encompasses of others, personal, communication, social and self-management behaviours. They cover a wide spectrum of personal traits and abilities including but not restricted to being reliable, trustworthiness, adaptability, personal integrity, leadership, social grace, time management, awareness, likeability, attitude, team building, influencing skills, etc. It talks about how a person reacts and interacts in the work place, and in life and how effectively he deals with his managers, co-workers, subordinates and others in general.

1.1 Importance of Soft skills

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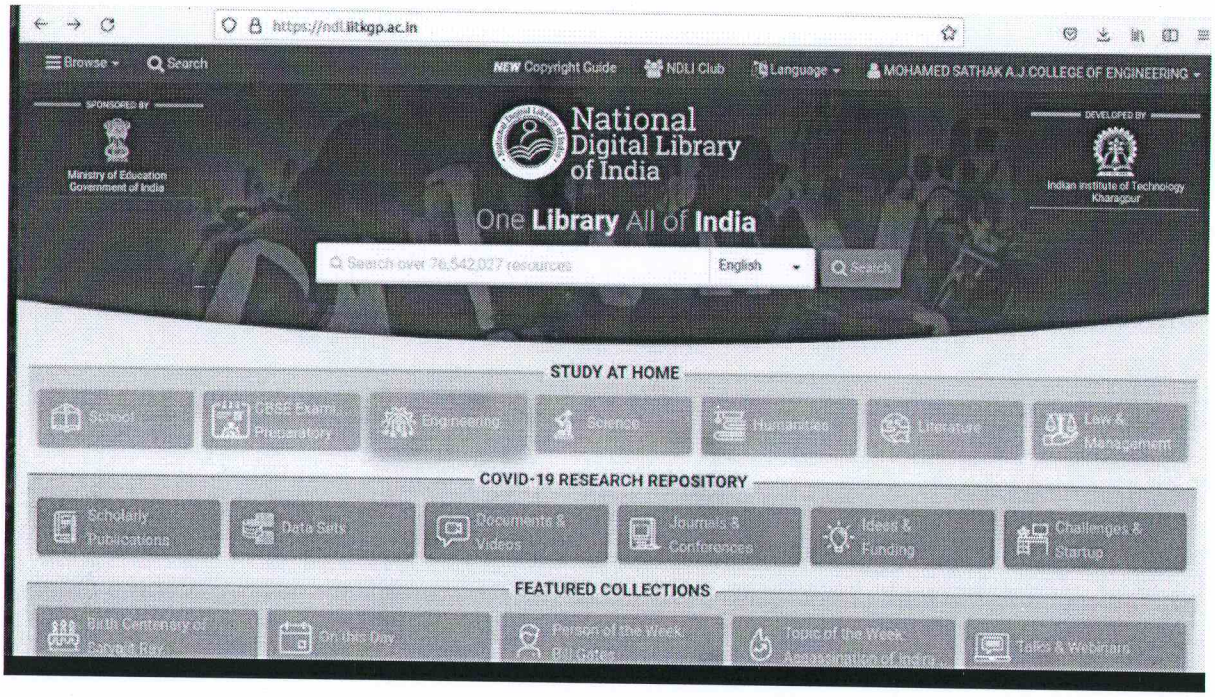
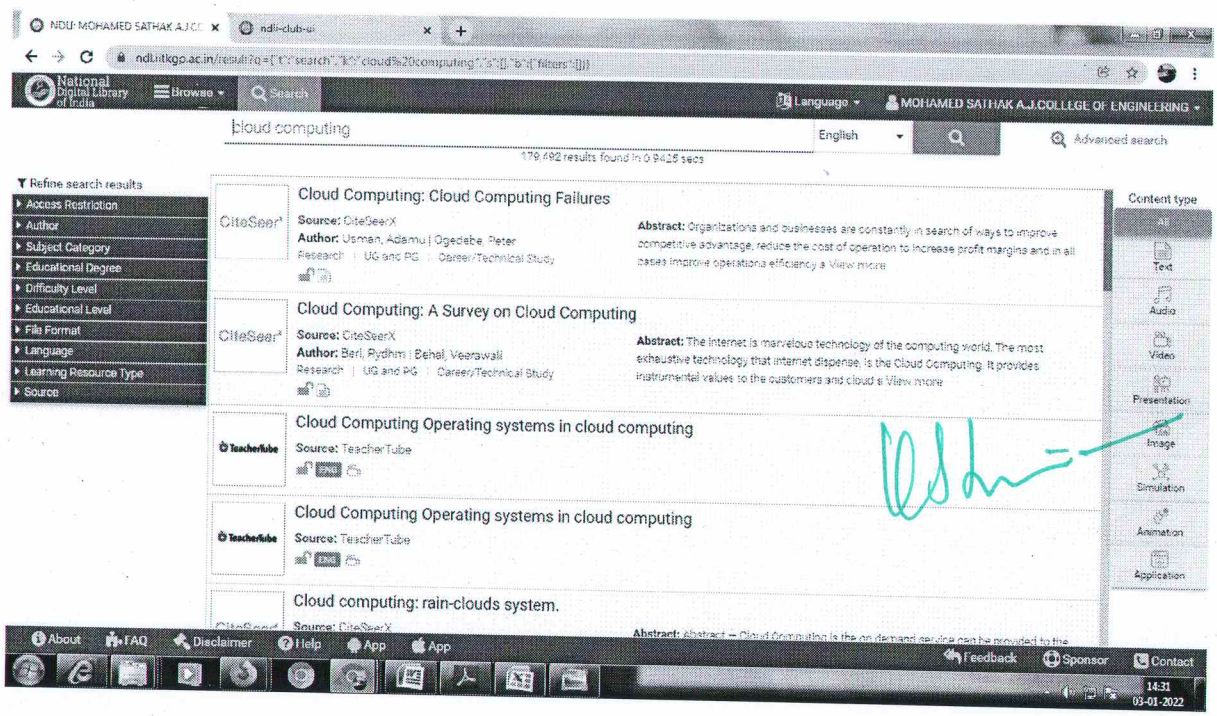
Databases

Screen short of National Digital Library



National Digital Library Search Page



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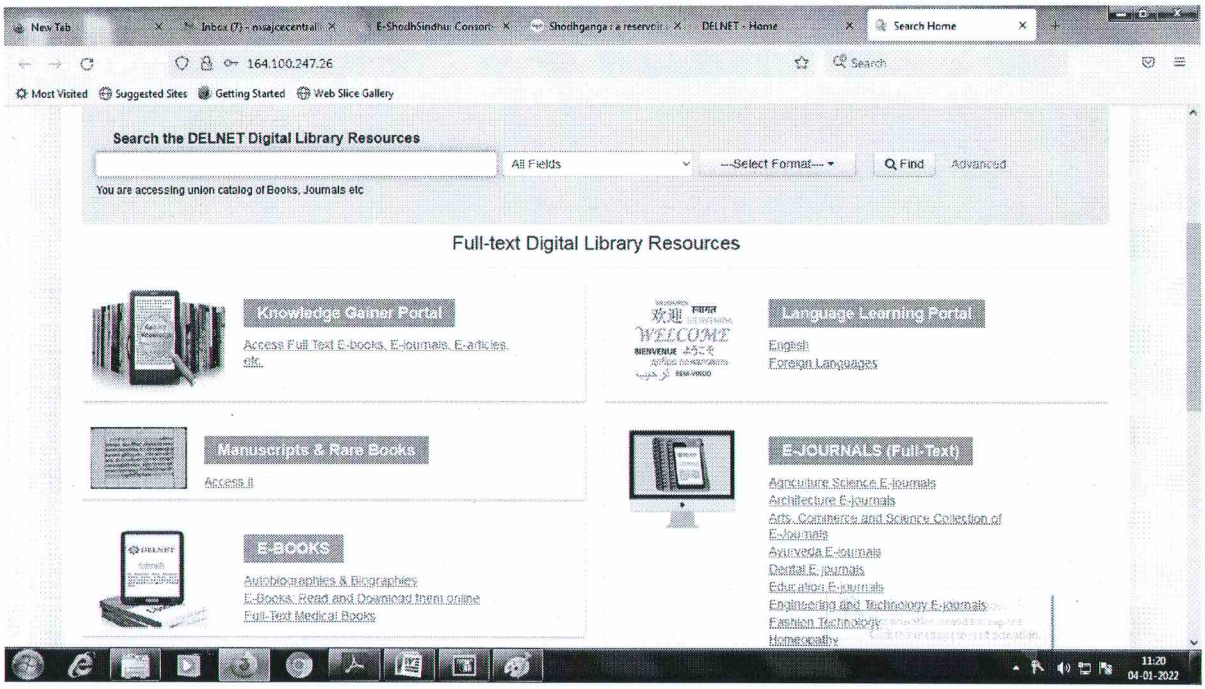
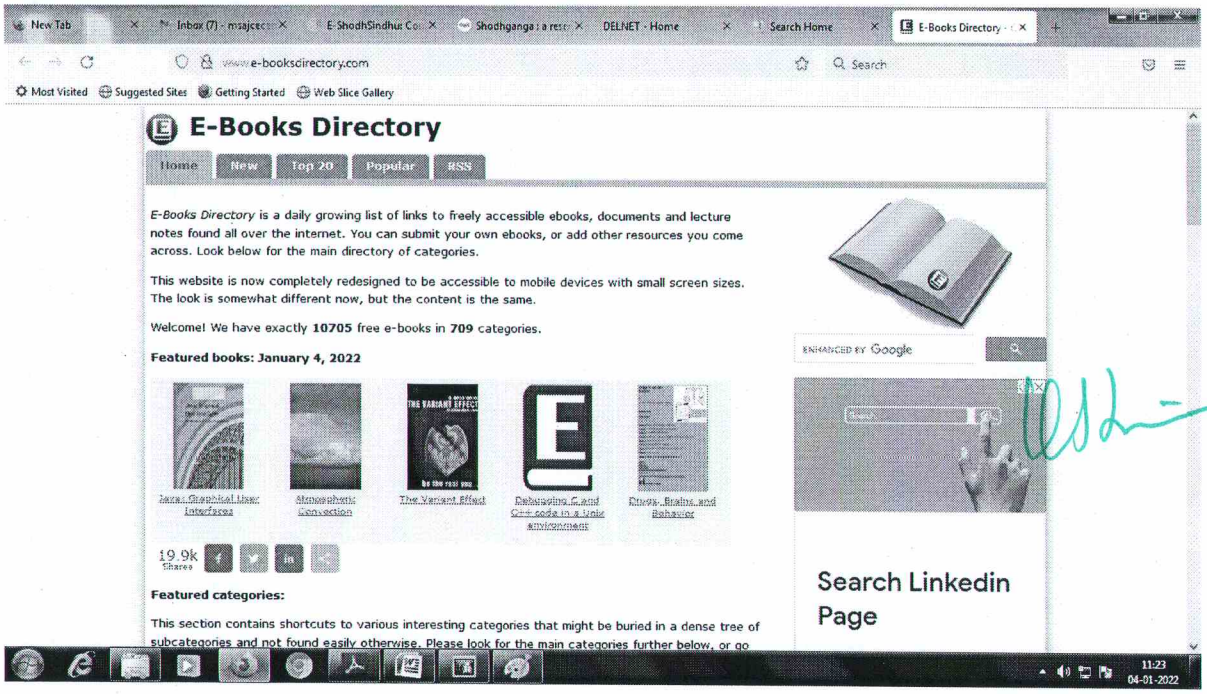


