2.3.1: Student centric methods,such as experiential learning,participative learning and problem solving methodologies are used for enhancing learning experiences

S.No	Department	Page Number
1	Department of Biotechnology	**2-8**
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3	Department of Chemical Engineering	**21-30**
4	Department of Computer Science And Engineering	**31-43**
5	Department of ECE	**44-60**
6	Department of EEE	**61-69**
7	Department of Information Technology	**70-91**
8	Department of Mechanical Engineering	**92-103**
9	Department of MCA	**104-113**
10	School of Management Studies	**114-125**
11	Department of Physics	**126-129**
12	Department of Mathematics	**130-139**
13	Department of English	**140-143**
14	Department of Chemistry	**144-152**

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Department of Biotechnology

Experiential Learning Methodologies used by Biotechnology department:

Industrial Internships
Department of Biotechnology
(From A.Y 2017-18 To A.Y 2021-22)

Academic Year	No of students done Internship				Total no of students done internship
	1 to 3 weeks duration	3 to 6 weeks duration	More than 6 weeks duration	Whole Semester duration	
2017-18	2	4	-	-	6
2018-19	1	5	-	-	6
2019-20	6	5	4	3	18
2020-21	3	6	16	-	25
2021-22	14	-	43	9	66

Demonstrations of working models/ Experiments (Project Expos) by Biotechnology department

A Brief Technical Report on"Neozion–2022" - Live Projects Dates of Event: 23rd&24th March,2022

Theme of the activity : Application ,Innovation ,and Product development in Biotechnology

Scope covered: *Food Biotechnology, Nano Biotechnology, PlantBiotechnology, AlgalBiotechnology, Animal Biotechnology, Environmental Biotechnology*

Outcome:

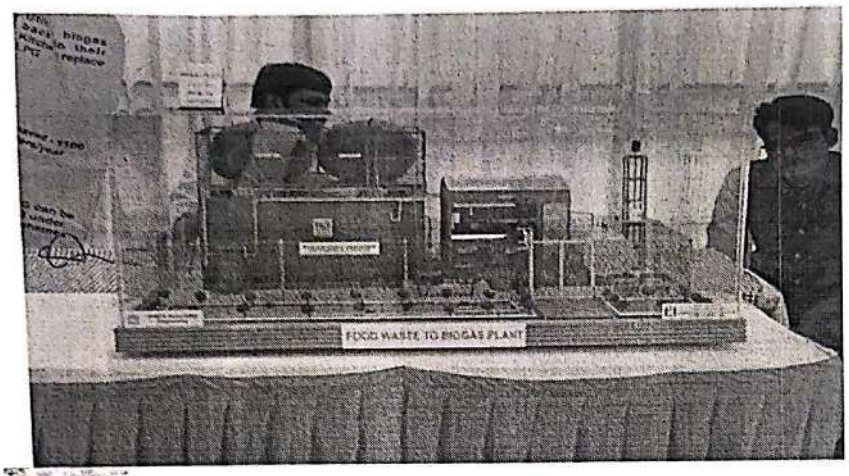
- *Demonstrate proficiency in basic laboratory skills like preparation of solutions and culture media,handling of equipment,aseptic techniques,micro pipetting*
- *Perform,and analyze results of experiments using basic laboratory techniques in molecularbiology*

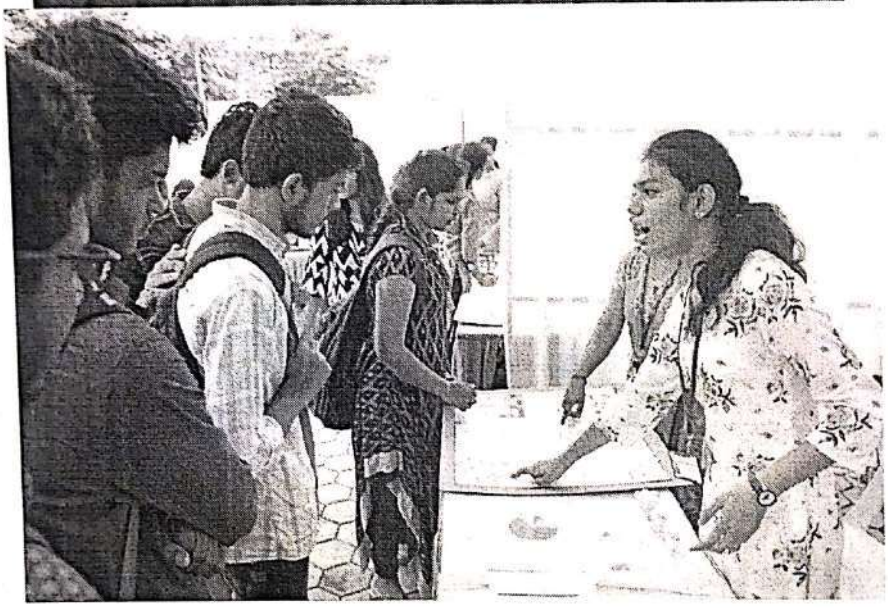
Number of students and faculty attended: Students: 32;Faculty:6

Photographs :Students demonstrating live projects to Judges in Neozion 2022

Research day 2019

Number of students and faculty attended: Students: 156;Faculty: 10





Students demonstrating live projects as part of Research day 2019

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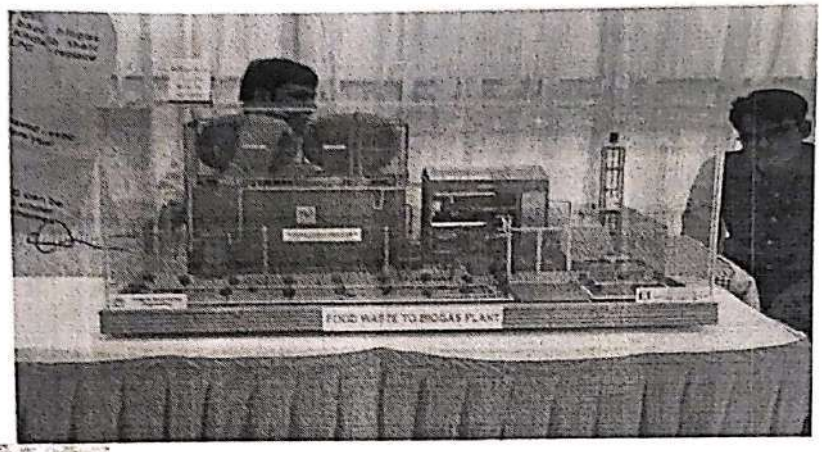
Research day 2019

Number of students and faculty attended: Students: 156;Faculty: 10



Students demonstrating live projects as part of Research day 2019

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Participative Learning Methodologies used by Biotechnology department:

Hackathons/ Ideathons

A Brief Technical Report on"Neozion–2022" - Bio Hackathon
Dates of Event: 23rd&24th March,2022

Theme of the activity: Biotechnology for the Society

Scope covered: Food Biotechnology, Nano Biotechnology, Plant Biotechnology, Algal Biotechnology, Animal Biotechnology, and Environmental Biotechnology

Outcome:

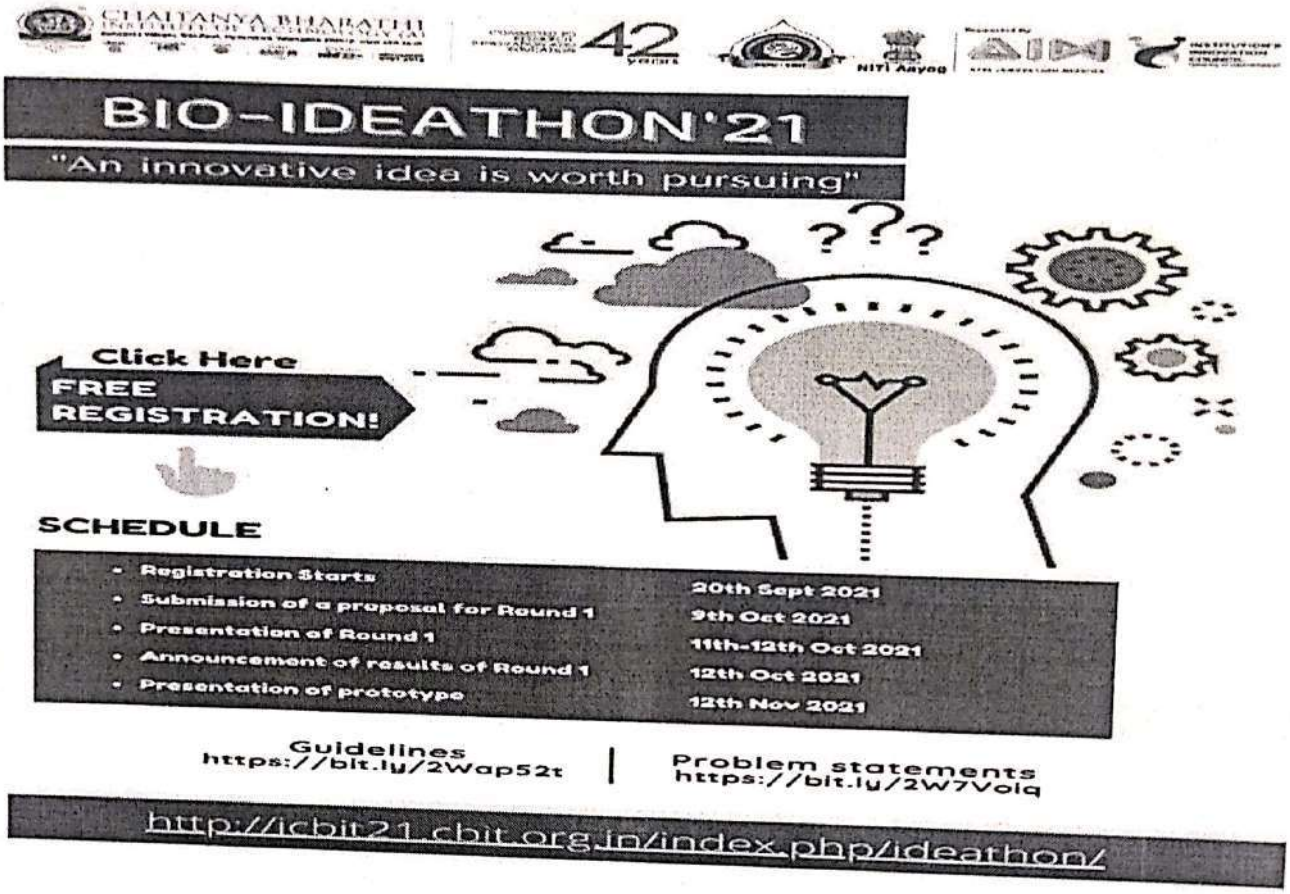
- *Challenged to solve a real problem in limited amount of time,the constraint of time helps youth to think of creative solutions*
- *Students can get validation on ideas that comes upto you from variety of people (if you have plan to ever become an entrepreneur)*

Number of students and faculty attended: Students:06; Faculties:1

Prize winner in Biohackathon-2022

Bioideathon'21

Bioideathon '21 is conducted by Department of Biotechnology,CBIT in November 2021 in association with ACIC-CBIT sponsored by NITI Aayog,NewDelhi in two phases. A total of 13 teams have registered for the Bioideathon out of which first two best two teams were awarded cash prize