DELNET – Digital Library Book Search



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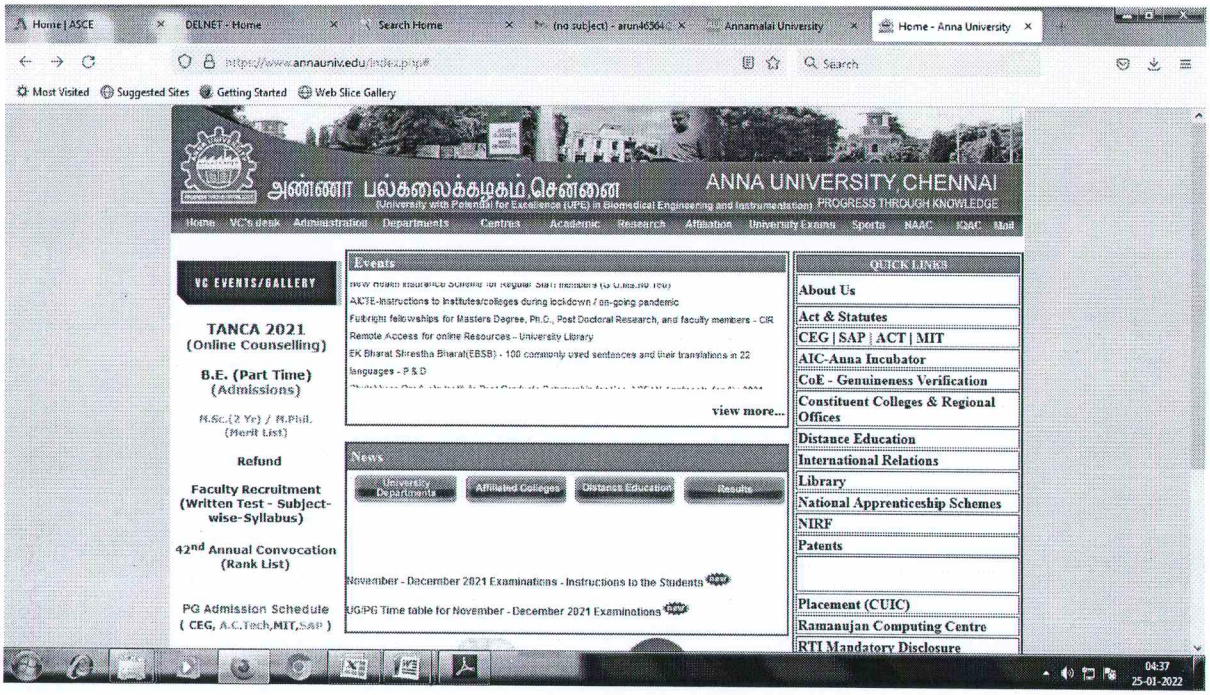
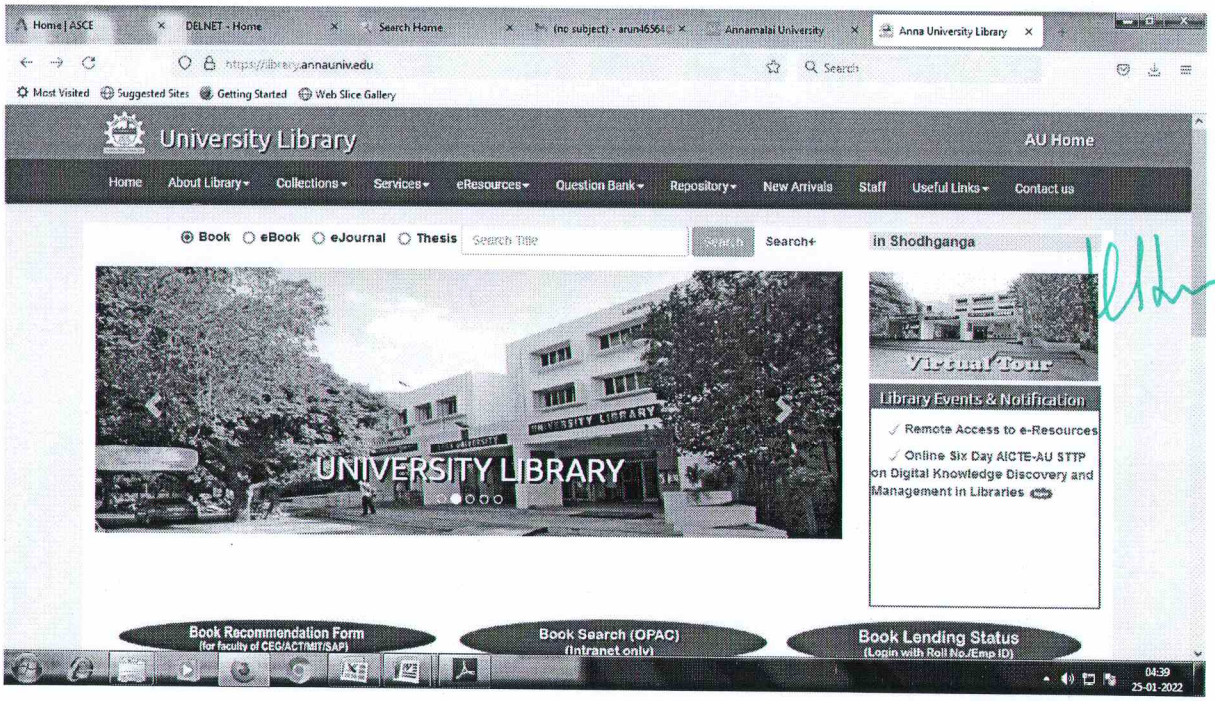
Home Page of E-Question Papers in Digital Library Software



E-Question Papers by Advanced Search



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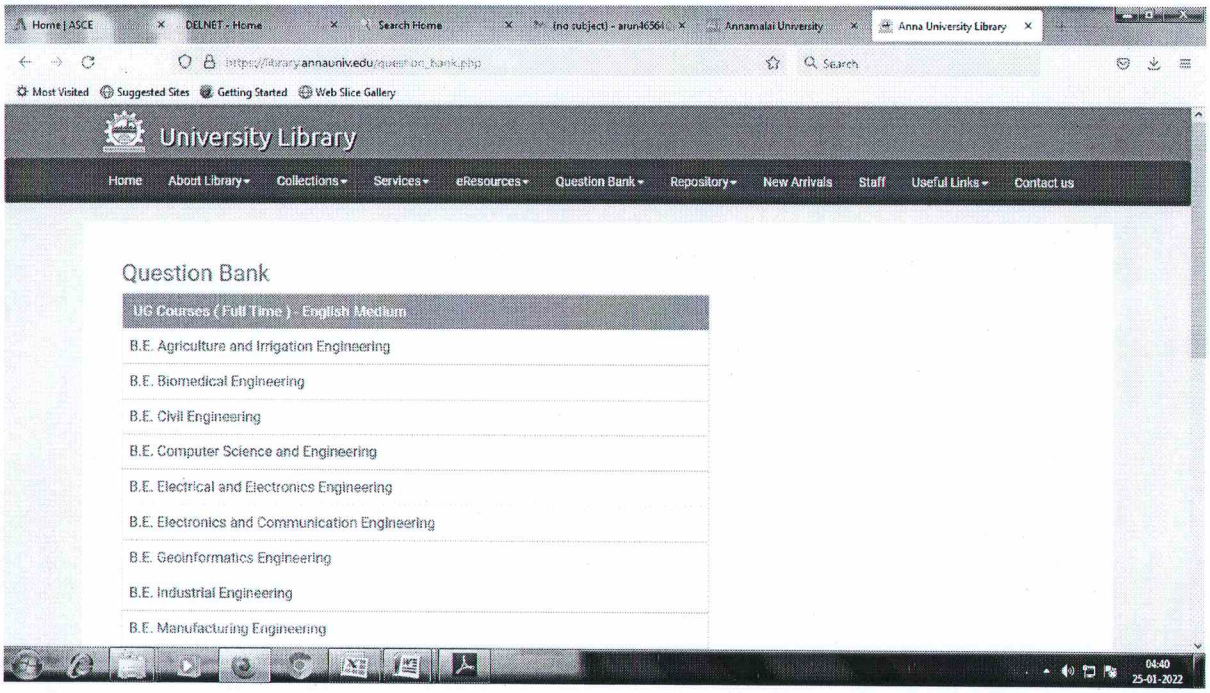
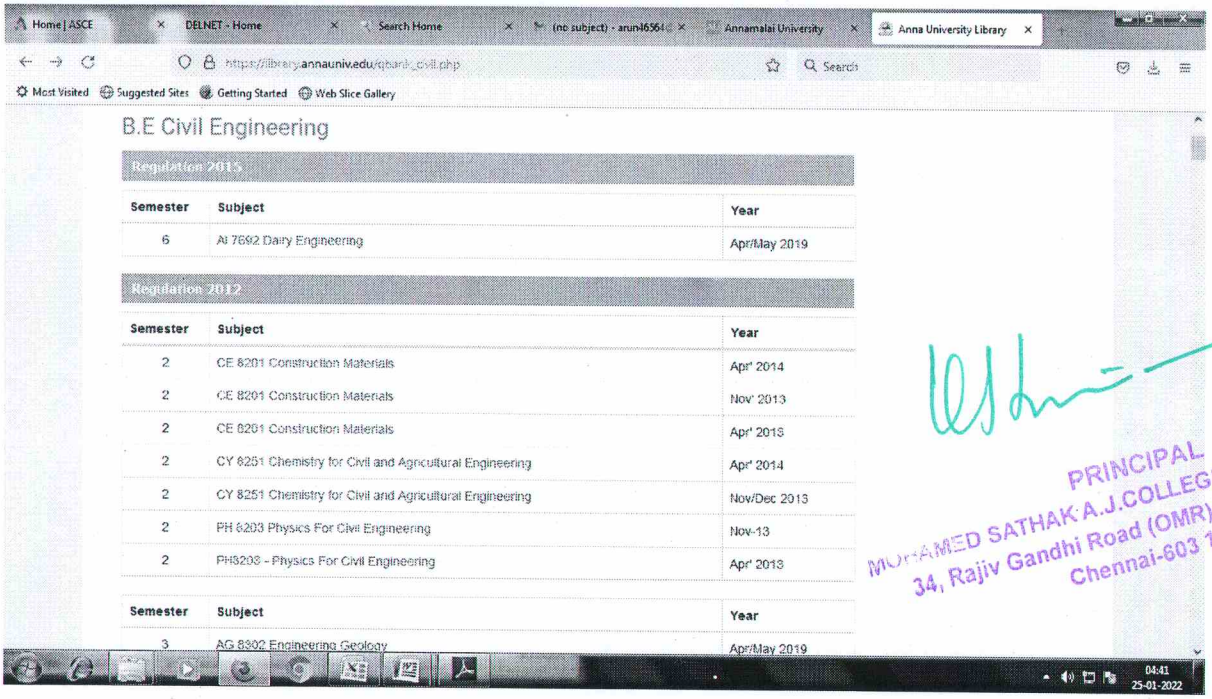
E-Question Papers Search by Subject Wise



Search Result of AU Previous Year Question Papers in Digital Library Software



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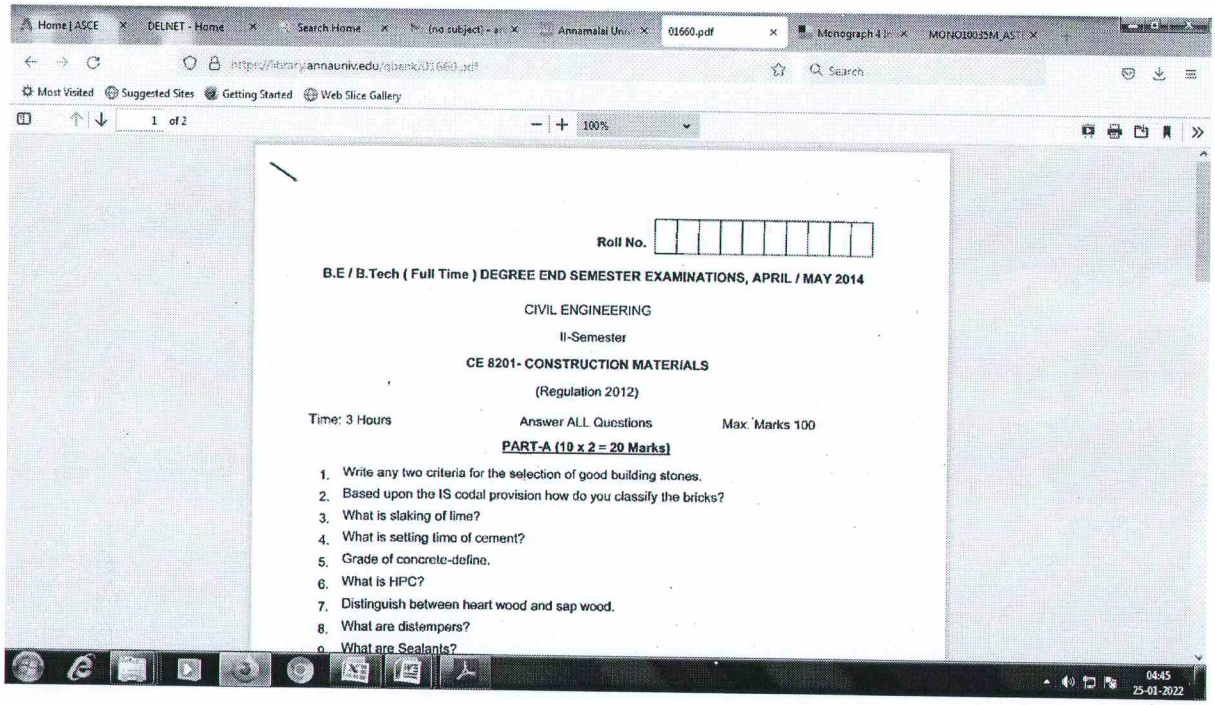
Result of Anna Unviersity E-Question Paper



Roll No.

B.E / B.Tech (Full Time) DEGREE END SEMESTER EXAMINATIONS, APRIL / MAY 2014

CIVIL ENGINEERING

II-Semester

CE 8201- CONSTRUCTION MATERIALS

(Regulation 2012)

Time: 3 Hours | Answer ALL Questions | Max. Marks 100

PART-A (10 x 2 = 20 Marks)

1. Write any two criteria for the selection of good building stones.
2. Based upon the IS codal provision how do you classify the bricks?
3. What is slaking of lime?
4. What is setting time of cement?
5. Grade of concrete-define.
6. What is HPC?
7. Distinguish between heart wood and sap wood.
8. What are distempers?
9. What are Sealants?