Hands-on Training programs/workshops

2017-18			
S.N.	**Date**	**Event Details**	**Proof**
1	12-09-2017 to 13-09-2017	Two days workshop on Biotechnology Innovations and Business Opportunities Organized Jointly by Department of Biotechnology and School of Management studies CBIT Hyderabad	https://drive.google.com/file/d/1f7jop3nNYg87Q5MoTq9j818t_bJSnmofI/view?usp=sharing
2	26-02-2018 to 27-02-2018	Two day Workshop on Bioinformatics By Dr. C. N. Prashantha, Organized by Department of Biotechnology, CBIT, Hyderabad	
2018-19			
S.N.	**Date**	**Event Details**	**Proof**
1	15-03-2019 to 16-03-2019	Two day National workshop on Current trends in Bioinformatics, Organized by Department of Biotechnology, CBIT, Hyderabad, Molecular Phylogenetics and DNA microarray and cluster analysis of gene expression	https://drive.google.com/file/d/1d2Eo20dPJu78SkEQKUeLSwT8Hj5UagaU/view?usp=sharing
2019-20			
S.N.	**Date**	**Event Details**	**Proof**
1	7/19/2019	Workshop was conducted on "Patent Searching-Search strategies and Techniques" by Mr. Penden Purushotham Rao, Manager, Life sciences division, Dolcera Information Technology Services Pvt Ltd.	https://drive.google.com/file/d/1J9Ju70fvRF_zuoDcDvPBDag3xTakS1Ry/view?usp=sharing https://drive.google.com/file/d/1VJ1oqme0G-3RkjLkZLCPLYGLpr2nf9XI/view?usp=sharing https://drive.google.com/file/d/1lci7Fm_TlMXzm_0xaT4A-Puu7FfGo2JH/view?usp=sharing https://drive.google.com/file/d/1VWDYVWquRQSluc3m4wgHRBnBGlgQdqRM/view?usp=sharing
2	2/3/2020	Gillette empanelled Motivational Speaker workshop on"How to develop a Smart and Confident personality"	
2021-22			
S.N.	**Date**	**Event Details**	**Proof**
1	11-05-2022 to 12-05-2022	"30M Genomics Pvt. Ltd." conducted a two-day Hands-On Workshop on "Advanced Genomics for Molecular Diagnostic Applications" for 36 students of 3rd B.Tech. Biotech students on 11.05.2022 and 12.05.2022 at the Department of Biotechnology, CBIT.	https://drive.google.com/drive/folders/1CDl6_GsqeHV9p2I2X2rrzHz1V_vunUJq?usp=sharing

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2.3.1. Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences.

a) Experiential Learning Methodologies used:

Industrial Internships/ Industrial Visits

Rural Internships/ Community Engagement

Learning by Doing (Labs and Projects)

Demonstrations of working models/ Experiments (Project Expos)

CALL-Computer Aided Language Learning

Industrial Internships, Industrial Visits (For the AY 2017-18 to 2021-22):

The department organizes seminars/guest lecturers/interactive sessions etc by the eminent persons from the industry to expose the students to industry requirements and provide them better insight of the same. The faculty members are also encouraged to attend training sessions organized byindustries. The students go on industrial visits to acquire hands-on experience and get exposure to the industrial environment. The students are encouraged to undergo internships in reputed industries/companies during summer vacation.

The department organizes industrial visits for students once in a year/semester to relevant organizations/companies to enable the students to experience the practical implementation of theoretical knowledge in the real world. This gives them an insight and exposure to the industrial environment, the work culture, and ethics in Industries. The visits also help the students to learn about human resource management, which is essential in any organization.

Industrial Internships for the AY 2017-18 to 2021-22:

The students are encouraged to take up internship programs during their semester break. Department provides guidelines, suggestions, scope, and details of industries offering internships. Besides, the faculty coordinator constantly interacts with those alumni who are entrepreneurs/working in the industries and requests them to provide necessary guidance andsupport for internships.

S. No.	Roll No	Name of the student	Name of the Company/ Organization	Duration	Title of Work
2021-2022					
BE IV Year Sem VII and Sem VIII (Samples)					

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1	160118732025	B Anish	Sumadhura	26-07-2021 to 14-08-2021	Processes in civil engg. constructions
2	160118732031	V HemaVardhan	Sumadhura	26-07-2021 to 14-08-2021	Processes in civil engg. constructions
BE III Year &Sem V and Sem VI (Samples)					
1	160119732003	Anusha R	Giridhariprospera	1-03-2022 to 29-03-2022	Construction processes
2	160119732005	Chinhitha K	Giridhariprospera	1-03-2022 to 29-03-2022	Construction processes
2019-2020					
BE III Year SemV and Sem VI (Samples)					
1	160117732002	B. Anupama Reddy	L & T Metro Rail Hyderabad.	24-06-2019 to 29-06-2019	Construction Sequence of Station and Ballast less Track
2	160117732002	B. Anupama Reddy	D.E.C Infrastructure & Projects (India) Pvt. Ltd. (Formerly Known as M/s Das Engineering Co.)	30-05-2019 to 06-06-2019	Construction of 2 BHK Housing Scheme
BE II Year &Sem III and Sem IV					
1	160119732031	P Manoj RamiReddy	TTribeThub	2019-2020	Entrepreneurship program by Telangana State
2	160119732008	KhyathiVardhini V	TTribeThub	2019-2020	Entrepreneurship program by Telangana State
3	160119732004	Charvi P	TTribeThub	2019-2020	Entrepreneurship program by Telangana State
2018-2019					
BE III Year and Sem V and Sem VI (Sampls)					
1	160116732004	Dusetty Manisha	Jayabheri Properties Pvt. Ltd Gachibowli, Hyderabad – 500032	03-06-2019 to 20-06-2019	Jayabheri The Summit
2	160116732006	G. Radhika Brindavani	Jayabheri Properties Pvt. Ltd Gachibowli, Hyderabad – 500032	03-06-2019 to 20-06-2019	Jayabheri The Summit
3	160116732007	A. Ramya Varshini	Sita Shelter Pvt. Ltd, H.No: 7-1-22/4, G-1, Begumpet,	16-05-2019 to 27-06-2019	Plots, Column Marking using Total Station,

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			Hyderabad- 500016, Telangana.		foundation & Plinth Beams etc.
2017-2018 III Year &Sem V and Sem VI (Samples)					
1	1601-15-732-001	Ms. K. Akila Reddy	Aparna Constructions & Estates Pvt. Ltd, Hyderabad.	18-06-2018 To 23-06-2018	Detailed explanation of all the activities in the construction which includes both office work and field work. At Aparna sarovar, zenith site, Hyderabad.
2	1601-15-732-003	B. Anusha Bai	Aparna Constructions & Estates Pvt. Ltd, Hyderabad.	18-06-2018 To 23-06-2018	Detailed explanation of all the activities in the construction which includes both office work and field work. At Aparna sarovar, zenith site, Hyderabad.
3	1601-15-732-006	Mr. A. Mahotra	Aparna Constructions & Estates Pvt. Ltd, Hyderabad.	18-06-2018 To 23-06-2018	Detailed explanation of all the activities in the construction which includes both office work and field work. At Aparna sarovar, zenith site, Hyderabad.
2017-2018 II Year &SemII and Sem III (Sample)					
33	1601-16-732-011	Ms. B. Shivani	Sita Shelters Pvt. Ltd.	19th May-30th June, 2018	Site execution
34	1601-16-732-014	Ms. N.C.Supriya	CADSYS, Himayatnagar, HYD	June-July, 2018	One month training in basic AutoCAD
35	1601-16-732-013	Ms. Sri RaghaSaipriya.N	Aqua Space Developers Pvt. Ltd at My Home Bhooja site	19th May-30th June, 2018	Concrete Technology and site execution
36	1601-16-732-017	Ms. Yamini Gupta	AIESEC – Srilanka	28th May-29th June, 2018	International Volunteer Internship

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37	1601-16-732-082	K. Harish	Howe, VIZHIJAM PORT, TRIVANDRUM.	21-05-2018 To 09-06-2018	Study of Marine Pilling Technology & Procedures.

Industrial Visits for the AY 2017-18 to 2021-22:

*Due to COVID, no industrial visits were planned for the AY 20-21 and 21-22

S. NO	Date	Place of Visit	Outcome
1	31-01-2020	Industrial visit to CABLE Stayed bridge on Durgamcheruvu, hyderabad	This visit gave students to understand the construction of cable bridge.
2	11-03-2019	Construction site at Rampally and reservoir at Shamshabad	This visit gave students a deep insight into the concepts of construction techniques and gain practical exposure to industry
3	22-01-2019	Sewage treatment plant, HMWS&SB, Amberpet, Hyderabad.	Visit to this plant gave students a deep insight into the concepts of treatment of sewage and processes involved in sewage treatment plant
4	21-03-2018	BSCPL pre-stressed concrete casting yard at Pillaipalli site, near Ramoji film city	This visit gives students a deep insight into the concepts in design of pre-stress structures and importance of pre-stress concrete in construction industry.

Rural Internships/ Community Engagement(For the AY 2017-18 to 2021-22):

COMMUNITY ENGAGEMENT:

The Community Engagement course will introduce students to the theory, techniques and challenges and field work related to community engagement. The objective behind this course is students to learn about challenges faced by various sections of the society and help in develop an appreciation of Rural culture, life-style and wisdom among the Students, Learn about the various livelihood activities that contribute to Rural economy and Familiarize the Rural Institutions and the Rural Development Programmes in India. Field work includes that interaction with women members of self-help groups (SHGs), visit to Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) project sites, visit state government sites, rural primary, middle and high schools/ mid-day meal centres, participate in gram sabha (village council) meetings, visit to local nagarpalika (municipal) office and anganwadi (child care) centers, among others. At the endof the course student will produce the report work on any one of the issues facing by the communities. In this course, students will learn how to become an active community member and citizen. An emphasis will be

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placed on in-service learning, leadership training and team building opportunities.

Fig 1: Visit to Akshya Patra by Civil (A2)

AY: 2021-2022 **Dept:** Civil (A2), I/IV Sem-II

S. No	Roll No	Title
1	1601-21-732-071 to 75	Anganwadi centers and Its Services
2	1601-21-732-076 to 80	Organic Cultivation and Use of Fertilizers
3	1601-21-732-081 to 85	Anganwadi centers
4	1601-21-732-086 to 90	Mid-Day Meal Center and Its Services
5	1601-21-732-091 to 95	Anganwadi Center
6	1601-21-732-096 to 100	Akshaya Patra- The NGO
7	1601-21-732-101 to 105	Mid-Day Meal Scheme
8	1601-21-732-106 to 110	Anganwadi
9	1601-21-732-111 to 115	Anganwadi Center
10	1601-21-732-116 to 120	Mid-Day Meals
11	1601-21-732-121 to 126	Mid-Day Meals
12	1601-21-732-127 to 132	Rural Schools in India

Learning by Doing (Labs and Projects):

Laboratory experiments:

Laboratory class work: A detailed Laboratory schedule is prepared prior to the commencement of class work, with the planning of experiments/programs to be performed in each session. The experiments/programs are designed in such a way that student get

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expertise in that particular Laboratory course. Students are evaluated for 50 marks in semester end examination and 25 marks in Continuous Internal evaluation for 2 credit lab course while it is 35 marks in SEE and 15 marks in CIE for 1 credit lab course.

Quality of laboratory experiments: Around 12 experiments are designed in the syllabus fora semester class work. Additional experiments are also conducted beyond the syllabus wherever necessary. Laboratory instructional manual contains the details of the experimentand theses are provided to students at the commencement of the semester.

Well-equipped labs and updated experiments as per the latest technologies help the students to update. Students are encouraged to repeat the experiments to become skilled and experiments/problems are designed for individual students to enhance their ability to prepare the protocols for a particular experiment (not for all labs). Research labs established in the department as well as in other department are used for the conducting experiments to orient the interest of students' interest towards research. Use of higher version equipment with latest standard software always helps the students to analyze the data as per the industrial standards.

Projects (For the AY 2017-18 to 2021-22):

Student Projects course in civil engineering is designed to provide the students an understanding on various courses of the curriculum and ability to apply the concepts from these courses in order to obtain innovative solutions, to the problems related to civil engineering domain, that cater the needs of the society. The students carry out their project works in the VII and VIII semester respectively. The students select a project in line with their area of interest and they are encouraged to work on real world examples. The in-depth study of a selected project problem and showing an implementable solution to theproblem taken up enables the student to synthesize and integrate knowledge, connect theory and practice as well as demonstrate holistic achievement of program learningoutcomes. Project work provides opportunity for improvement in presentation and communication skills and also helps them learn more within and beyond curriculum. Atthe end of the project, students are encouraged to publish their work in Journals / conferences. At the end of the project the students are expected to have:

- The capability to complete projects within the stipulated period and cost.
- The capability to manage and use scientific knowledge to carry out Engineering projects.
- The capability to think objectively, analytically, and critically in identifying and solving problems in a systematic manner.
- The capability to deliver or present the project findings in oral and written form.
- The Department follows processes mentioned below to monitor the Project work continuously and promote quality in project works.