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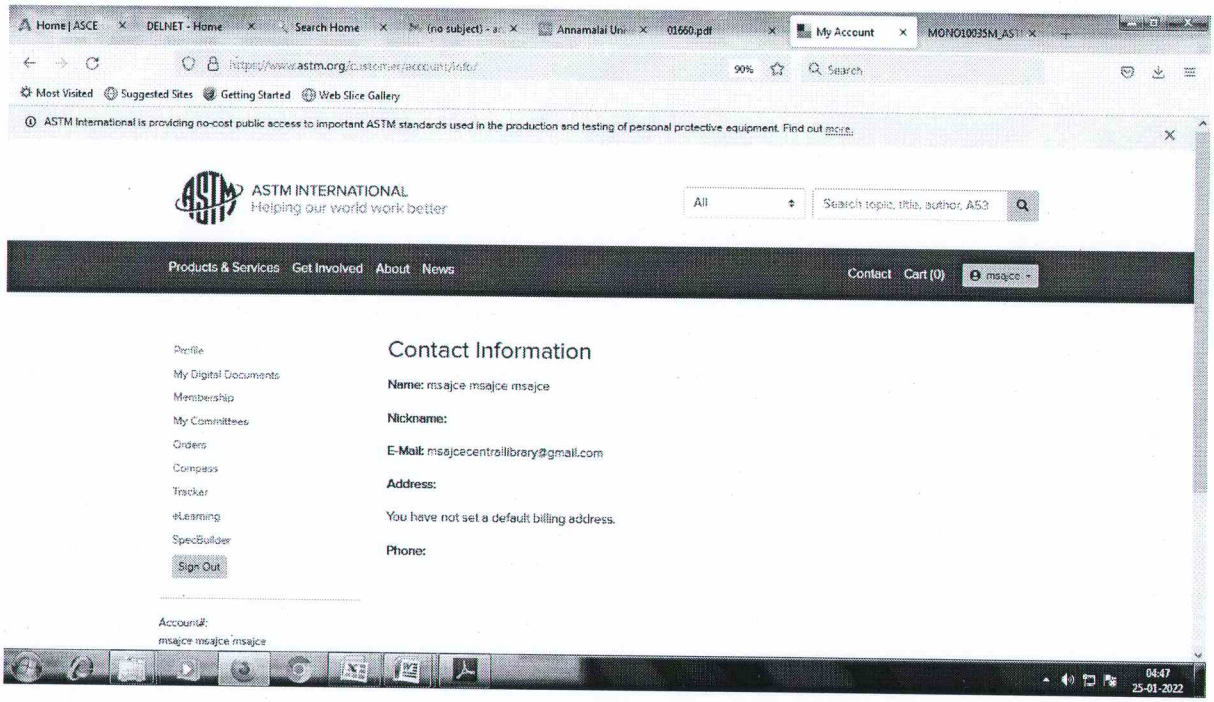
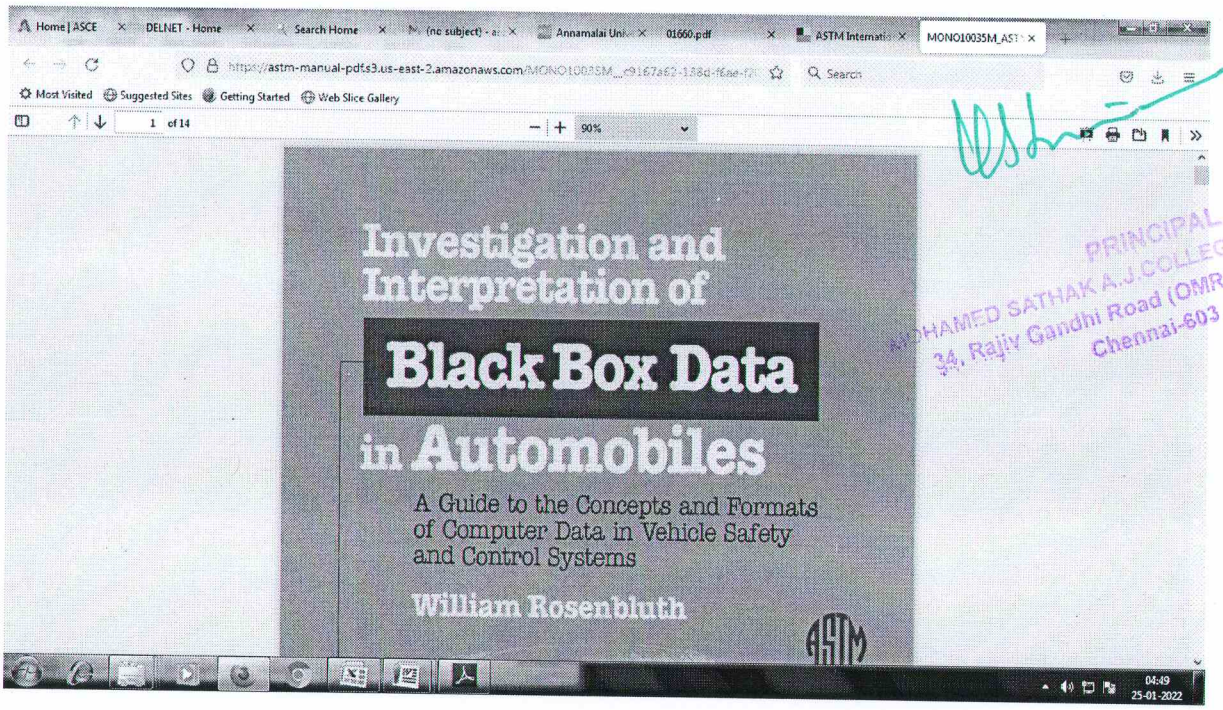
d.List of Monograph and Search by Titles



Search Result of E-Monograph



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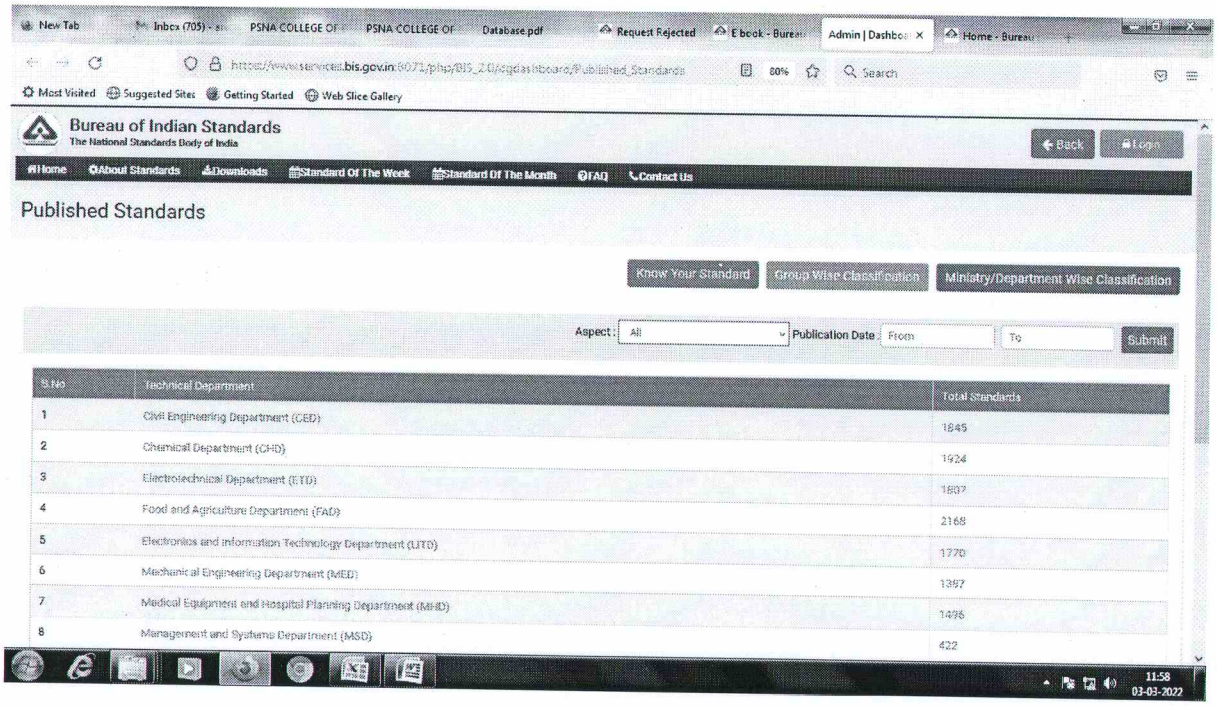
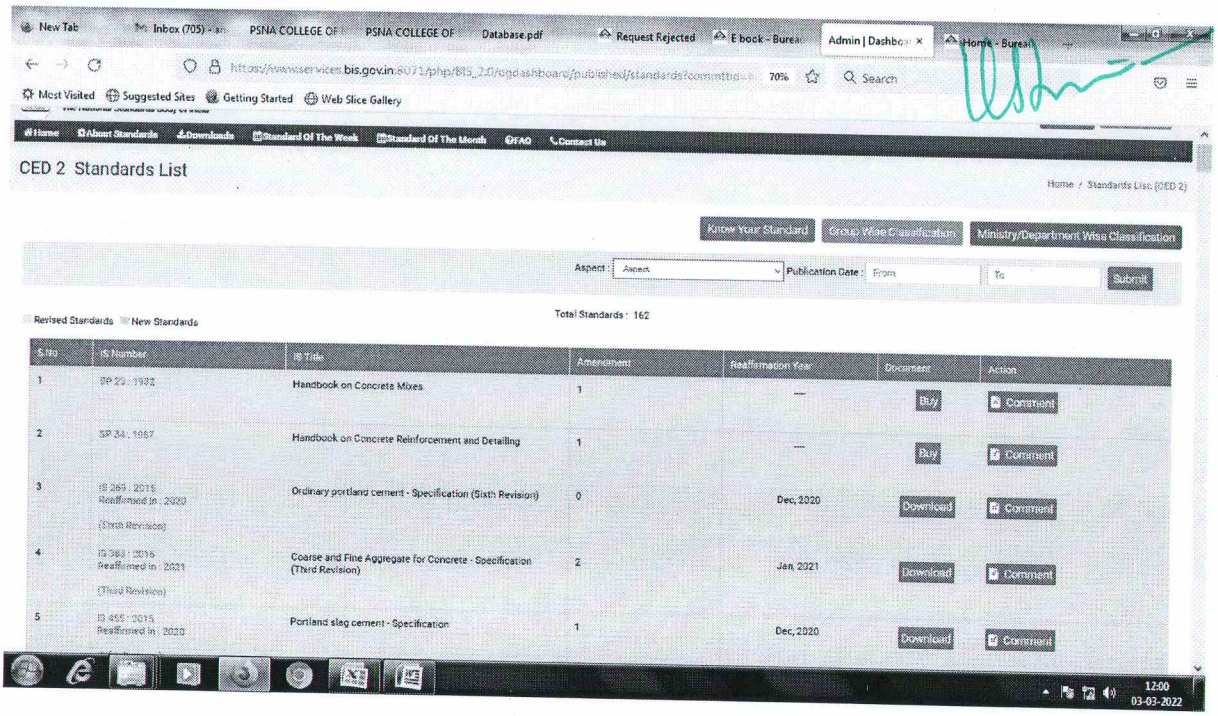


BIS - Indian Standard Coding list



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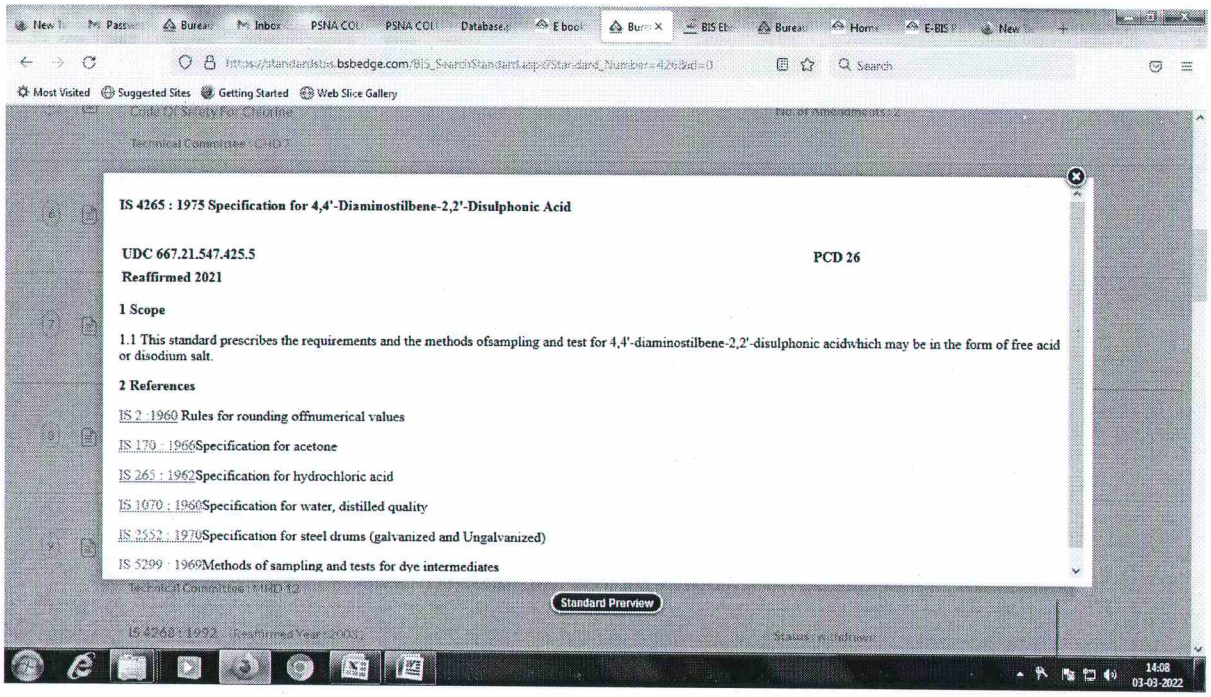
BIS - Indian Standard Coding Book



IS 4265 : 1975 Specification for 4,4'-Diaminostilbene-2,2'-Disulphonic Acid

UDC 667.21.547.425.5 **PCD 26**

Reaffirmed 2021

1 Scope

1.1 This standard prescribes the requirements and the methods ofsampling and test for 4,4'-diaminostilbene-2,2'-disulphonic acidwhich may be in the form of free acid or disodium salt.

2 References

IS 2 : 1960 Rules for rounding offnumerical values

IS 170 : 1966Specification for acetone

IS 265 : 1962Specification for hydrochloric acid

IS 1070 : 1960Specification for water, distilled quality

IS 2552 : 1970Specification for steel drums (galvanized and Ungalvanized)

IS 5299 : 1969Methods of sampling and tests for dye intermediates

Standard Prerview

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Index for Online Classes

Sl. No.	Contents
1	Online Video Class
2	Assignment
3	Text Book
4	Internal Assessement
5	Case Study Material
6	Exam Preparation Class
7	MCQ Sample Question & MCQ Responses
8	Practical Exercise and Solution
9	Reference Books
10	Virtual Lab Samples

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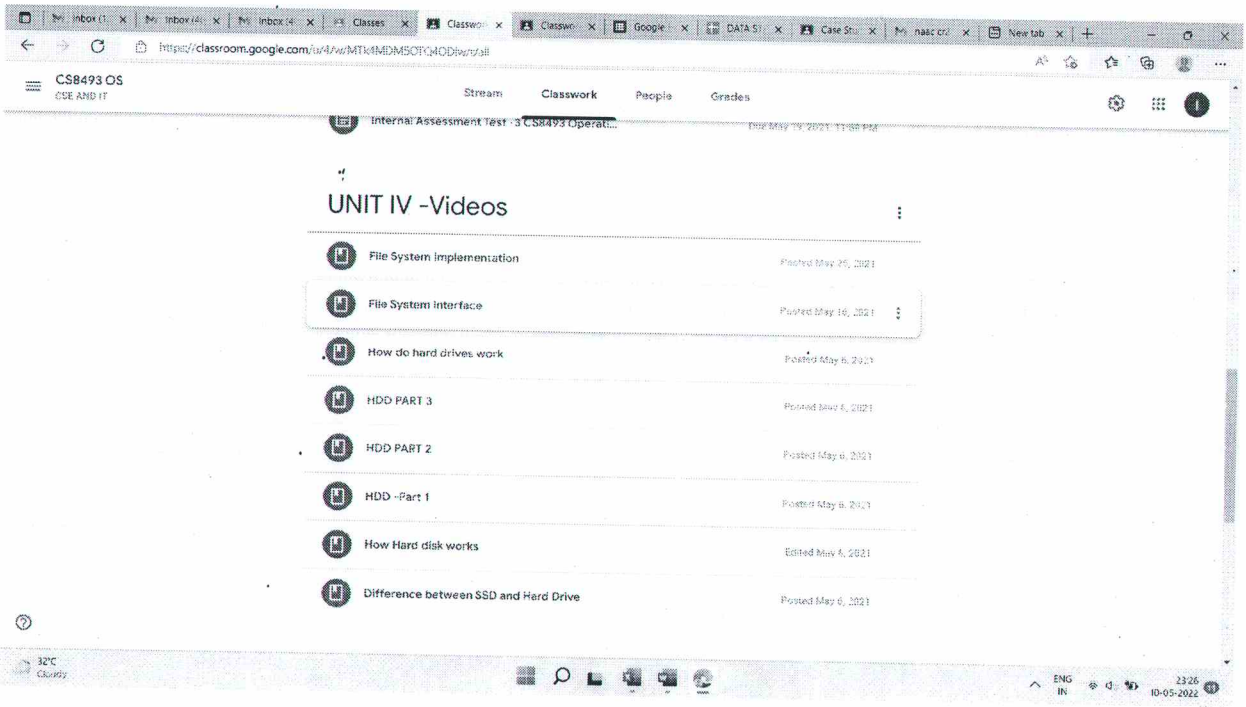

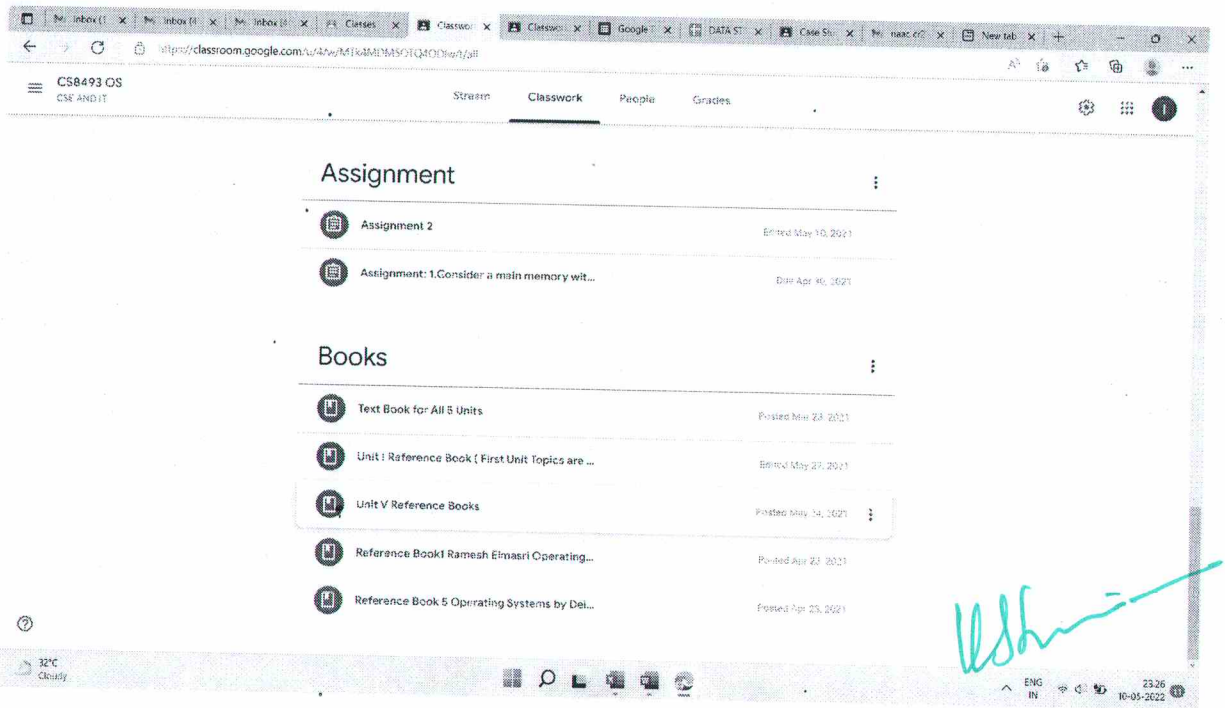

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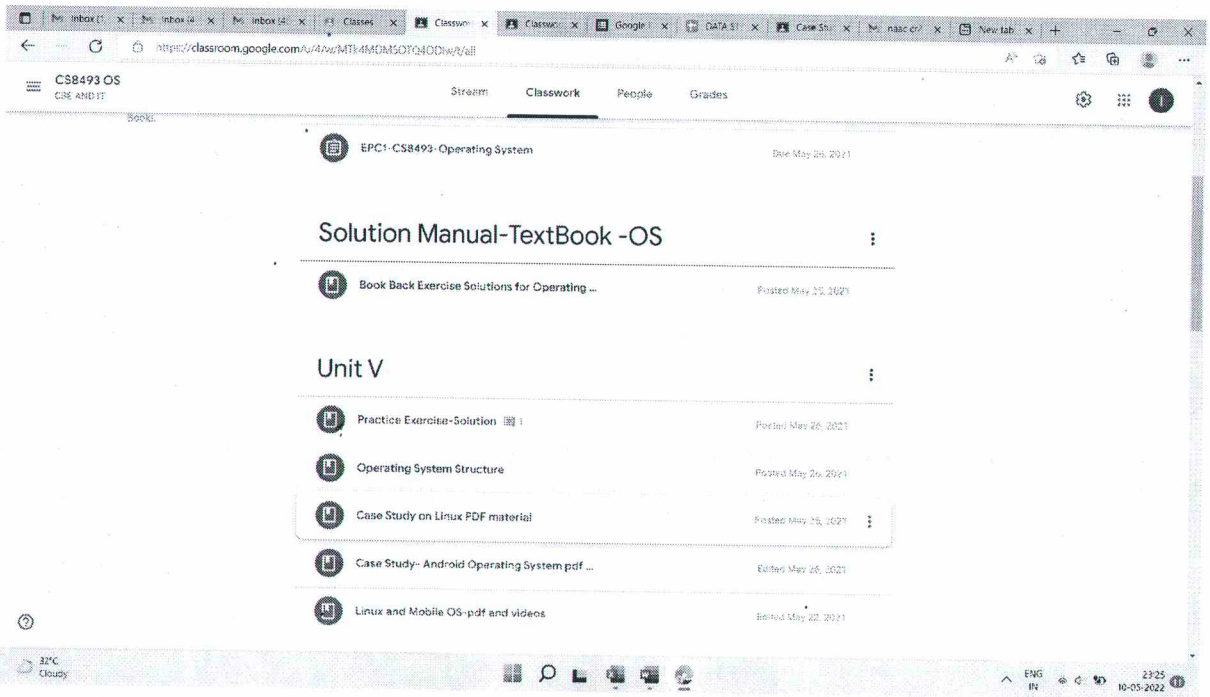