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b). Participative Learning Methodologies used:

Flipped Classroom

Hackathons/ Ideathons

ICS-Interactive Communication Skills

Technical Clubs

Hands-on Training programs/workshops

Mock Interviews

Role Play

ICS-Interactive Communication Skills:

AUDIO-VISUAL CENTER AT SCIENCE DEPARTMENT:

Involving the students while teaching is what builds the student and helps them learn faster, keeping this in mind ,Under the guardianship of the English department, an Audio-Visual Center was established in CBIT which offers a wide range of various learning techniques that aim to acuminate the English language skills of students and also proffer a deeper understanding of the language. When a student with his knowledge listens, sees, and practically applies it, that's when they will understand better and put the knowledge to actual use and this is what the Audio-Visual Center provides. Audio-Visual Center embodies 2 labs, the CALL, and the ICS lab. CALL which is known as **Computer-Assisted Language Learning** strives to bridge the digital divide by providing all students with equal access to technology-aided education. whereas the **ICS-Interactive Communications skills lab** attempts to sharpen certain skills of students through activities such as group discussions ,role-play activities, and many more. The Audio- Visual center ensures that every student, irrespective of their background, is treated equally in terms of the equipment and learning techniques that they have access to, making the entire class subject to the good outcomes of the faculty's hard work. Having the selabs ameliorate the student's creative thinking, critical thinking, and decision-making skills. The students are provided with accent neutralization training, a deeper understanding of phonetics, and several other real-life skills like interview and presentation skills. Doing this not only enhances the student's skills butalso increases the love for the language. The less on sare not limited to merely theoretical jargon; the students are encouraged to practically display and improve their skills by taking part in group discussions, putting up skits that involve role-playing, and making presentations. By doing such activities not only the students overcome their stage fear but also learn to work as a team and be confident in whatever they speak. The knowledge and skills

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c). Problem Solving methodologies used:
Course End Projects, Mini and Major ProjectsOpen ended problems/ Structured Enquiry Tutorials
Group Assignments
Crossword Puzzles & QuizzesCase Studies

Course End Projects, Mini and Major Projects :

Project Reports titles – B.E. (Civil - A1)-VIII semester For Ay: 2021-2022 (Sample Titles)

S. No.	Roll Number	Name of the student	Title of Project	Name of the Guide
	160118732305	Pakalapati Sai Anil kumar	Retrofitting of Buildings Seismic	Dr. K. Jagannadha Rao
	160118732306	John Kenneth		
	160118732307	Irshad Mohammad		
	160118732001	AkhilaUmmanavena	Response of Irregular	Dr. M. Koti Reddy
	160118732002	Gayathri Mounika T.V	Buildings Seismic Analysis of Step back Buildings On Sloping Ground	Dr. M. Koti Reddy
	160117732015	Chilukuri Spandana Reddy		
	160118732026	Kadannagari Arvin Reddy		
	160118732049	Angara SrivenkatachalaSubrahmanya Saketh		
	160117732059	ChintaVishwa Vignan	Pedestrian Crossing Behaviour At Un signalized Intersection	Prof. S. S. V. Chalam
	160118732012	K Sai Sindhu		
	160118732032	M Maveen		
	160118732038	Chelimilla Rama Krishna Reddy		
	160118732008	Neeharika Pusala	Investigations On The Performance Of Rc Framed Buildings In Disaster Prone Areas-Case Studies In Seismic, WindAnd Flood Zones	Prof. P. Sreenivas Sarma
	160118732005	R. Kirankumari		
	160118732014	Pakanati Shilpa		
	160118732021	Mohammed Abdul Rafey Mubasshir	Study Of Effect Of Corner Modification On Wind Pressure ActingOn Square HighRise Building	Sri. A. BalajiRao
	160118732022	Bejgam Abhishek		
	160117732029	Kushal		
	160118732004	Harshitha Sandiri	Analysis And Design Of Box Culvert	Dr. N.R. Dakshina Murthy
	160118732011	Rakshitha		
	160118732045	Sathwik Chandra Akkinepally		
	160118732044	Challa Sanjay Reddy	"Study On Strength And Durability Properties Of Concrete With Alccofine As Admixture"	Dr. N.R. Dakshina Murthy
	160118732043	S. Sai Lokesh		
	160118732302	Chipirichetti Vijay		
	160118732041	Daladuli Sai Krishna	Improvement Of Bearing Capacity Of Soil By Using Admixtures (Cement, Fly ash)	Sri G. Bhaskar Reddy
	160118732042	Mucharla Sai Kumar		
	160118732054	Venkatesh Bandaru		
	160118732016	G Tara Sri	Analysis and design of multi-storey buildings	Sri T. Vasudeva Rao
	160118732017	Teegala Vaishnavi Reddy		
	160117732032	Mohammed Ashwaq Mohammed		
	160118732020	Yasaswini Matam	Biodegradable	Smt. K.

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	160118732025	Anish Bondada	Waste - A Case study of CBIT	Manasa
	160117732055	M. Uddaay		
	160118732024	Anil Reddy Karne	Urban flood management in Hyderabad A case study in Gandipet Village	Smt. K. Manasa
	160118732030	A Hari Prasad		
	160118732057	M Vishal Tejas		
	160118732040	Sagar Nunavath	Design Of Cross Section Of Non Overflow Dam Section	Smt. K. Manasa
	160118732050	Surya Bharath Kotenky		
	160118732059	Vivek Reddy Cherla		
	160118732013	Masabathini Sathya Sri	Waste Management systems	Smt. K. Manasa
	160118732055	Gunti Venkatesh Sagar		
	160117732024	Bharath Kumar B		
	160118732003	Vunnava Haripriya	Analysis Of Multi-Storey Building Using Staad Pro	Sri P. Srinivas Reddy
	160118732006	Manasa Badri		
	160117732036	Nikhil Obili		
	160118732015	Vaddepalli Srihitha	Urban Lake Quality- A Case Study	Sri R. Ranga Reddy
	160118732031	Vaigandla Hemavardhan		
	160118732036	Kunta Rahul		
	160118732028	Bassi Gnaneshwar	Study Of Geopolymer Concrete Using Metakoalin And Lime StoneFines	Sri K.V. Vivek
	160118732301	Nikhil Gadham		
	160117732037	Katepaga Pavan Kumar		
	160118732034	Pavankalyan Bonkuri	Experimental Study On SteelFibre Based Self-Compacting Concrete With Mineral Admixtures	Sri Swamy Ranga Reddy
	160118732046	Shiva Kumar Goud Dulam		
	160118732304	Banothu Anvesh		
	160118732009	Sailla Preethi	Comparative Analysis Of ConventionalBuilding And Sustainable Building Using Building Information Modelling	Smt. N.LalithaKumari
	160118732010	Varuda Rajeshwari		
	160117732038	Praneeth K		
160118732007	Bathini Manasa	An Experimental Study On Mechanical Properties Of Self-Curing Concrete By Replacement Of Fine Aggregate With Robo Sand In M20 And M30 Grade Of Concrete		Sri M.Kalyan
160118732019	ChekondaVijaya			
160118732053	Chinthakindi Vaishnav			
160118732303	Gujjari Dhanush Kumar	Analysis And Design Of G+8 Building Using Staad.Pro		Sri M.Kalyan
160117732033	Mohammed Anas Ajaz			
160117732041	Revan Goud			
160118732027	Chethan Narayana	Pedestrian Crossing Behaviour Modelling At Signalized Intersection		Sri G.Viswanath
160118732033	G Nagaharshith			
160118732035	Prem Kumar Pulla			
160118732029	Goutham Anand	Road Safety Audit On State Highway 19 From Manneguda ToSagar Ring Road.		Sri G.Viswanath
160118732037	Rakesh Sabbani			
160117732023	Kvbs Bharath Chandra			
160118732056	GunapatiVikhyat Reddy	Assessment OfWater Quality Index Of Himayat Sagar Lake And Its Surroundings		Dr.Mohd Aamir
160117732021	Ashrith			
160116732021	Aravind Marampelly			

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Project Reports titles – B.E.(Civil – A2)-VIII semester For Ay: 2021-2022 (Sample Titles)

S. No	Roll Number	Name of the student	Title of Project	Name of the Guide
	160118732113	Ganugapenta Venkata Aravind	Performance Of Concrete On Partial Replacement Of Fine Aggregate With Perlite	Dr. M. V. Krishna Rao
	160118732313	Shaik Shanawaz		
	160118732083	Gnaneswar Sarma Vanapamala		
	160118732103	Shashiteja Kalleti	Effect Of Elevated Temperatures On The Properties Of Standard Grade Concrete Containing Perlite As AReplacement Of Fine Aggregate- An Experimental Study	Dr. M. V. Krishna Rao
	160116732314	Dileep M		
	160118732116	Vivek Vardhan Vanipenta		
	160117732116	Syed Mohammed Sadiq Basha	Integration Of Spatial Data Of Roads And Accidents Related Using QGIS	Prof. S.S.V.Chalam
	160118732062	Bhavana Gaddamidhi		
	160118732108	E Spandan Kumar		
	160118732067	Aljapur Shivani	Seismic Behaviour Of Retrofitted Rc FramedMulti Storeyed Building – A Focus On	Prof. P. Sreenivas Sarma
	160118732069	Sirichandana Dasi		
	160118732087	Kalyan K		
	160118732099	Naikoti Saikiran	Pushover Analysis Of Multistorey Building Using Etabs	Sri. A. BalajiRao
	160118732110	B Vamshi Vikyath		
	160118732070	Srivani Sheshagani		
	160118732095	M Ramcharan	Improvement Of Bearing Capacity OfSoil By Using Admixtures	Sri G. Bhaskar Reddy
	160118732082	D Ganesh Kumar		
	160118732102	Velpumadugu Sanjeev Kumar		
	1601187320 61	Govathoti Anusha	Sustainable Materials For Concrete	Sri T. Vasudeva Rao
	1601187320 63	Simra Jabeen		
	1601187320 65	Patnam Rebecca Florence		
	1601187320 85	Mushke Hemanth	Seismic Analysis Of Multi-Store	Sri P. Srinivas Reddy

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	160118732316	Aadikeshava Reddy	Experiment al Study On Self-Compacting Concrete Using FlyAsh And Ggbs	Sri V. SaiTeja
	160118732310	Tejasree Ala		
	160117732105	A. Sai Sashikanth		
	160118732101	Sai Teja Chinthakuntla	Experimental Study Of Concrete Using Recycled Aggregates and Fly Ash	Sri V. SaiTeja
	160118732091	Nagarjuna Banoth		
	160117732083	Ch Goutham		

S.No	Roll Number	Name of the student	Title of The Project	Name of The Guide
	1601-17-732-006	Gorre Manisha	Analysis Of Cable Stayed Bridges Using Staad Pro	Dr.K.Jaggadha Rao
	1601177 32014	Kuruba Sindhu		
	1601177 32051	Arsha Shiva Charan		
	1601-17-732-02	Bojja Anupama Reddy	Seisimic Analysis Of MultistoriedBulding (	Dr.M.Koti Reddy
	1601177 32012	K Sandhya	G+10) With And Without Shear Walls	
	1601177			

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	32059	Chinta Vishwa Vignan		
	1601-17-732-23	Kommu V B S Bharath Chandra	Seismic Strengthening ofMulti Storey Building With Soft	
	1601177 32048	Lanka Saikumar		
	1601177 32304	S V Muthesham Ahmed		
	1601177 32050	Sama Samar Simha Reddy	Preparation of thematicmaps for change detection in rangareddydistrict using GIS	Sri.S.S.V.C halam
	1601177 32026	K Karthik Choudary		
	1601177 32049	Burra SakethReddy		
	1601177 32016	Latti Sreeja	An investigative numerical study on a RCC framed residentialhigh-rise building subjected to gravity andlateral loads	Sri.P.Srinivas Sarma
	1601177 32046	Adike Sai Pradhyumna		
	1601177 32019	Malyala Ajay Kumar		
	1601177 32022	Bhanu Prakash Bommanaboina	Effect of Bay Width OnDesign Parameters	Dr.A.Vimala
	1601177 32303	Mohammed Faheem Uddin		
	1601177 32060	Abrar Manzoor		
	1601177 32013	Manubothula Shivani	Stabilizing expansivesoil with cement	Sri.G.Bhas kar Reddy
	1601177 32017	Matam Tejaswini		

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Chaitanya Bharathi Institute of Technology
GANDIPET, HYDERABAD-5000 075

Experiential Learning Methodologies used by Chemical Engineering department:

Industrial Internships
Department of Chemical Engineering
(From A.Y 2017-18 to A.Y 2021-22)

Academic Year	No of students done Internship				Total no of students done internship
	1 to 3 weeks duration	3 to 6 weeks duration	More than 6 weeks duration	Whole Semester duration	
2017-18	–	3	-	-	3
2018-19	2	-	-	-	2
2019-20	-	12	-	-	12
2020-21	-	12	-	-	12
2021-22	-	15	9	6	30

Industrial visit Report – Aurobindo Unit 5, Hyderabad on 26-09-2017

Date of Visit: **26-09-2017**

Industry : **Aurobindo Unit 5**

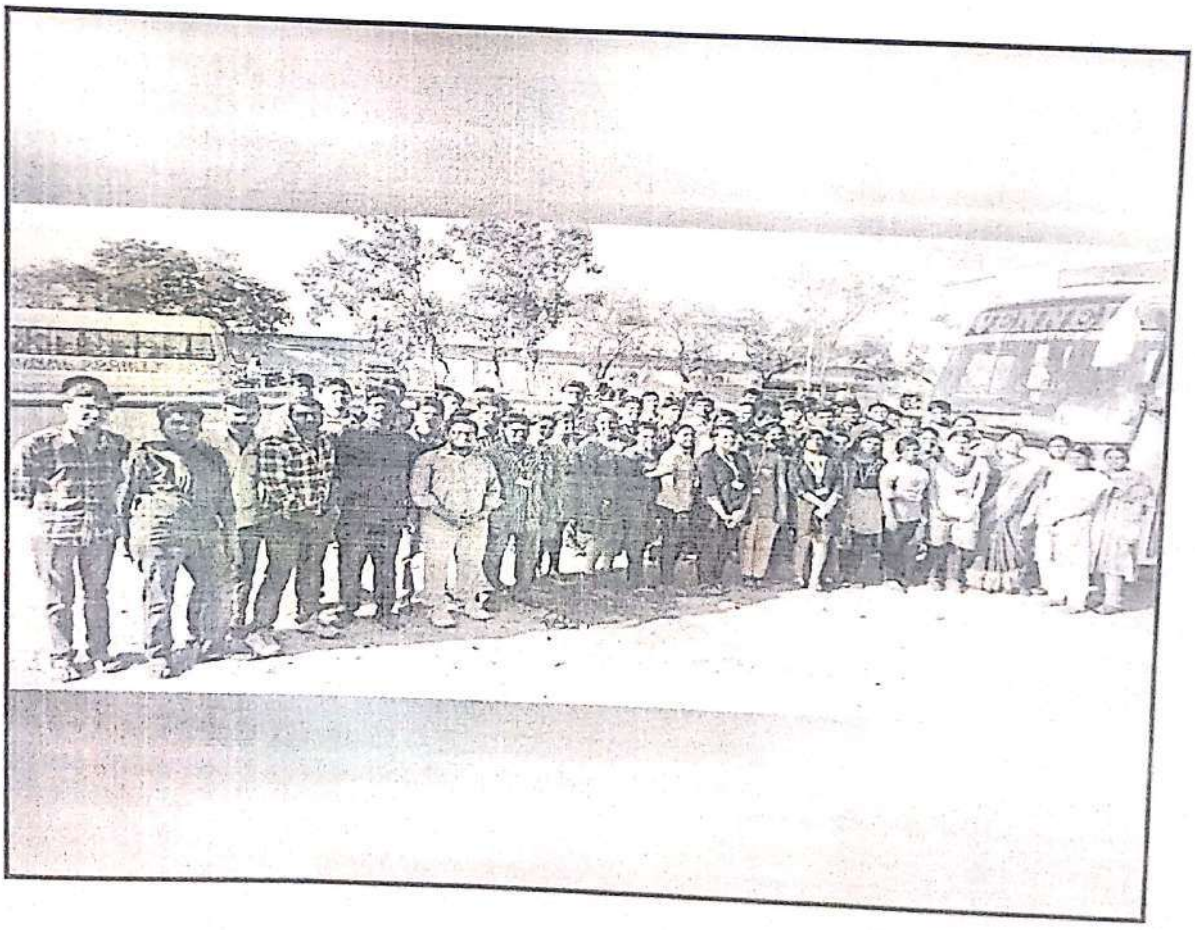
Place : Hyderabad,

Staff Attended: 1Nos.

Sri I. Bala Krishna

Students Attended: 30 Nos.

Photographs:



Industrial visit Report – Aurobindo Unit 1, Pashamailaram

Hyderabad on 12-01-2018

Date of Visit: **12-01-2018**

Industry : **Aurobindo Unit 1,** Pashamailaram

Place : Hyderabad,

Staff Attended: 3Nos.

1. P. Madhuri,
2. Sri. K.Prasad Babu,
3. Sri V.Sanjeeva Reddy

Students Attended: 43 Nos.

Brief report on industrial visit organized during Jan 2018 to Aurobindo Pharma-Unit I at Pashmailaram, Secunderabad

We the students of B.Tech Chemical engineering 2/4 were given permission for a one day visit to one of the most esteemed industries "Aurobindo Pharma", Pashmailaram, Secunderabad; where we were exposed to various important chemical processing units. This industrial visit has not only enhanced our theoretical knowledge but also helped us to experience working environment in a chemical process plant.

A batch of 43 students were accompanied by our staff, P.Madhuri . K.Prasad Babu, M. Shipley. The company bus picked us at JNTU-H at 8:30 AM. After a 45min drive, we reached the plant.

"Aurobindo- Committed to healthier life" is a pharmaceutical plant. The Aurobindo team gave us a very warm and hearty welcome. The team gave us an extraordinary presentation about the role of chemical engineers in any processing industries, important unit operations working procedures, types of reactors, processing of important products etc. The team have also shown videos on the working of plate and filter press, shell & tube heat exchangers, centriguge, distillation units, crushers, drying etc. During the presentation we came to know that the plant is Asia's largest sterile pencillin manufacturing unit. The unit -1 production mainly involves steroids, semi-synthetic pencillin, antibiotics etc which is approved by USCPA.

After gleaming a broad perspective and foundation about unit operations & processes, we were divided into 4 teams, each team accompanied by 2 plant supervisors and 1 faculty member. We explored the following during the visit:

(a). Production block

(b). Water treatment plant

(c). Solvent recovery section-Distillation unit

1.Production Unit- In this block the API(active pharmaceutical ingredients) are prepared. The products manufactured are Amoxylin, Trihydride, Naphthalene sodium. The experts explained us about the working of glass lined reactor and stainless steel reactor. They also made us aware of the safety measures that they follow while production. Then we were taken to material processing section, where important unit operations such as crystallization, centrifugation, bleaching etc were being carried out on continous scale. The products are prepared & maintained at a certain temperature , humidity and are exported to other nations such as US, Germany, Japan & China.

2. Water Treatment Plant- The hard/ unpurified water is treated to obtain pure/ soft water. This water is then utilized for processes during production. In this section we learnt about reverse osmosis and properties of different filters.

3. Distillation unit- The separation process is being carried out in this section . Steam distillation process is being used and the required components are extracted from the top section.

We hereby conclude that the industrial trip was really informative and productive. Now, we could connect and relate to the theoretical concepts, by the practical knowledge acquired from the plant visit.

Our sincere and special thanks to Aurobindo pharma team, Principal Sir, HOD & I/C Staff members.

Photographs:

Community Engagement by Chemical Engineering department

As part of the academic regulations students will be understanding the community and prepare a report for evaluation

Department of Chemical Engineering : II sem BTech Chemical Engineering students

Subject : Community Engagement data

AY- 2021-2022

Sno.	Roll nos	Title	Proof link
1	1601-21-802-001	Rural schools	https://drive.google.com/drive/folders/1L2N6LCvKpLNTbk2F_F02QPoieyyEQv6s
	1601-21-802-011		
	1601-21-802-021		
	1601-21-802-031		
	1601-21-802-041		
2	1601-21-802-002	Swachh Bharat	
	1601-21-802-012		
	1601-21-802-022		
	1601-21-802-032		
	1601-21-802-042		
3	1601-21-802-003	Agriculture and Climate change in Rural Areas	
	1601-21-802-013		
	1601-21-802-023		
	1601-21-802-033		
	1601-21-802-043		
4	1601-21-802-014	MISSION BHAGIRATHA	
	1601-21-802-024		
	1601-21-802-034		
	1601-21-802-044		
5	1601-21-802-005	Interaction With Village Leaders	
	1601-21-802-015		
	1601-21-802-025		
	1601-21-802-035		
	1601-21-802-008		
6	1601-21-802-006	SURVEY ON MISSION ANTYODAYA	
	1601-21-802-016		
	1601-21-802-026		
	1601-21-802-036		
	1601-21-802-018		
7	1601-21-802-007	Infrastructural resources and mid-day meal scheme in rural schools	
	1601-21-802-017		
	1601-21-802-027		

	1601-21-802-037		
8	1601-21-802-009	Rural education	
	1601-21-802-019		
	1601-21-802-029		
	1601-21-802-039		
9	1601-21-802-028	MID-DAY MEALS	
	1601-21-802-038		
	1601-21-802-010		
	1601-21-802-020		
	1601-21-802-030		
	1601-21-802-040		

VIII SEM Projects by Chemical Engineering department

Undergraduate students of Chemical Engineering carry out their project work in VIII sem within and outside the campus where they will take up a research statement and work on it for getting experience in handling and troubleshooting the problems experienced during the project tenure

Outcomes from the project thesis:

S. NO	Faculty Name	Student Details	UG Project Title	Publication Details	Proof Link
1	Dr. M. Kalyani (Resigned & releived on 17-03-2022)	Arani Nandakumar Chandana, Dimple Katikela	Effects of process parameters in anaerobic digester for production of biogas from food waste	M Kalyani, Arani Nandakumar Chandana, Dimple Katikela, "Effect of Process Parameters on Production of Biogas from Food Waste", International Journal of Advance Research, Ideas and Innovations in Technology, 7(3), pp. 2040-2043, June2021.	https://scholar.google.co.in/citations?user=79Q67cwAAAAJ&hl=en
		Shalini Suran, P Ramya	Effects of inoculum to feedstock ratio on anaerobic digestion of food waste for biogas production	M Kalyani, Shalini Suran, P Ramya, "A Critical Review on the Effect of Feed to Inoculum Ratio on Biogas Digestion", International Journal of Research in Science & Technology, 11(2), pp. 1-15, June 2021.	
2	Dr. P. Madhuri	Mamidala Akanksh, Kamma Rithush-VIII Sem	Preparation & Characterization of Biodegradable Plastic from Biomass	Mamidala Akanksh, Kamma Rithush, Pydimalla Madhuri*, "Challenges and opportunities of Bioplastics for Sustainable Development", 8(5), pp. 149-157, May 2021	https://drive.google.com/file/d/1WCefhzc-GreyK3jiaB-rwhVIGFmZPmAg/view?usp=sharing

Details of the Main Contributions by Conveners and Research Coordinators to the Success of the Research Day-2021

S. No	Dept.	Name of Convener / Research Coordinator	Responsibilities
1	Chemical Engineering	Dr. Harikrishnan N Member – DRC, Assistant Professor, Chemical Engg	1. Monitored the payment of the students from the department 2. Conveyed the link details to students from III, V and VII sem students for attending the presentation and whole event 3. Conveyed the link details to Faculty members of the department to attend the presentation and whole event 4. Coordinated with the oral presentation through technical issue in session 2
2	Chemical Engineering	Dr Harsha Nagar, Convener – DRC, Assistant Professor, Chemical Engg	1. Prepared Chemical engg department report on faculty and student achievements eport to be read out as part of department sessions. 2. Encouraged and followed up with students to participate in the event and also to present their work. 3. Conveyed the event details to faculty members and students and monitored their participation
3	Chemical Engineering	Dr Naga Prapurna P V., Chairman – DRC, Incharge HoD and Associate Professor, Chemical Engg	1. Coordinated with Convener for Biotech & Chemical Engg in organizing oral sessions 2. Coordinated with chemical engg dept Research Coordinators in contributing to the organization plans and execution in support to Biotech faculty 3. Coordinated the common oral sessions of Biotech & Chemical Engg dept 4. Presented closing remarks before vote of thanks

Participative Learning Methodologies used by Chemical Engineering Department:

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY
Department of Chemical Engineering
2017-18

1. **Department Activities :**

Seminars / Workshops/Guest lectures Organized:

1. One day workshop in Collabaration with **Dr. Reddy Labs, Hyd** for B.Tech 1st, 2nd, 3rd & 4th year students on Jan 31st 2018. **"The Best Manufacturing Practices In Chemical Industry".**
2. The **ChemSpark-2017** a student national level technical paper symposium under **Sudhee-2017** conducted by Department of Chemical Engineering on 15th & 16th Sep'2017. Dr.B. Sreedhara Rao HOD & Associate Professor, Chemical Engg. was Chairman, K. Prasad Babu, Assistant Pofessor, was Convener, P. Madhuri, Assistant Professor, was Coordinator. The papers received was around 180. The keynote address is given by very prominent Academician **Sri R. C. Sastry Garu**, Professor(Rtd), NITW. The judges for the event were from reputed institutions like NITW and S.V. University.
3. A ***guest lecture*** was organized for B.TECH IV SEM on 19th Feb 2018. Speaker: **Dr.S.Vikranth., Assistant Professor**, BITS HYDERABAD. Topic: Transport of Fluids through porous media applications .
4. A ***guest lecture*** was organized for B.TECH VI SEM on 22nd Jan 2018. Speaker: **Mr. Pranav Baswanth,** Product Assurance Engineer, CTS-Schneider Electric, Topic: Semi continuous Distillation
5. A ***guest lecture*** was organized for B.TECH 4/4 on 29th Jan 2018. Speaker: **Mr. Suraj Peri**, Topic: Data Analysis.
6. A ***guest lecture*** was organized for B.TECH 4/4 on 15th Feb 2018. Speaker: **Sri. A. Paramesha,** Deputy Manager , EIL, Delhi, Topic: Process Design and Engineering Activities .