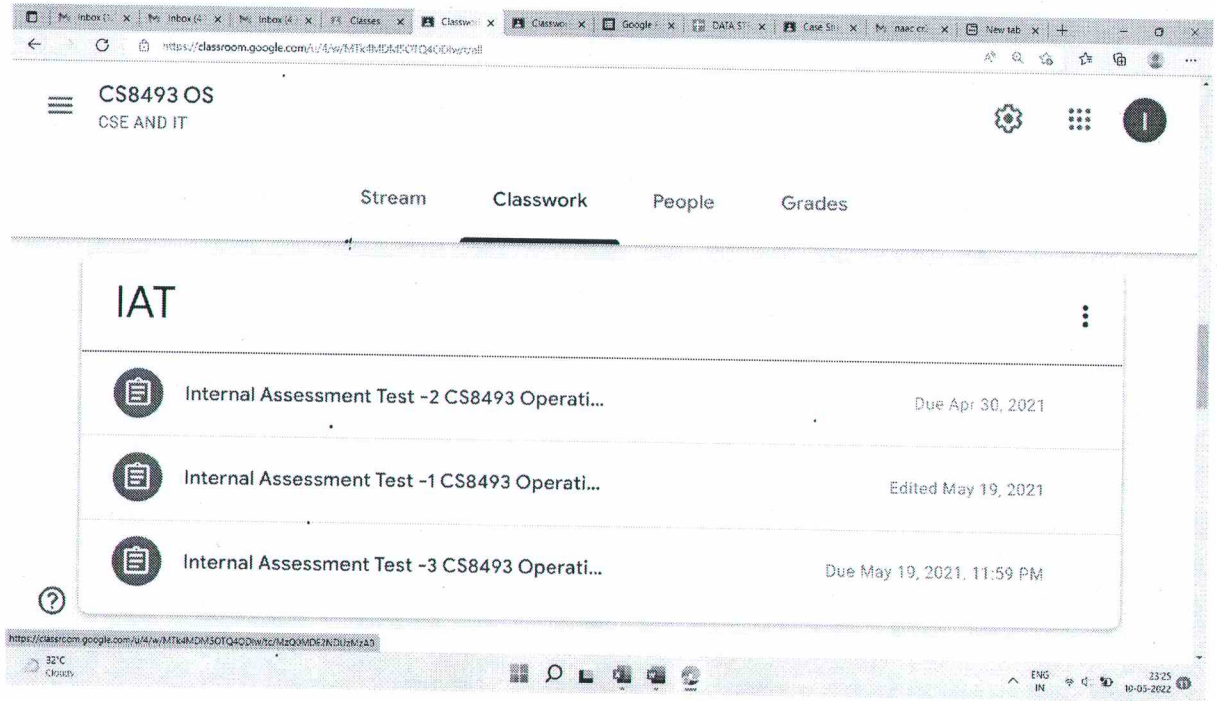

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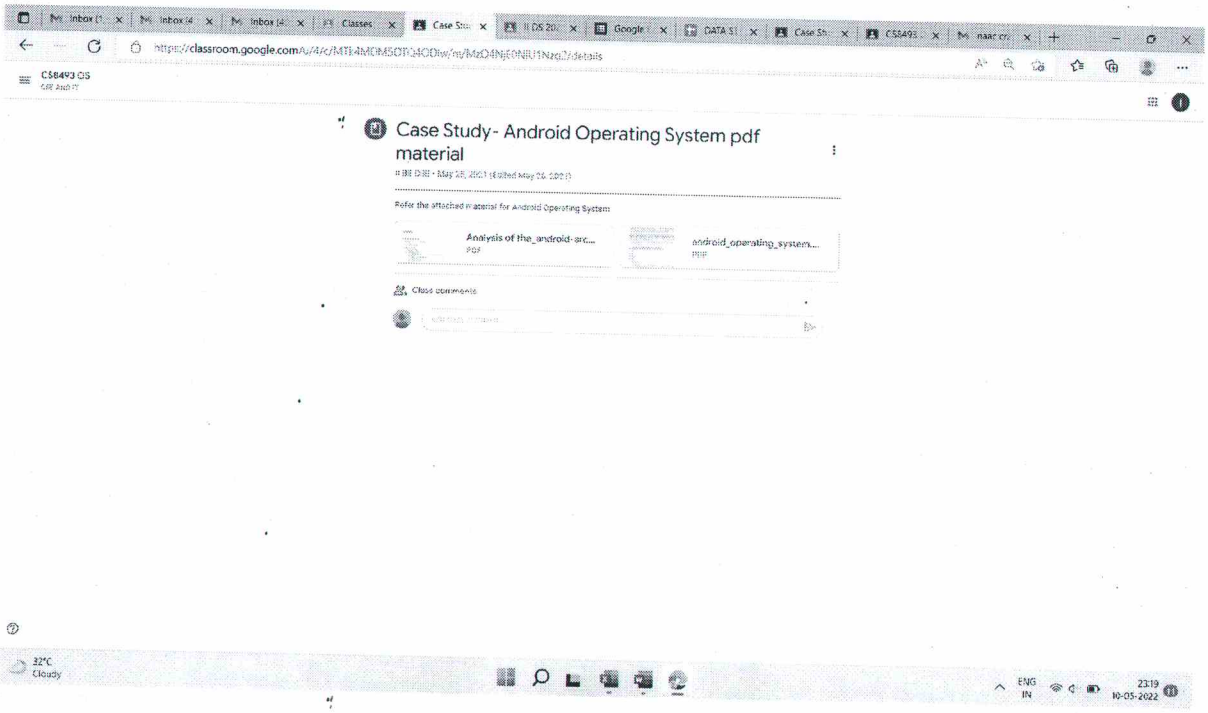

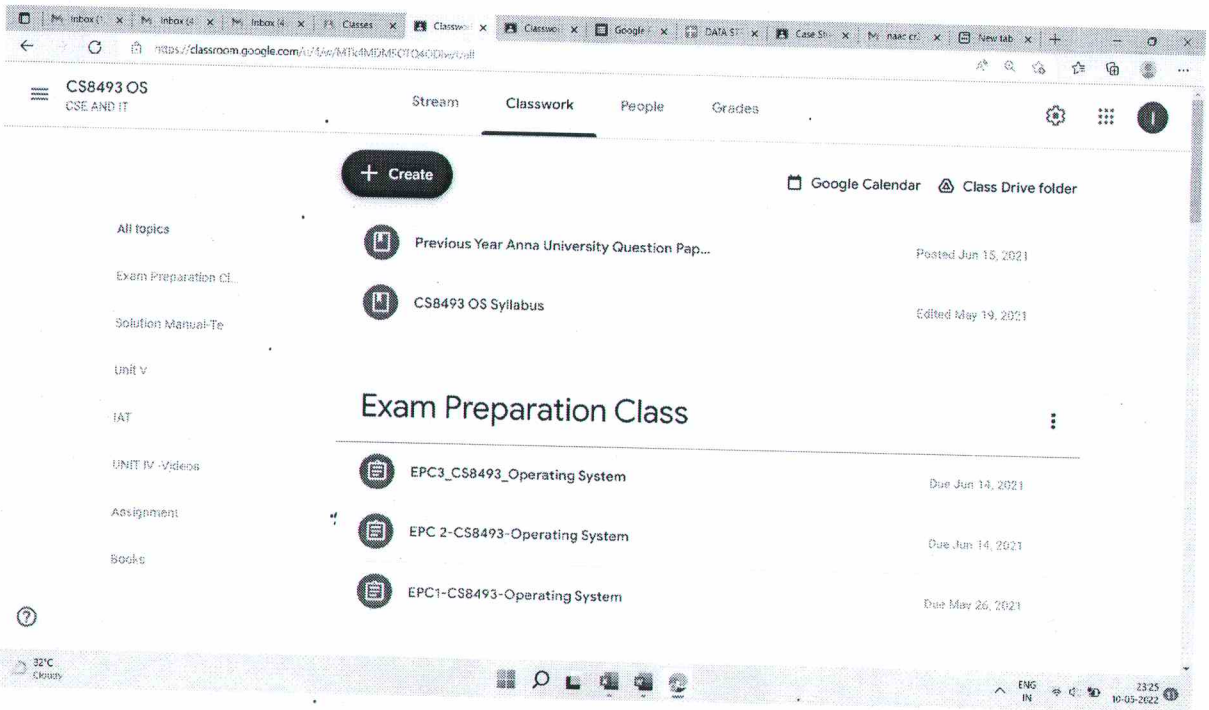

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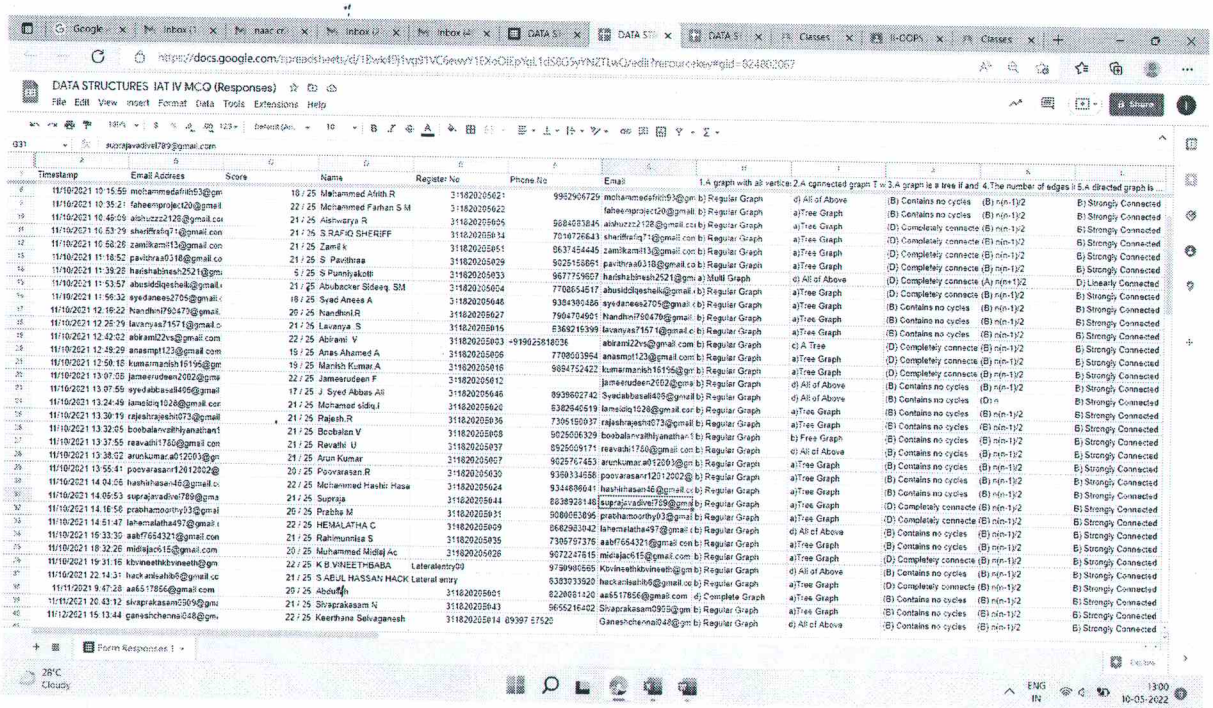
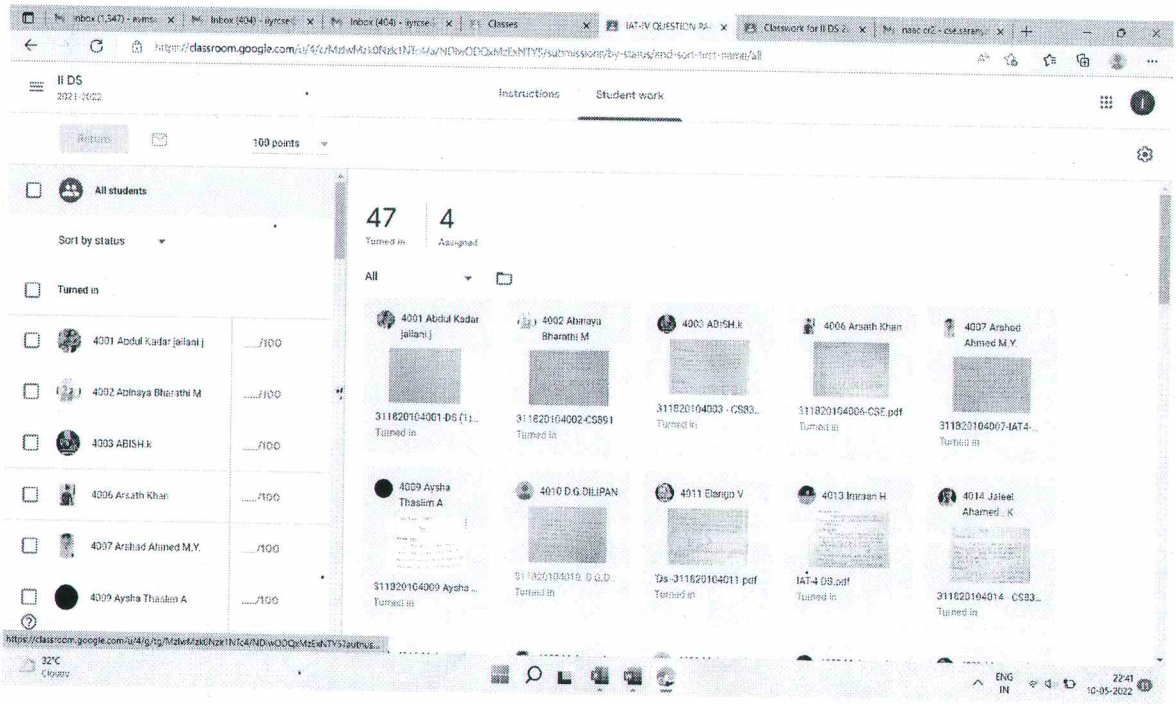


Proof for Assignment



E-Learning Materials

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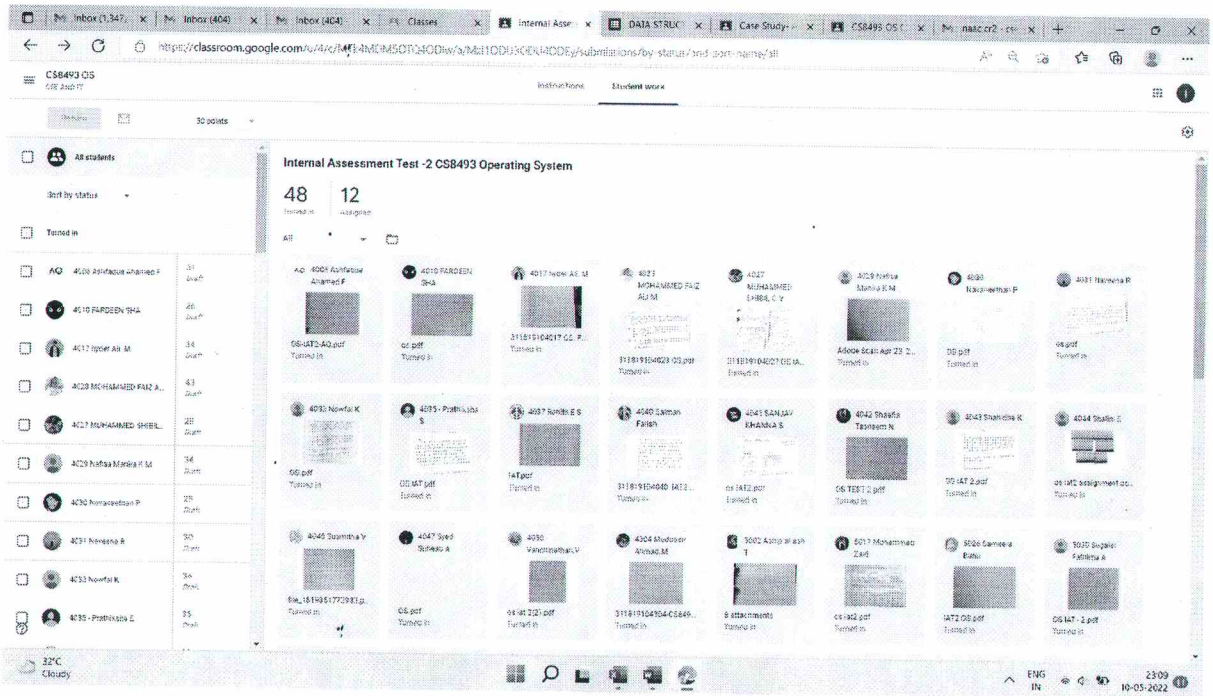

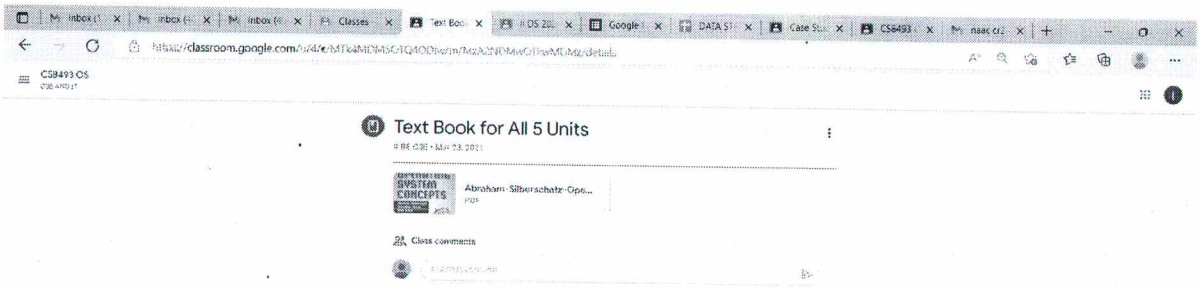

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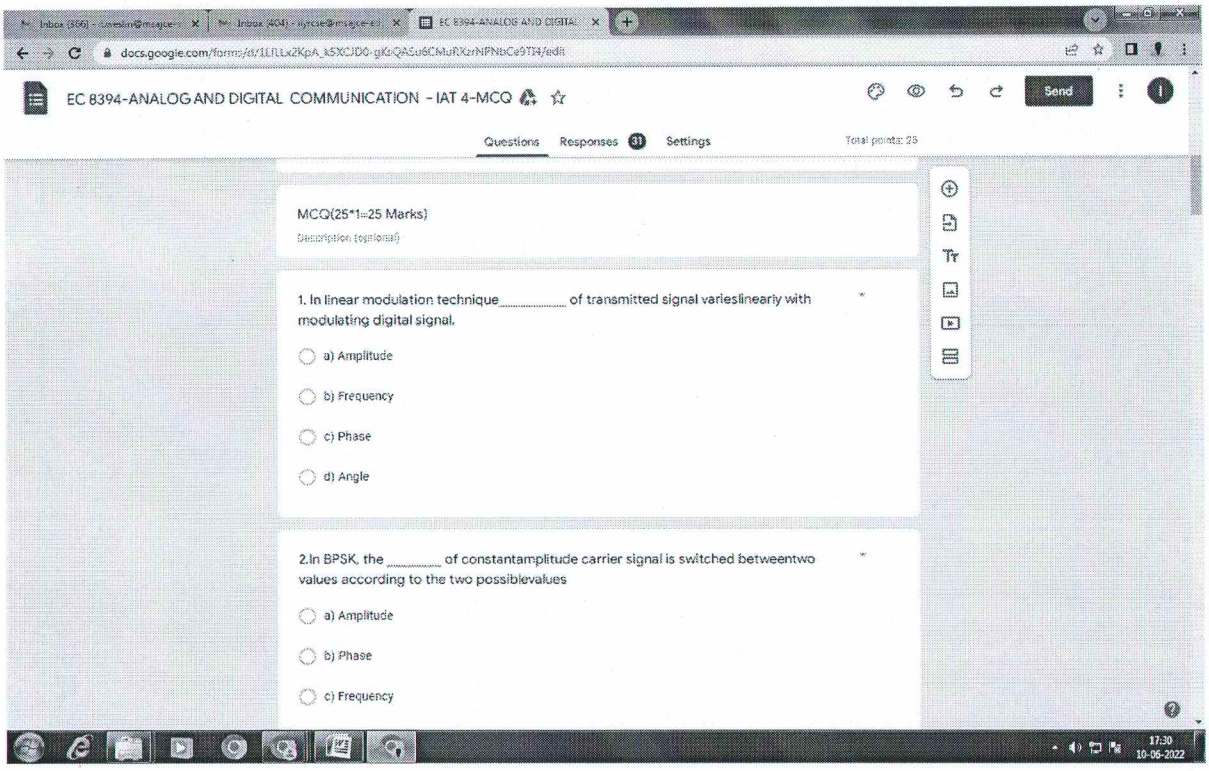
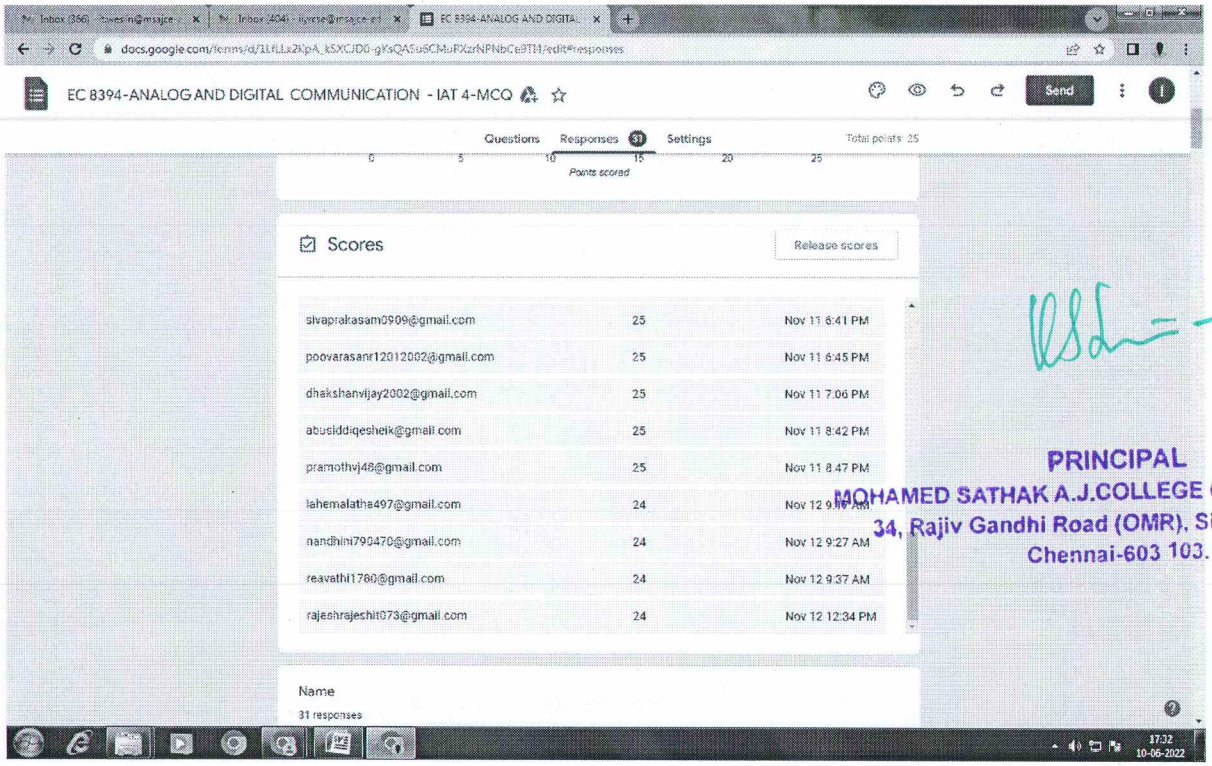


Sample MCQ



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Sample of MCQ Responses

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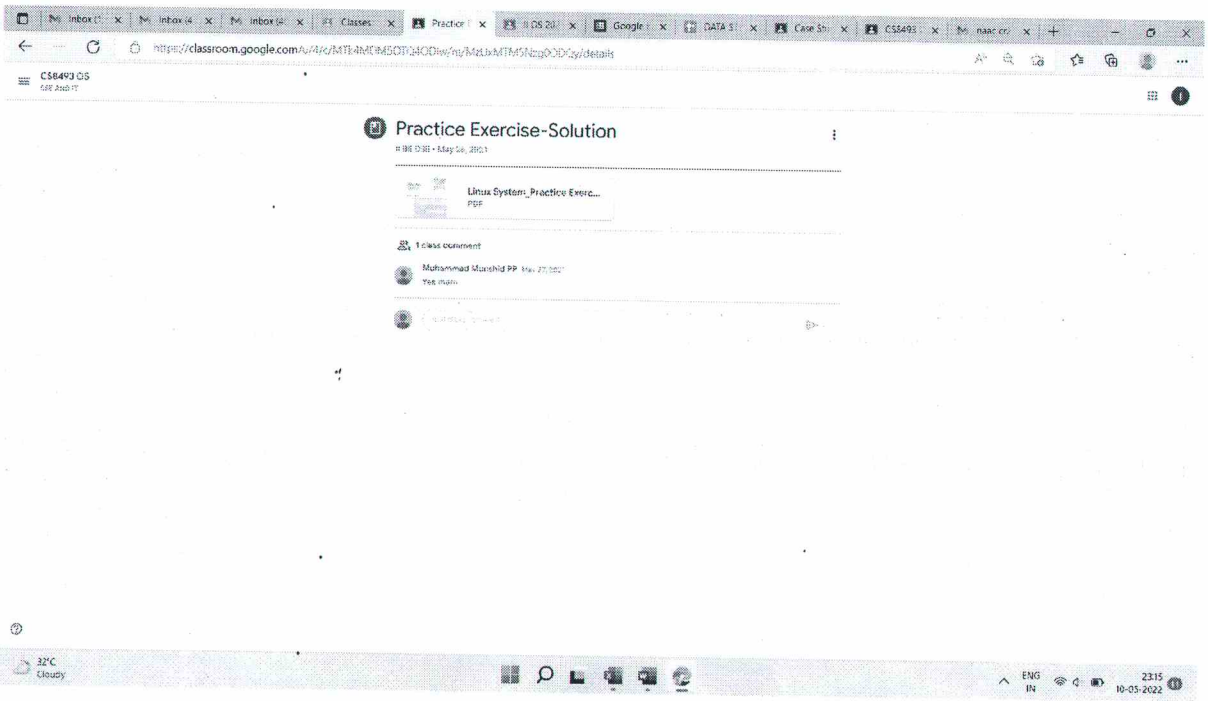