2. Student Acheivements

- The 2nd, 3rd, 4th yr Chemical Engg students have actively participated and won prizes in numerous ***National & International Technical events/Conferences.***
- The students were also instrumental in ***publishing*** their work in reputed journals.
- ***Summer internships*** were taken up by the students in reputed organizations and they have successfully completed their training programme.

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY
Department of Chemical Engineering
Achievements- 2018-19

Events Organized 2018-19.

1. **Dr. P V Naga Prapurna,** Vice-chairman committee, one day national seminar on "Water and Environment" organized by environmental club, **PARIVRITHA-CBIT**, 22nd March 2018.
2. The **Chem-Spark-2018** a student national level technical paper symposium under **Sudhee-2018** conducted by Department of Chemical Engineering on 28th & 29th Sep'2018. Dr. B. Sreedhara Rao HOD & Associate Professor, Chemical Engg. was Chairman, M Kalyani, Assistant Professor, was Convener, Dr. B Ganesh, Assistant Professor, was Coordinator. The papers received were around 90.
3. A ***guest lecture*** was organized for B.TECH IV SEM on 19th Feb 2018. Speaker: **Dr. S. Vikranth, Assistant Professor**, BITS HYDERABAD. Topic: Transport of Fluids through porous media applications.
4. A ***guest lecture*** was organized for B.TECH 4/4 on 15th Feb 2018. Speaker: **Sri. A. Paramesha,** Deputy Manager, EIL, Delhi, Topic: Process Design and Engineering Activities.

Student Acheivements

1. The 2nd, 3rd, 4th year Chemical Engg students have actively participated and won prizes in numerous ***National & International Technical events/Conferences.***
2. The students were also instrumental in ***publishing*** their work in reputed journals.
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CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A)
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

2.3.1 (A) Experiential Learning Methodologies used by CSE Department

Industrial Internships

Academic Year	Total no of students carried out internship		
	Summer Internships	Final Year Internships	Total Number of Internships
2017-18	-	45	45
2018-19	-	93	93
2019-20	260	113	373
2020-21	266	149	415

Community Engagement

AY: 2021-2022

S. No	Roll No	Title
1	1601-21-733-071 1601-21-733-072 1601-21-733-073 1601-21-733-074 1601-21-733-075	Self Help Groups
2	1601-21-733-076 1601-21-733-077 1601-21-733-078 1601-21-733-079 1601-21-733-080	Mid-Day Meals
3	1601-21-733-081 1601-21-733-082 1601-21-733-083 1601-21-733-084 1601-21-733-085	Anganwadi Center
4	1601-21-733-086 1601-21-733-087 1601-21-733-088 1601-21-733-089 1601-21-733-090	Anganwadi Center
5	1601-21-733-091 1601-21-733-092 1601-21-733-093 1601-21-733-094 1601-21-733-095	Mid-Day Meals
6	1601-21-733-096 1601-21-733-097 1601-21-733-098 1601-21-733-099 1601-21-733-100	Self Help Groups

7	1601-21-733-101 1601-21-733-102 1601-21-733-103 1601-21-733-104 1601-21-733-105	Organic Farming
8	1601-21-733-106 1601-21-733-107 1601-21-733-108 1601-21-733-109 1601-21-733-110	Mid-Day Meals
9	1601-21-733-111 1601-21-733-112 1601-21-733-113 1601-21-733-114 1601-21-733-115	Self Help Groups
10	1601-21-733-116 1601-21-733-117 1601-21-733-118 1601-21-733-119 1601-21-733-120	Self Help Groups
11	1601-21-733-121 1601-21-733-122 1601-21-733-123 1601-21-733-124 1601-21-733-125	Organic Farming
12	1601-21-733-126 1601-21-733-127 1601-21-733-128 1601-21-733-139 1601-21-733-130	Self Help Groups
13	1601-21-733-131 1601-21-733-132 1601-21-733-133 1601-21-733-134 1601-21-733-213	Mid-Day Meals

AY: 2020-2021

S. No	Roll No	Title
1	1601-20-733-121 1601-20-733-121 1601-20-733-121 1601-20-733-121 1601-20-733-121	Study on Organic Farming
2	1601-20-733-122 1601-20-733-133 1601-20-733-144 1601-20-733-155 1601-20-733-166	Rural Schools and Mid-Day meals
3	1601-20-733-123 1601-20-733-134	Study on academic and infrastructural resources and gaps in Rural schools

	1601-20-733-145 1601-20-733-156 1601-20-733-167	
4	1601-20-733-124 1601-20-733-135 1601-20-733-146 1601-20-733-157 1601-20-733-168	Study on academic and infrastructural resources and gaps in Rural schools
5	1601-20-733-125 1601-20-733-136 1601-20-733-147 1601-20-733-158 1601-20-733-169	Organic Cultivation, rational use of irrigation and fertilizers and promotion of traditional species of crops and plants.
6	1601-20-733-126 1601-20-733-137 1601-20-733-148 1601-20-733-159 1601-20-733-170	Rural School and Mid-Day Meals
7	1601-20-733-127 1601-20-733-138 1601-20-733-149 1601-20-733-160 1601-20-733-171	Self Help Groups
8	1601-20-733-128 1601-20-733-139 1601-20-733-150 1601-20-733-161 1601-20-733-172	Organic Farming and Development Activities
9	1601-20-733-129 1601-20-733-140 1601-20-733-151 1601-20-733-162 1601-20-733-173	Rural Schools and Mid-Day Meals
10	1601-20-733-130 1601-20-733-141 1601-20-733-152 1601-20-733-163	Anganwadi
11	1601-20-733-131 1601-20-733-142 1601-20-733-153 1601-20-733-164 1601-20-733-175	Study on SHG functions and challenges, planning for their skill building and livelihood activities.
12	1601-20-733-176 1601-20-733-177 1601-20-733-178 1601-20-733-179 1601-20-733-180	Anganwadi Center in Kondapuram

Learning by Doing - CSE department

Undergraduate students of CSE department will be trained in practical sessions along with theory during their 4 year course work where they will be exposed to various learning the theoretical concepts in a practical way.

S.No	Name of the Labs	Semester
1	Basic Electrical Engineering Lab	III Sem
2	Basic Electronics Lab	
3	Data Structures Lab	
4	Mathematical Foundation for Data Science & Security Lab	IV Sem
5	Design and Analysis of Algorithms Lab	
6	Data Base Management Systems Lab	
7	Internet & Web Technologies Lab	
8	Operating Systems Lab	V Sem
9	Data Communication and Computer Networks Lab	
10	Case Studies using UML Lab	
11	Compiler Design Lab	VI Sem
12	Artificial Intelligence Lab	
13	Professional Elective – II Lab	

CBIT(A) With effect from the academic year 2021-22

20EEC02

BASIC ELECTRICAL ENGINEERING LAB

Instruction	2 Hours per week
Duration of End Examination	3 Hours
Semester End Examination	50 Marks
Continuous Internal Evaluation	50 Marks
Credits	1

Course Objectives: The objectives of this course are

1. To acquire the knowledge of different types of electrical elements and to verify the basic electrical circuit laws and theorems.
2. To determine the parameters and power factor of a coil, calculate the time and frequency responses of RLC circuits and to familiarize with measurement of electric power & energy.
3. To determine the characteristics of Transformers, dc, ac machines and switchgear components

Course Outcomes: On Successful completion of this course, student will be able to

1. Get an exposure to common electrical components, their ratings and basic electrical measuring equipment.
2. Make electrical connections by wires of appropriate ratings and able to measure electric power and energy.
3. Comprehend the circuit analysis techniques using various circuital laws and theorems.
4. Determine the parameters of the given coil and calculate the time response of RL & RC series circuits.
5. Recognize the basic characteristics of transformer and components of switchgear.
6. Understand the basic characteristics of dc and ac machine by conducting different types of tests on them.

Mapping of Course Outcomes with Program Outcomes and Program Specific Outcomes:

PO/PSO CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4
CO 1	2	2	1	1	-	-	1	1	2	1	-	1	-	1	1	1
CO 2	2	1	1	1	-	-	1	1	2	1	-	1	-	1	1	1
CO 3	3	3	2	1	-	-	1	-	2	1	-	1	-	1	1	1
CO 4	3	1	2	1	-	-	1	-	2	1	-	1	-	1	1	1
CO 5	3	3	2	3	-	-	1	-	2	1	-	1	-	1	1	1
CO 6	3	3	2	2	-	-	1	-	2	1	-	1	-	1	1	1

List of Laboratory Experiments/Demonstrations:

1. Demonstration of Measuring Instruments and Electrical Lab components.
2. Verification of KCL and KVL.
3. Time response of RL and RC series circuits.
4. Determination of parameters of a choke or coil by Wattmeter Method
5. Verification of Thevenin's and Norton's theorems
6. Turns ratio /voltage ratio verification of single phase Transformers
7. Open Circuit and Short Circuit tests on a given single phase Transformer
8. Observation of Excitation Phenomenon in Transformer
9. Measurement of three phase power in a balanced system using two Wattmeter method.
10. Measurement of 3-Ph Energy by an Energy Meter (Demonstration of Principle)
11. Load test on DC Shunt motor
12. Speed control of DC Shunt motor
13. Demonstration of Low Tension Switchgear Equipment/Components
14. Demonstration of cut - out section of Machines like DC Machine, Induction Machine etc.

Note: TEN experiments to be conducted from the above list.

20ECC36

BASICS ELECTRONICS LAB

Instruction	2 Hours per week
Duration of End Examination	3 Hours
Semester End Examination	50 Marks
Continuous Internal Evaluation	50 Marks
Credits	1

Prerequisite: Students should have prior knowledge of Applied Physics and Semiconductor Physics.

Course Objectives: The objectives of this course are

1. Learn about various electronic components, devices and systems.
2. Study the operation of CRO.
3. Study the transistor characteristics in different modes.
4. Analyze application of diodes and transistors.
5. Learn about analog circuits and digital circuits operation.