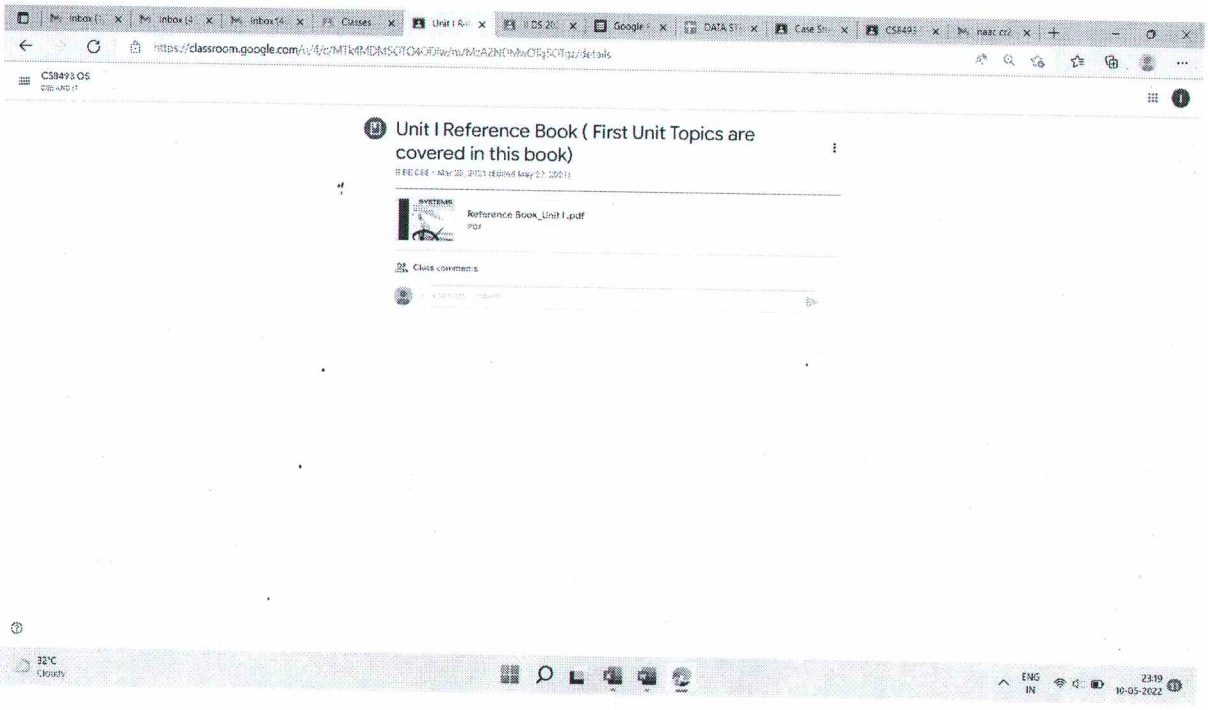

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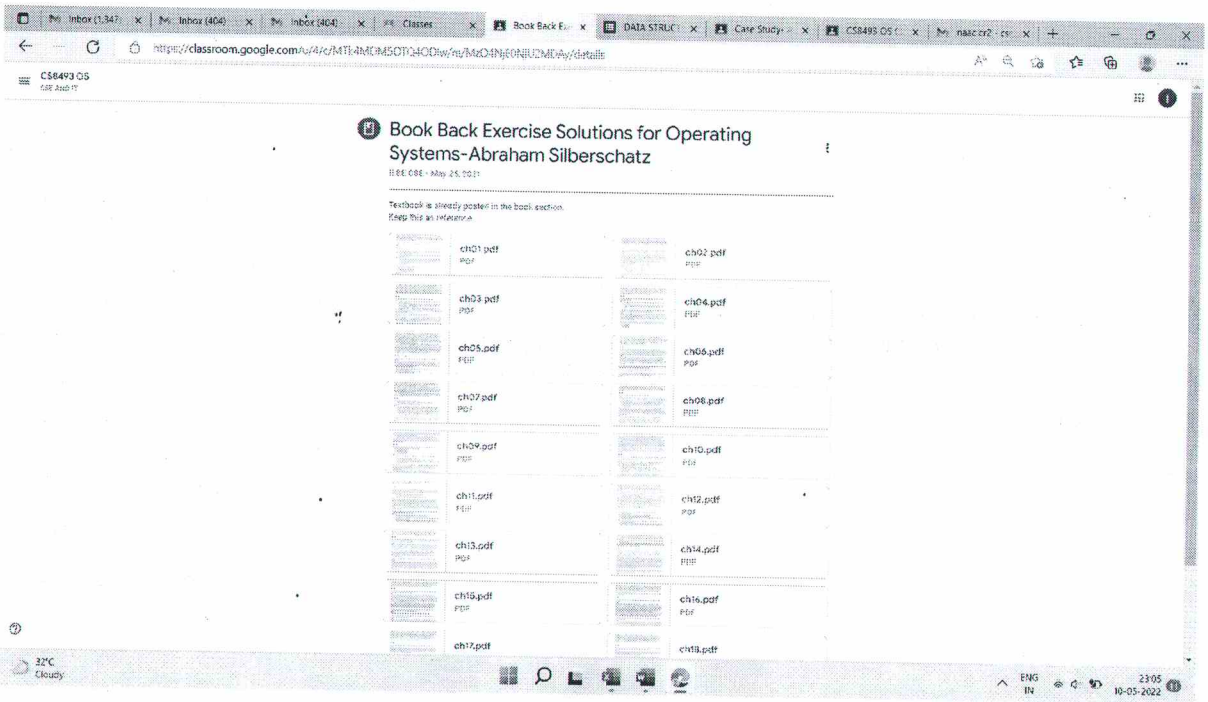

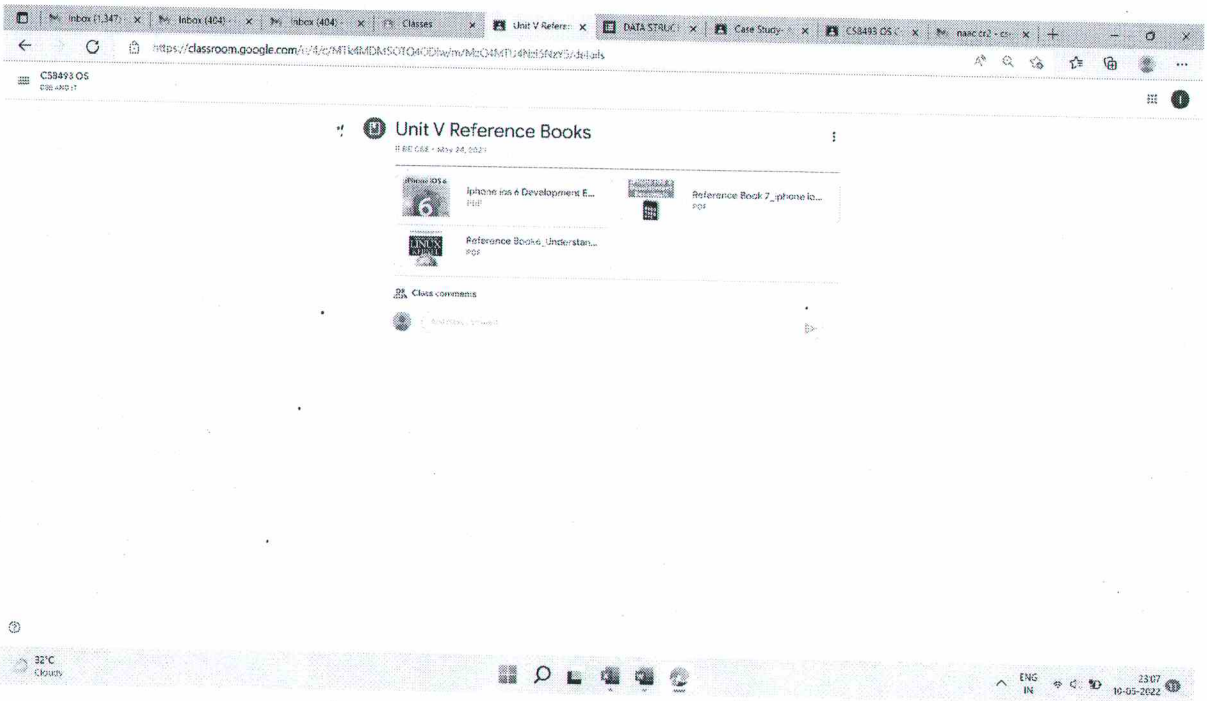

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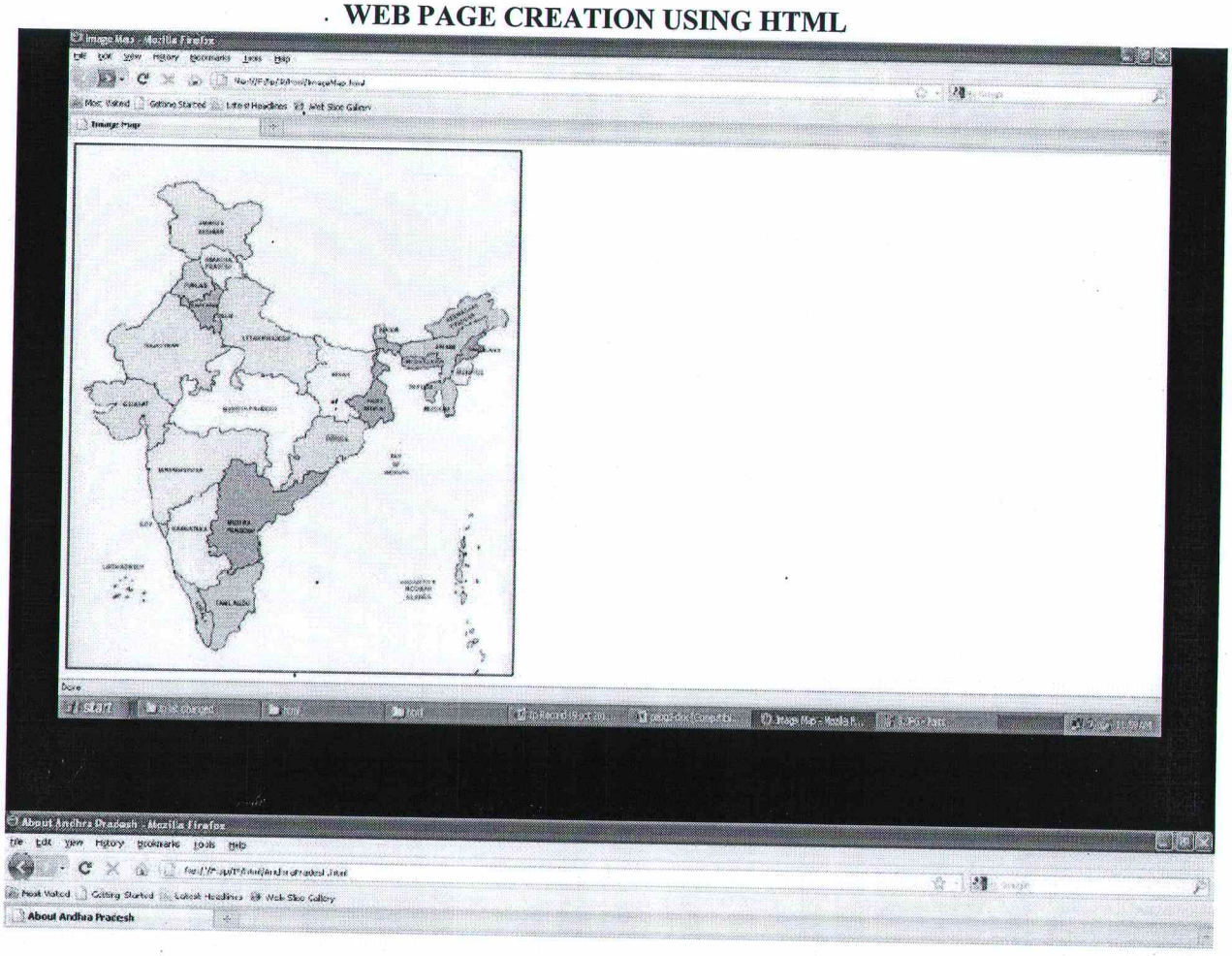
VIRTUAL LAB SAMPLES

. WEB PAGE CREATION USING HTML



Andhra Pradesh

- Area : 2,75,068 Sq. Kms
- Capital : Hyderabad
- Language : Telugu
- Population : 7,57,27,541

India Map

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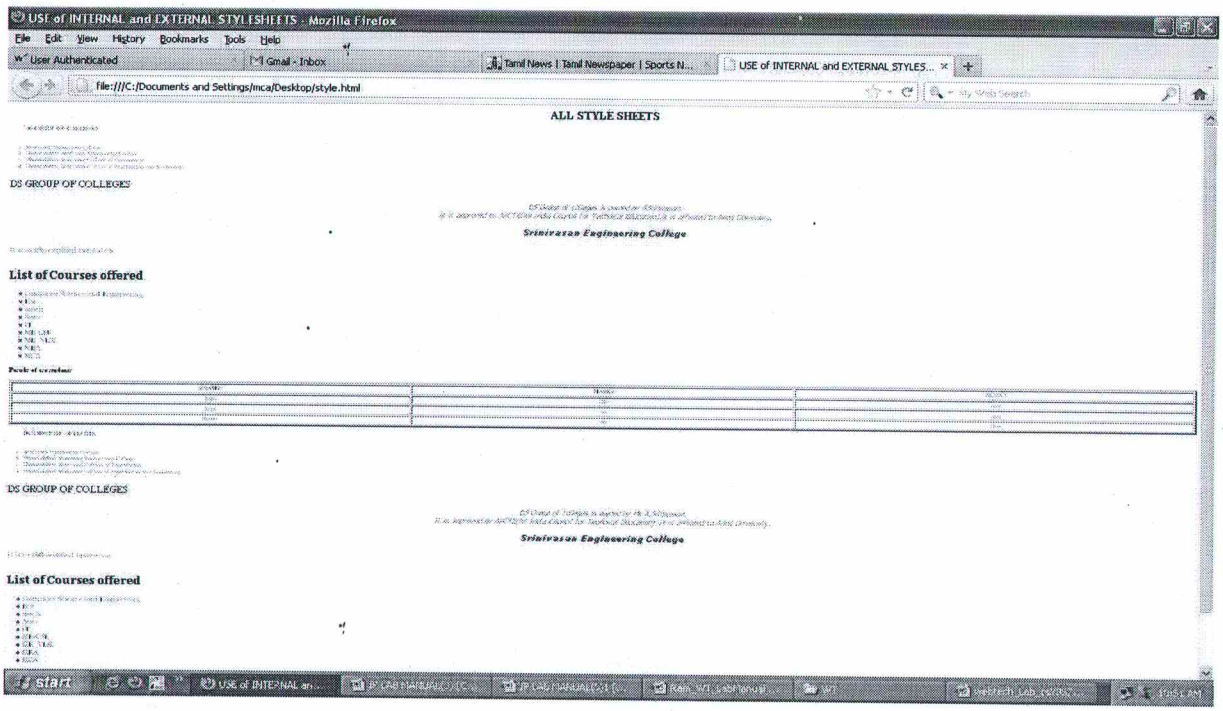
CASCADING STYLE SHEETS.



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What's New > Students and Faculty Available in the AICTE Web Portal New

Information Technology

Department of Information Technology

Overview
PEOs / PSOs / PO
Programme
Faculty
Department Facilities
Academics
Placement
News and Events
Student Activities
Members of Alumni Association

ACADEMICS

ANNA UNIVERSITY REGULATION, SYLLABUS

BE - 2015 Syllabus
BE - 2017 Syllabus
BE - 2017 Regulation

COURSE MATERIALS

SINo.	Subject Code	Subject Name	Lesson Plan	Question Bank	Lecture Notes	ICT Tools
1	GE8151	Problem Solving and Python Programming	VIEW	VIEW	VIEW	VIEW
2	IT8201	Information Technology Essentials	VIEW	VIEW	VIEW	VIEW
3	CS8251	Programming in C	VIEW	VIEW	VIEW	VIEW
4	CS8391	Data Structures	VIEW	VIEW	VIEW	VIEW
5	CS8392	Object Oriented Programming	VIEW	VIEW	VIEW	VIEW
6	CS8491	Computer Architecture	VIEW	VIEW	VIEW	VIEW
7	CS8492	Database Management Systems	VIEW	VIEW	VIEW	VIEW
8	CS8451	Design and Analysis of Algorithms	VIEW	VIEW	VIEW	VIEW
9	CS8493	Operating Systems	VIEW	VIEW	VIEW	VIEW
10	CS8591	Computer Networks	VIEW	VIEW	VIEW	VIEW
11	IT8501	Web Technology	VIEW	VIEW	VIEW	VIEW
12	CS8494	Software Engineering	VIEW	VIEW	VIEW	VIEW
13	IT8601	Computational Intelligence	VIEW	VIEW	VIEW	VIEW
14	CS8592	Object Oriented Analysis and Design	VIEW	VIEW	VIEW	VIEW

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LESSON PLAN

Department of Electronics and Communication Engineering

Name of the Subject	MEDICAL ELECTRONICS	Regulation	2017
Subject Code	EC8073	Year / Sem	III/V
Acad Year	AY 2019-2020	Batch	2017-2021

Course Objective

To gain knowledge about the physiological parameters (characterstics) and recording methods of bioelectric signals

To analyse the bio-chemicals and various physiological information

To study about various assist devices used in hospitals

To study the equipment used for physical medicine and the various recently developed diagnostic and therapeutic techniques.

To gain knowledge about the concepts of medical Instrumentation in recent technology (laser, telemedicine, endoscopy unit).

Course Outcome

At the end of the course, the students should be able to:

CO1: Discuss the physiological parameters (characterstics) and recording methods of bioelectric signals

CO2:Measure various bio chemical Information

CO3:Measure various physiological information

CO3:Measure various physiological information

CO4:Illustrate the working of human assist devices used in hospitals and to know about telemetry principles

CO5:Describe the recent trends in diagnosis & Therapy (laser, telemedicine, endoscopy unit).

Lesson Plan

Sl. No.	Topic(s)	T / R* Book	Periods Required	Mode of Teaching (BB / PPT / NPTEL / MOOC / etc)	Blooms Level (L1-L6)	CO	PO
UNIT I ELECTRO-PHYSIOLOGY AND BIO-POTENTIAL RECORDING							
1	Introduction	T1	1	BB,PPT	L1	CO1	PO1
2	Sources of Biomedical Signals, Basic Medical Instrumentation system	T1,R1	1	BB	L2	CO1	PO1-PO2
3	Origin of Bio-potentials	T1	1	BB	L2	CO1	PO1
4	Bio-potential electrodes (Ag-AgCl Electrodes, Surface Electrode , Nernst equation)	T1,R1	1	BB,PPT	L2	CO1	PO1,PO2
5	Biological amplifiers	T1	1	BB,PPT	L2	CO1	PO1,PO2
6	ECG – (Electrodes, Amplifiers, Lead set up, System, Waveforms and Signal Characteristics)	T1,R1	1	BB,PPT	L3	CO1	PO1,PO2,PO6,PO7,PO12
7	EEG – (Electrodes, Amplifiers, Lead set up, System, Waveforms and Signal Characteristics)	T1,R1	1	BB,PPT	L3	CO1	PO1,PO2,PO12
8	EMG – (Electrodes, Amplifiers, Lead set up, System, Waveforms and Signal Characteristics)	T1,R1	1	BB,PPT	L3	CO1	PO1,PO2,PO12
9	PCG – System and Signal Characteristics	T1,R1	1	BB,PPT	L3	CO1	PO1,PO2,PO12

Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any

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7	EEG – (Electrodes, Amplifiers, Lead set up, System, Waveforms and Signal Characteristics)	T1,R1	1	BB,PPT	L3	CO1	PO1,PO2,PO12
8	EMG – (Electrodes, Amplifiers, Lead set up, System, Waveforms and Signal Characteristics)	T1,R1	1	BB,PPT	L3	CO1	PO1,PO2,PO12
9	PCG – System and Signal Characteristics	T1,R1	1	BB,PPT	L3	CO1	PO1,PO2,PO12
Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any Assignment : comparision of various bio potential recording system							
Evaluation method : Assignment papers collected							
UNIT II BIO-CHEMICAL AND NON ELECTRICAL PARAMETER MEASUREMENT							
10	Introduction to biochemical process- PH, PO2	R1	1	BB	L2	CO2	PO1,PO2
11	PCO2	R1	1	BB	L2	CO2	PO1,PO2
12	Colorimeter	R1	1	BB	L2	CO2	PO1,PO2
13	Auto analyser	R1	1	BB	L3	CO2	PO1,PO2,PO12
14	Blood flow meter	R1	1	BB	L3		PO1,PO2,PO6,PO

11	PCO2	R1	1	BB	L2	CO2	PO1,PO2
12	Colorimeter	R1	1	BB	L2	CO2	PO1,PO2
13	Auto analyser	R1	1	BB	L3	CO2	PO1,PO2,PO12
14	Blood flow meter	R1	1	BB	L3	CO2	PO1,PO2,PO6,PO 7,PO12
15	Cardiac output and Respiratory measurement	R1	1	BB,PPT	L3	CO3	PO1,PO2
6	Blood pressure	R1	1	BB,PPT	L3	CO3	PO1,PO2,PO6,PO 7,PO12
17	Temperature and pulse	R1	1	BB	L3	CO3	PO1,PO2
18	Blood Cell Counters	R1	1	BB	L2	CO2	PO1,PO2,PO12
Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any **Miniproject: Temperature Monitoring**							
Evaluation method : Implement and Evaluate							
UNIT III ASSIST DEVICES							
19	Introduction to Assist devices	T1	1	BB,NPTEL	L2	CO4	PO1,PO2
20	Cardiac Pacemaker: Primary node and Secondary node	T1,R1	1	PPT	L3	CO4	PO1,PO2,P12
21	Cardiac Pacemaker: Generation of action potentials	T1	1	PPT	L2	CO4	PO1,PO2,PO12
22	DC Defibrillator: Definition Block diagram	T1	1	PPT	L3	CO4	PO1,PO2,PO12
23	Internal Defibrillator and External Defibrillator	T1,R1	1	PPT	L2	CO4	PO1,P O2
24	A.C. defibrillator and D.C. defibrillator	T1	1	PPT	L2	CO4	PO1,P O2
25	Dialyzer -peritoneal,hemodialysis	T1,R1	1	BB	L4	CO4	PO1,PO2,PO4,PO12
26	MRI	T1	1	BB	L3	CO4	PO1,PO2,PO6,PO7, PO12
27	Ultrasonic Imaging system	T1	1	BB	L3	CO4	PO1,PO2,PO6,PO

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27	Ultrasonic Imaging system	T1	1	BB	L3	CO4	PO1,PO2,PO6,PO7 ,PO12

Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any : Industrial Visit

Evaluation method : Visit the nearby hospital for learning of medical equipments and submit a report

UNIT IV PHYSICAL MEDICINE AND BIOTELEMETRY

28	Diathermies- shortwave	T1,R1	1	BB	L3	CO4	PO1,PO2,PO12
29	Ultrasonic	T1,R1	1	BB	L3	CO4	PO1,PO2
39	Microwave applications	T1	1	PPT	L4	CO4	PO1,PO2
31	Surgical diathermy	T1	1	PPT	L3	CO4	PO1,PO2
32	Telemetry principles	T1	1	PPT	L2	CO4	PO1,PO12
33	Frequency selection	T1,R1	1	BB	L2	CO4	PO1
34	Biotelemetry	T1	1	PPT	L2	CO4	PO1,PO2,PO12
35	single channel bio telenetry	T1	1	PPT	L2	CO4	PO1,PO2,PO12
36	multichannel bio telemetry ,ECG telemetry	T1	1	PPT	L2	CO4	PO1,PO2,PO12

Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any :Case study
Compare the side effects of Microwave ,CT Scan,MRI,

Evaluation method : Online MCQ Quiz

UNIT V RECENT TRENDS IN MEDICAL INSTRUMENTATION

37	Introduction to medical instrumentation	R1	1	BB	L2	CO5	PO1-PO2,PO6,PO12
38	Telemedicine,Introduction	T1	1	BB	L2	CO5	PO1-PO2,PO6,PO12

CO5	3	3	0	0	0	0	0	0	0	0	0	2	0	0
Avg	3	3	0	0.6	0	0.6	0.8	0	0	0	0	1.6	0.8	0

Justification for CO-PO mapping

CO1	Various fundamental key elements related to bioscience are described Highly in PO1 .high correlation of Different concepts of recording bio signals are being analyzed to produce engineering solutions in medical field PO2.Less impact environmental engineering solutions and society PO6,PO7.Here is a reasonable need for continuous learning required PO12
CO2	Various fundamental key elements like electrode and non electrical parameter are described Highly in PO1 .High correlation of Different measurement concepts are being analyzed to produce engineering solutions in medical field PO2.Less impact environmental engineering solutions and society PO6,PO7.Here is a reasonable need for continuous learning required PO12
CO3	Highly described Various fundamental key elements used for assist devices indicated in PO1 .Modern equipments concepts are being analyzed to produce engineering solutions in medical field PO2.Less impact environmental engineering solutions and society PO6,PO7.Here is a reasonable need for continuous learning required PO12
CO4	fundamental key of physical medicine and telemetry signals used for medical field are described in PO1 Highly .Understands the work of different telemetry concepts in combination -PO2. Side effects of different scanning method asked .PO4.Less impact environmental engineering solutions and society PO6,PO7.Here is a reasonable need for continuous learning required PO12
CO5	Highly descibed Basic concepts used in the latest medical technology advancement PO1. Different systems are analyzed PO2 .Less impact environmental engineering solutions and society PO6,PO7.Here is a reasonable need for continuous learning required PO12

3	High level	2	Moderate level	1	Low level

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DEPARTMENT OF INFORMATION TECHNOLOGY

SEVENTH SEMESTER

LECTURE NOTES

CS8079 -HUMAN COMPUTER INTERACTION

CS8079 HUMAN COMPUTER INTERACTION

OBJECTIVES: The student should be made to:

- Learn the foundations of Human Computer Interaction.
- Be familiar with the design technologies for individuals and persons with disabilities.
- Be aware of mobile HCI.
- Learn the guidelines for user interface.

UNIT I FOUNDATIONS OF HCI

The Human: I/O channels – Memory – Reasoning and problem solving; The computer: Devices – Memory – processing and networks; Interaction: Models – frameworks – Ergonomics – styles – elements – interactivity- Paradigms. Case Studies

UNIT II DESIGN & SOFTWARE PROCESS

Interactive Design basics – process – scenarios – navigation – screen design – Iteration and prototyping. HCI in software process – software life cycle – usability engineering – Prototyping in practice – design rationale. Design rules – principles, standards, guidelines, rules. Evaluation Techniques – Universal Design.

UNIT III MODELS AND THEORIES

Cognitive models –Socio-Organizational issues and stake holder requirements –Communication and collaboration models-Hypertext, Multimedia and WWW.

UNIT IV MOBILE HCI

Mobile Ecosystem: Platforms, Application frameworks- Types of Mobile Applications, Widgets, Applications, Games- Mobile Information Architecture, Mobile 2.0, Mobile Design: Elements of Mobile Design, Tools. Case Studies

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UNIT I
FOUNDATIONS OF HCI

The Human: I/O channels – Memory – Reasoning and problem solving; The computer: Devices – Memory – processing and networks; Interaction: Models – frameworks – Ergonomics – styles – elements – interactivity- Paradigms. Case Studies

Introduction

Human-computer interaction (commonly referred to as HCI) researches the design and use of computer technology, focused on the interfaces between people (users) and computers. Researchers in the field of HCI both observe the ways in which humans interact with computers and design technologies that let humans interact with computers in novel ways.

User

By "user", we may mean an individual user, a group of users working together. An appreciation of the way people's sensory systems (sight, hearing, touch) relay information is vital. Also, different users form different conceptions or mental models about their interactions and have different ways of learning and keeping knowledge and. In addition, cultural and national differences play a part.

Computer

When we talk about the computer, we're referring to any technology ranging from desktop computers, to large scale computer systems. For example, if we were discussing the design of a Website, then the Website itself would be referred to as "the computer". Devices such as mobile phones or VCRs can also be considered to be —computersl.

Interaction

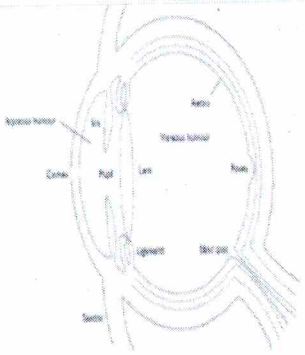

Figure: Human Eye

The retina is mainly covered with photoreceptors there is one blind spot where the optic nerve enters the eye. The blind spot has no rods or cones, our visual system compensates for this so that in normal circumstances we are unaware of it.

The retina also has specialized nerve cells called ganglion cells. There are two types:

X-cells, which are concentrated in the fovea and are responsible for the early detection of pattern; and Y-cells which are more widely distributed in the retina and are responsible for the early detection of movement. The distribution of these cells means that, while we may not be able to detect changes in pattern in peripheral vision, we can perceive movement.

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