Course Outcomes: On Successful completion of this course, student will be able to

1. Demonstrate the concepts of basic electronic components, devices, and systems.
2. Analyze the measurements of time period, amplitude and phase of different waveforms.
3. Design and analyze the behavior of the diode and transistor circuits
4. Develop various types of feedback and power amplifiers
5. Examine the functionality of various analog and digital circuits

Mapping of Course Outcomes with Program Outcomes and Program Specific Outcomes:

PO/PSO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PSO	PSO	PSO	PSO
CO	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
CO 1	3	2	2	1	2	1	2	2	2	1	2	2	1	-	1	2
CO 2	3	1	1	1	2	2	2	1	1	2	2	1	1	-	1	2
CO 3	3	1	1	1	2	2	2	1	1	2	2	1	1	1	1	2
CO 4	2	3	3	3	2	2	1	2	2	2	2	2	1	1	1	2
CO 5	2	1	2	2	2	1	1	1	1	2	2	1	1	-	1	2

List of Experiments:

1. Study of Electronic components.
2. Characteristics of Semiconductor diodes (Ge, Si and Zener).
3. CRO and its Applications.
4. Half, Full wave rectifiers with and without filters.
5. Voltage Regulator using Zener diode.
6. Characteristics of BJT in CE Configuration.
7. Characteristics of FET in CS Configuration.
8. Amplifier with and without feedback.
9. RC Phase shift oscillator
10. Operational Amplifier and its applications.
11. Power Amplifier Characteristics.
12. Realization of Half and Full adder
13. Structured Enquiry: Design a switching circuit using BJT and analyse its operation.
14. Open ended Enquiry: Design a suitable 10watt audio amplifier.

Text Books:

1. Paul B. Zbar, Albert P. Malvino, Michael A. Miller, *Basic Electronics*, A Text - Lab Manual, 7th Edition, TMH, 1994
2. Paul B. Zbar, Industrial Electronics, A Text - Lab Manual, 3rd Edition.

CBIT(A)

With effect from the academic year 2021-22

20CSC11

DATA STRUCTURES LAB

Instruction	4 Hours per week
Duration of End Examination	3 Hours
Semester End Examination	50 Marks
Continuous Internal Evaluation	50 Marks
Credits	2

Pre-requisites: Any Programming Language

Course Objectives: The objectives of this course are

1. Understand basic concepts data structures and abstract data types.
2. Differentiate between linear and non-linear data structures.
3. Analyze various searching, sorting and hashing techniques.

Course Outcomes: On Successful completion of the course, students will be able to

1. Implement the abstract data type.
2. Implement linear data structures such as stacks, queues using array and linked list.
3. Implement non-linear data structures such as trees, graphs.
4. Analyze various sorting techniques.
5. Analyze various algorithms of linear and nonlinear data structures.
6. Design and develop real world problem using suitable data structures.

Mapping of Course Outcomes with Program Outcomes and Program Specific Outcomes:

PO/PSO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PSO	PSO	PSO	PSO
CO	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
CO 1	2	1	1	1	-	-	-	-	-	-	-	-	3	1	-	-
CO 2	2	1	1	1	-	-	-	-	-	-	-	-	3	1	-	-
CO 3	2	1	1	1	-	-	-	-	-	-	-	-	3	1	-	-
CO 4	1	2	2	1	-	-	-	-	-	-	-	-	3	2	2	1
CO 5	1	2	2	1	-	-	-	-	-	-	-	-	3	2	2	1
CO 6	2	3	3	1	1	-	-	1	1	1	1	2	3	3	3	1

List of Experiments

1. Implementation of Quick Sort, Merge Sort, Selection Sort, Radix Sort.
2. Implementation of Insert, Delete and Search operations on Single Linked List.
3. Implementation of Insert, Delete and Search operations on doubly Linked List.
4. Implementation of skip list.
5. Implementation of Stack using array and linked list.
6. Converting of Infix Expression to Postfix.
7. Implement the algorithm for Evaluation of Postfix.
8. Implementation of Queue using array and linked list.
9. Implement application of queue.
10. Implementation of Binary Tree Traversals.
11. Implementation of Binary Search Tree.
12. Implementation of Heap Sort.
13. Implementation of Graph Traversal Techniques.
14. Implementation of Hashing.
15. Implementation of string matching algorithm.
16. **Case study-** Given a page of text from a textbook, break each sentences into words, remove whitespaces, punctuations, special symbols from it. Convert all words into unique case (i.e. either lower or upper case)

Perform the following task on those words- find the frequency of each word, find the top k words which are frequent and construct word cloud on those top k words. (Similar type of case studies can be given by the faculty)

Text Books:

1. Brian WKernighan, Dennis Ritchie, "C Programming Language", PH PTR, 2nd Edition.
2. Richard M Reese, "Understanding and Using C Pointers", O'Reily, 2013.
3. Narasimha karumanchi, "Data Structures and Algorithms Thinking with Python ", Career Monk Publications, 2020

Online Resources:

1. https://nptel.ac.in/courses/106102064/
2. https://www.udemy.com/algorithms-and-data-structures-in-python/

20MTC14

MATHEMATICAL FOUNDATION FOR DATA SCIENCE & SECURITY LAB

R- Programming/C/C++

Instruction	2 Hours per week
Duration of End Examination	3 Hours
Semester End Examination	50 Marks
Continuous Internal Evaluation	50 Marks
Credits	1

Course Objectives: The objectives of this course are

1. Able to learn and Analyzing data in Linear and Non-Linear form.
2. Able to fit the hypothetical data using probability distribution.
3. To know the characteristic of various continuous probability distributions
4. To know the impact of number theory before computer age.
5. To know the security issues of Cryptography

Course outcomes: On successful completion of this course the students shall be able to

1. Analyze the coefficient of skewness and fitting of the data by various methods
2. Apply properties of Mathematical Expectations and analyze the various distributions.
3. Evaluate areas of curves by using various distributions.
4. Apply various technics of Number Theory for solving problems
5. Apply RSA –PKC for solving security issues.

Mapping of Course Outcomes with Program Outcomes and Program Specific Outcomes:

PO/PSO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PSO	PSO	PSO	PSO
CO	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
CO 1	2	2	-	-	-	-	-	-	-	-	-	1	1	1	1	1
CO 2	2	2	-	-	-	-	-	-	-	-	-	1	1	1	1	1
CO 3	2	2	1	-	-	-	-	-	-	-	-	1	1	1	1	1
CO 4	2	2	1	-	-	-	-	-	-	-	-	1	1	1	1	1
CO 5	2	2	1	-	-	-	-	-	-	-	-	1	1	1	1	1

List of Programs

1. Write a Program for Create Graphs and Charts
2. Write a Program for Calculate measures of Central Tendency for the data
3. Write a Program for Standard Deviation for the data
4. Write a Program for Correlation and Covariance using Pearson method
5. Write a Program for simple linear Regression and Logistic regression
6. Write a Program for Compute probabilities using Binomial Distribution
7. Write a Program for Compute Probabilities using Poisson Distribution
8. Write a Program for Compute Probabilities using Normal Distribution

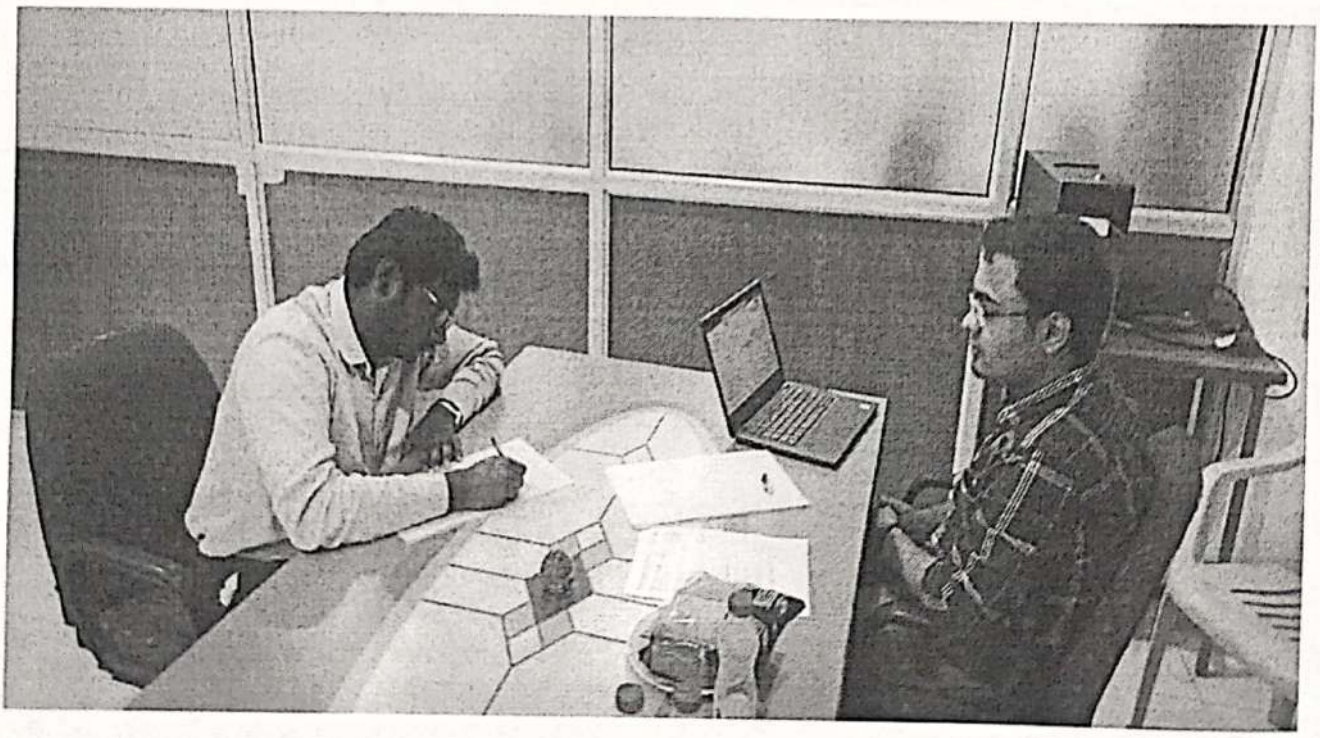
Remark: The programs 1-4 are quite elementary.

Text books:

1. S. R. Mani Sekhar, Dr. T.V. Suresh Kumar, "Programming with R" CENGAGE Publishers, 2017.
2. K. G. Srinivasa, G. M. Siddesh, "Statistical Programming in R", Oxford University Press, 2017.
3. Jared P Lander, "R for Everyone" Pearson.2018.

Online Resources:

1. http://www.cyclismo.org/tutorial/R/



GROUP ASSIGNMENTS

Drive link:

https://drive.google.com/drive/folders/1fAbla1R5nhmZJPNrbYwC1U9Euu7QtCA7?usp=sharing

Group No	Roll No	Titel
1	160120733115- Linga Sravan	BMW AUTOMOBILE CLONE
2	160120733095 - Bhanu Prakash 160120733100 - K Hemananda Reddy 160120733101 - Jayesh Dhoot 160120733106 – G Ragul 160120733107 – GR Rohith	Groww Clone
3	160120733062-Aditi Varma 160120733069-Hamsitha Kotla 160120733070-Harshita Kalva 160120733081-Sneha Boorla 160120733091-Aditya Yerbati 160120733098-Dheeraj Nune	DROMOMANIA TRAVEL SUGGESTION WEBSITE
4	160120733082 – Sreeja Somavarapu 160120733066 – Ashritha Reddy 160120733065 – Arshia Parveen 160120733064 – Anjali Vanam 160120733074 – Niveditha Reddy 160120733077 – Roopika Ponnur	WHITE DOVE HOTEL
5	160120733090 – Abhinav Sandru 160120733099 – Harshavardhan VSK 160120733102 – Mohd Asaduddin Amaan 160120733103 – G. Nithish Rao 160120733118 – Syed Md Kashan Naiyer	SIMPLE EXPENSE MANAGER
6	160120733094- G Ashish 160120733111- B. Satvik 160120733089- Abhinav JMS 160120733104- B. Koushik 160120733116- Sree Vardhan	RIOT GAMES
7	160120733110- R.Sankara Bharadwaj 160120733108 Sai Hemanth 160120733109 J.Sai Kumar 160120733117 Swaroop Patnaik 160120733119 Varshith Reddy Ravula	Charisma Wedding – A Wedding Planner website
8	160120733086- TEJASWI 160120733072- MANJUSHA 160120733078 -SAHITHI 160120733079- SATYA SUSHEELA 160120733112- SHARON 160120733114- SHIVA SAI	ECCOMERCE WEBSITE
9	160120733066- Asritha Reddy M 160120733074- Niveditha Reddy M	WHITE DOVE HOTEL

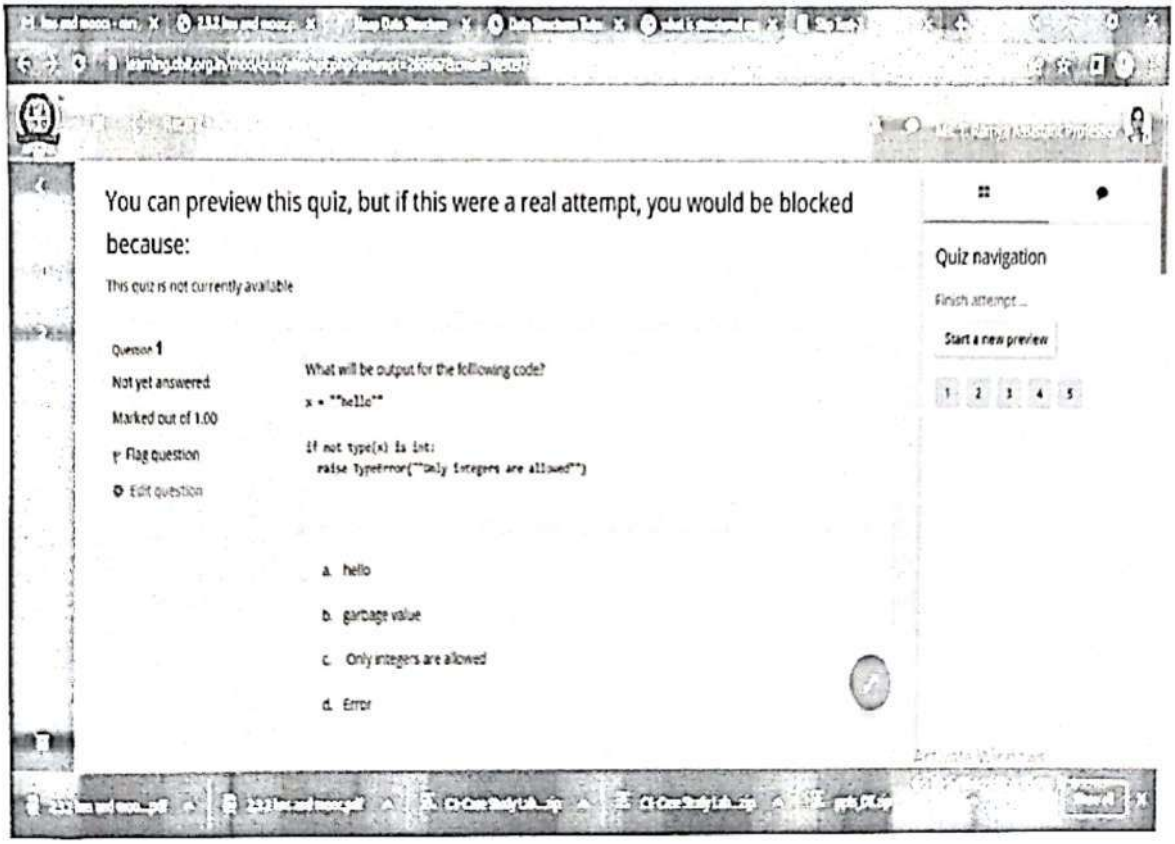
	160120733077- Roopika ponnuri	
10	160120733067- Basuri poloki 160120733076- Rishika Ponna 160120733080- Shruthi Kunchakuri 160120733084- Srimeghana Akella 160120733087- Vaasuki Achampeta 160120733088- Yahshaswitha Sirineni	Planet Fitness
11	160120733307- M NIKHIL 160120733071-M HARSHITHA 160120733073- V MEGHANA SREEYA 160120733120-R VIKAS SWAGATH 160120733308- V SAITEJA 160120733309-A SRIDHAR	BOOK-LIB
12	160120733063 (Team Lead) Amulya Nandala 160120733061 Adhikya Edammala 160120733075 Poojitha Pachava 160120733083 Sreeni Tummuru 160120733085 Srinidhi Challa	Foodville Restaurant Website

Case Study Lab

1.	160119733027	The use of Revolutionary Paradigm of cloud computing by NETFLIX.
2.	160119733029	
3.	160119733030	
4.	160119733025	Green Cloud Computing
5.	160119733025	
6.	160119733012	Libre office in contrast to Microsoft Office
7.	160119733019	
8.	160119733001	Artificial Intelligence in Video Games
9.	160119733005	Version Control Systems – Git and GitHub
10.	160119733013	
11.	160119733006	
12.	160119733022	
13.	160119733009	Conversational AI
14.	160119733008	
15.	160119733011	Augmented Reality in Snapchat
16.	160119733002	
17.	160119733010	Security Issues in Cloud Computing

18.	160119733023	Transformers (ML Model)
19.	160119733026	
20.	160119733020	Speech Conditioned Face Generation using Deep Adversarial Networks.
21.	160119733004	Google Maps
22.	160119733007	
23.	160119733031	Apache Web Server
24.	160119733033	
25.	160119733024	
26.	160119733032	ML in Mén's Football Application and Future Prediction.
27.	160119733034	

Quizzes



NAAC-SSR-Criteria 2.3: Teaching-Learning Process

ECE Department

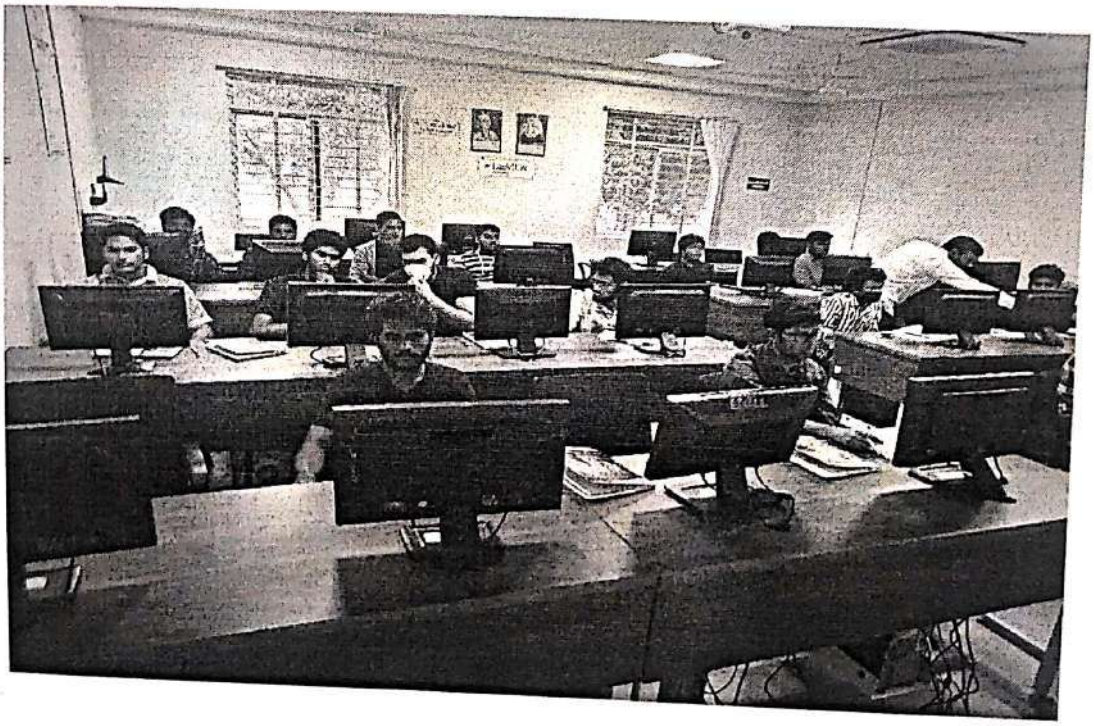
2.3.1. Student centric methods, such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences.

I. Experiential learning Methodologies

Experiential Learning Methodologies adopted in the department of ECE are as follows:

1. ICT in Teaching Learning methods in Classrooms and Laboratories
2. Industrial Internships
3. Industrial Visits
4. Learning by Doing (Labs and Projects)
5. Community Engagement

1. ICT in Teaching Learning



2.Industrial Internships

The following no of students are participated in the industrial internships in various academic years from the Department of ECE

S.No	Academic Year	No. of students attended for internship 30-45 days	No. of students attended for one semester duration
1	2017-18	25	-
2	2018-19	113	22
3	2019-20	269	13
4	2020-21	101	50
5	2021-22	126	92

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY

Autonomous Institute under UGC
Accredited four times by NBA-AICTE and accredited by NAAC-UGC
Chaitanya Bharathi P.O., Gandipet, Hyderabad - 500 075.

A REPORT ON THE EVENT

"VISIT TO NATIONAL INSTITUTE OF AMATEUR RADIO (NIAR)"

DATE: 6 January, 2018

TIMINGS: 10.00 am to 1.30pm

BRANCH COUNSELLOR: Sri G. Mallikharjuna Rao.

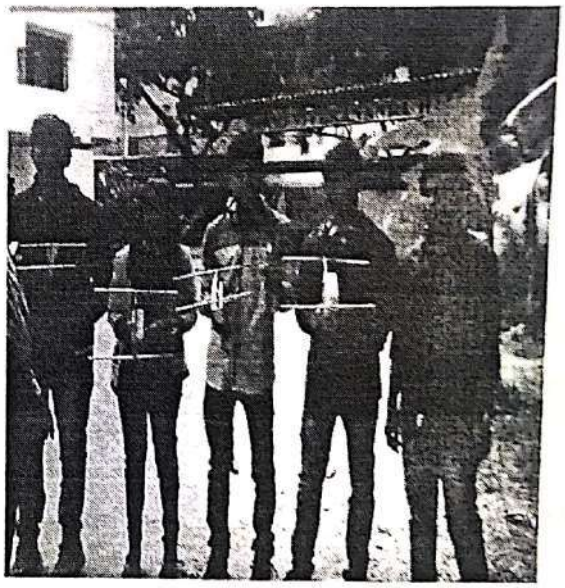
EVENT DETAILS:

National Institute of Amateur Radio (NIAR) is a Non-Governmental organization founded by Mr. S. Suri, VU2MY at Hyderabad. One of the main aim of it establishment, is to spread the awareness of Amateur radio activity amongst the people in India. Its vision is to build a world-class institution to support advancement of global Amateur radio activity in terms of promotion, training, government advocacy, technical support, knowledge repository and research, exceed the expectations with commitment, quality and excellent service. Its mission is to deliver services to Hams, communities, policy makers, organizations to accomplish integrated information systems and provide excellent second line pf communication through amateur radio.

The event was planned by IEEE CBIT. Almost 15 people, 3 EB members and a branch counsellor have attended this wonderful event. It's an industrial visit and went for 4 to 5 hours long. Students were given an insight on amateur radio and communication equipment used during the disaster management.

To make the visit interesting students were given a task to find out the transmitter using the signals from the receiver equipment. All the students felt contented at which the knowledge they have gained during the visit.

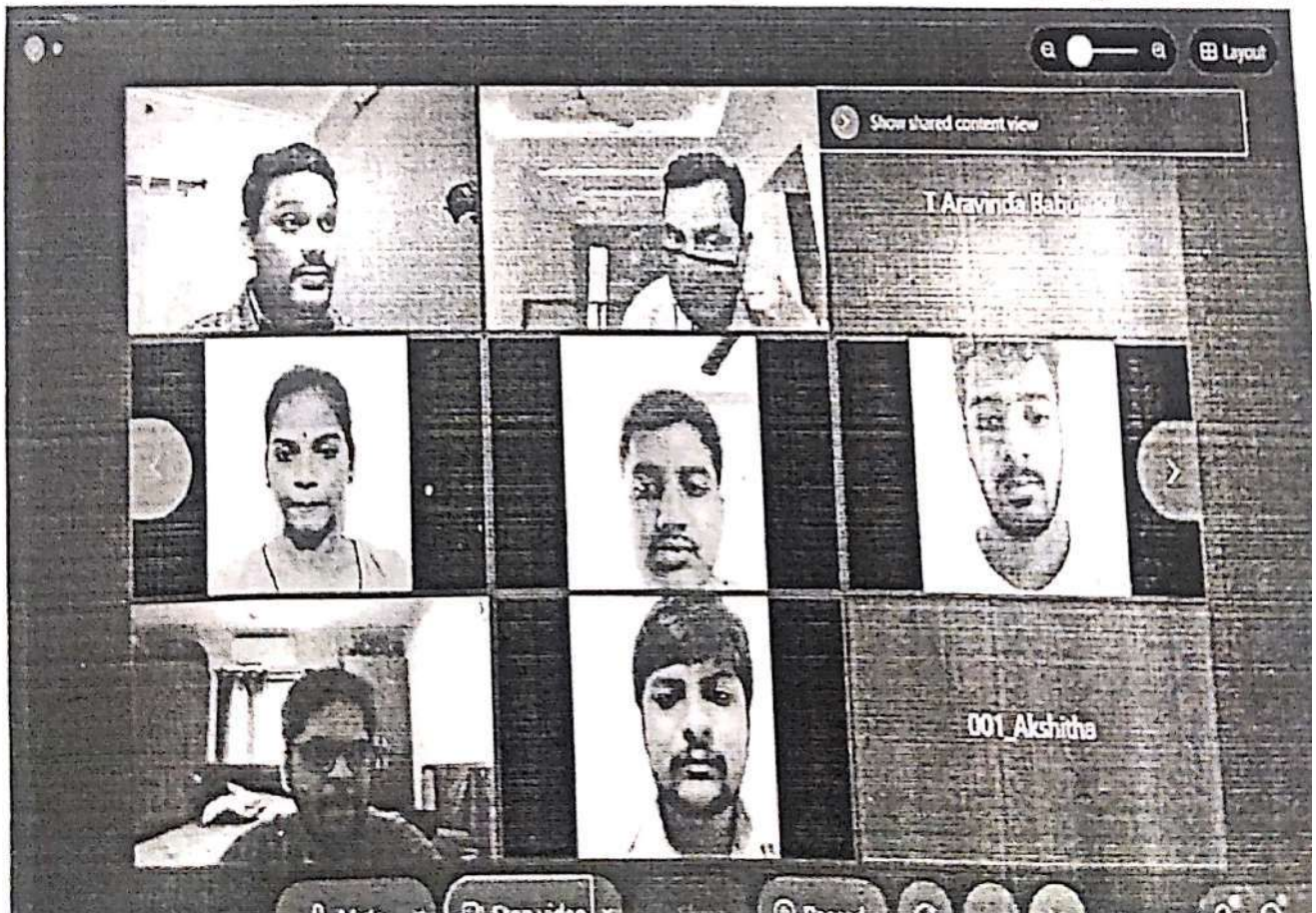
PICTURES OF THE EVENT:

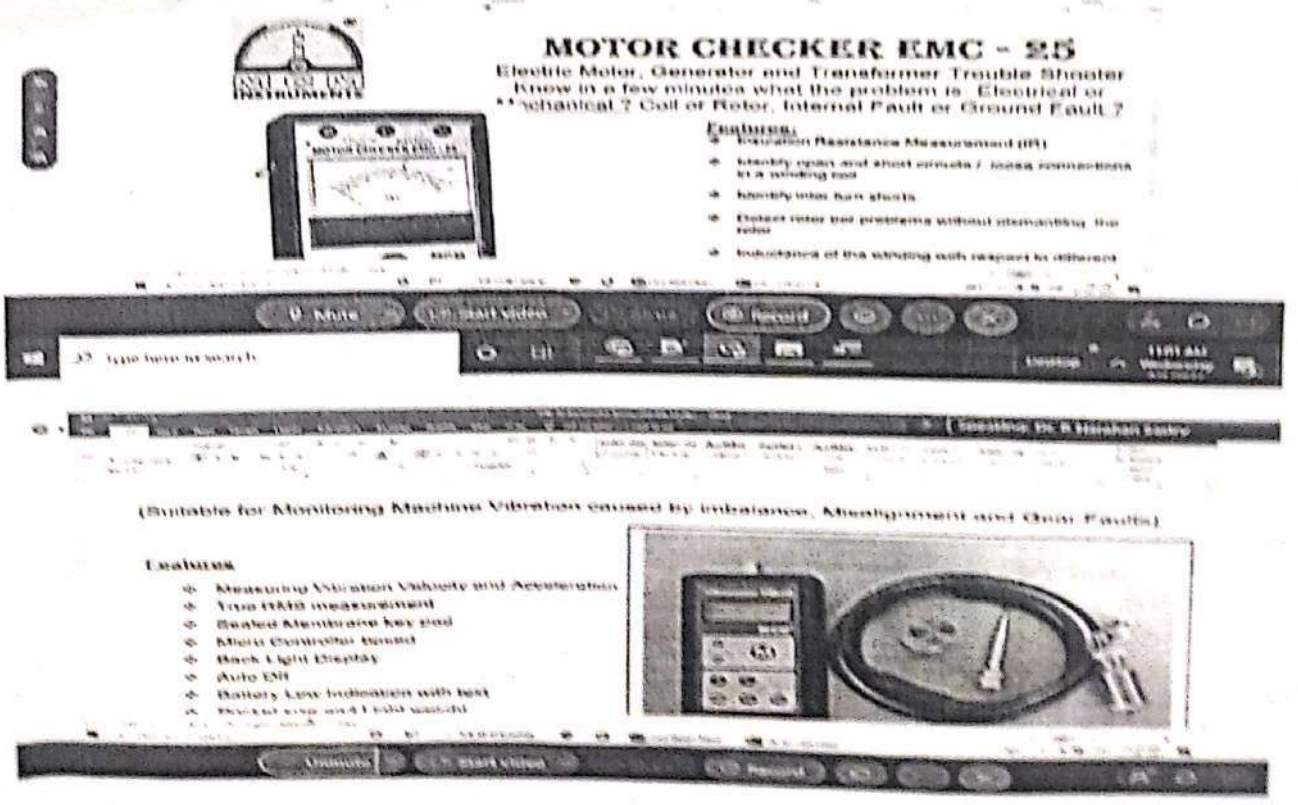


REPORT ON VIRTUAL INDUSTRIAL VISIT TO MCM INSTRUMENTS INDIA PVT LTD

The department of ECE has organized a One-day virtual industrial visit to **MCM Instruments India PVT LTD**, Hyderabad, on **1st September 2021**. The **BE VII** semester students of **all three sections** (E1, E2 & E3) and **ME II** semester students of two specializations (ESVLSID, CE) a total **231 students** visited the organization. The **MCM Instruments India PVT LTD**, Hyderabad emerges as the undisputed conqueror in the arena of manufacturing condition monitoring instruments. It is established in the Year 2005. The entity is providing the unmatched quality of products like Vibration Test Equipments, Vibration Analyzers, Vibration Data Loggers, Bearing Condition Analyzers, Machine Conditioners, Electric Motor Checkers, Electronic Stethoscope and other items in the same category, at a very Competitive prices. The nominated faculty coordinators for this industrial visit were Dr. P. Narahari Sastry, Sri G. Mallikharjuna Rao and Smt. J Mounika. The scheduled timings for this industrial visits was 10:00 AM – 01:00 PM

The virtual industrial visit is accompanied by K.Srinivas, Incharge of Sales and Services in MCM Instruments PVT limited. He explained about Electric Motor Checker which is an analog motor checker using this we can measure motor winding, coil resistance, low resistance, an insulation resistance and inductance. He also explained about how to use Vibrator, Bearing Analyzer (BVT-111), Vibration tester (AVD-80).The screenshots are given below:




MOTOR CHECKER EMC - 25
Electric Motor, Generator and Transformer Trouble Shooter
Know in a few minutes what the problem is. Electrical or
Mechanical ? Coil or Rotor, Internal Fault or Ground Fault ?
Features:

NAAC-SSR-Criteria 2.3: Teaching-Learning Process

ECE Department

2.3.1. Student centric methods, such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences.

III. Problem-Solving Methodologies

Problem-Solving Methodologies adopted in the department of ECE are as follows:

1. **Open ended problems/ Structured Enquiry**
2. **Tutorials**
3. **Group Assignments**
4. **Working Models**

1. Open ended problems/ Structured Enquiry

Open Ended and Structured Projects

Semester	Laboratory	Open ended enquiry	Structured Enquiry
III	ELECTRONIC DEVICES LAB	Design a LED running lights circuit for vehicles to avoid accidents in fog/rain condition.	Design a switching circuit using BJT and JFET and analyse its operation.
	ELECTRONIC WORKSHOP AND NETWORKS LAB	Design and Verification of Constant-K high-pass filter.	Design and Verification of Parallel Resonance.
IV	ANALOG CIRCUTS LAB	Design and implement a classroom sound monitoring system using BJTs and a 0.5W speaker.	Design a circuit that converts a given D.C Voltage to Frequency using BJTs and verify its operation.
	ANALOG COMMUNICATION LAB	Design a Phase Locked Loop for the given free running frequency and determine its capture range and Lock range.	Design a frequency mixer based on the given specifications and analyze its characteristics.
	DIGITAL SYSTEM DESIGN LAB	Design of a simple Digital System for real time applications.	Design of a counter for the given specifications.
V	DIGITAL COMMUNICATION LAB	Develop a code for different digital modulation schemes and verify through simulation. Design different Line coding schemes using logic Gates.	Design N-bit PCM encoder based on the given specifications.
	DIGITAL SIGNAL PROCESSING LAB	Design a three stage multirate filter to meet the given specifications: Pass band cut off frequency: 450 Hz Stop band cut off frequency: 500 Hz	Design the best IIR band pass filter to meet the given specifications: Pass band cut off frequencies: [500 600] Hz Stop band cut

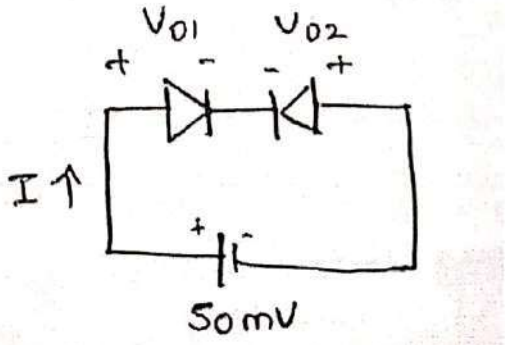
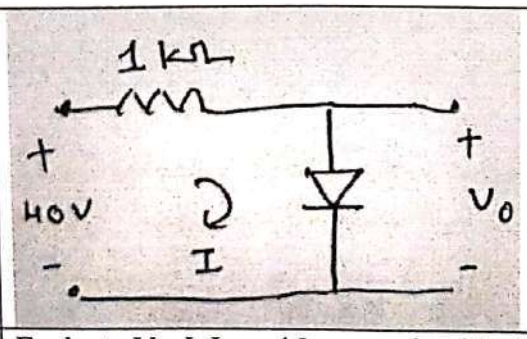
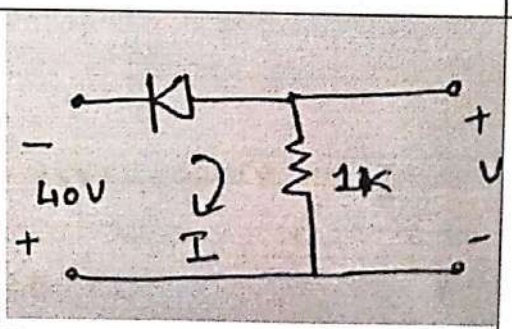
		Pass band ripple: ≤ 3dB Stop band attenuation: ≥ 40dB Sampling frequency: 40 KHz Compare with single stage filter.	off frequencies: [525 675] Hz Pass band ripple: ≤ 2dB Stop band attenuation: ≥ 60dB
	LINEAR AND DIGITAL INTEGRATED CIRCUITS LAB	Design a Digital Clock structure to display minutes and seconds. (Use only non-programmable ICs.)	Implement a Security Monitoring System (Use only nonprogrammable ICs.)
VI	ELECTRONIC DESIGN AND AUTOMATION LAB	Simulate a design using System Vivado and implement the same on Zynq Evaluation Development Board	Design and simulate a high-speed adder using Verilog HDL
VII	COMPUTER NETWORKS LAB	Design a Wireless Ad hoc Network and evaluate its performance.	Evaluate the performance of Data link/Network/Transport layer protocols.
	IOT AND SIMULATION LAB	Implementation of a Weather Monitoring System by an interfacing temperature sensor, pressure, etc.	Implementation of Smart Agriculture Monitoring System.
	MICROWAVE ENGINEERING LAB	Measurement of impedance for inductive /capacitive window in X-band frequency.	Calibration of given component in X-band frequency.

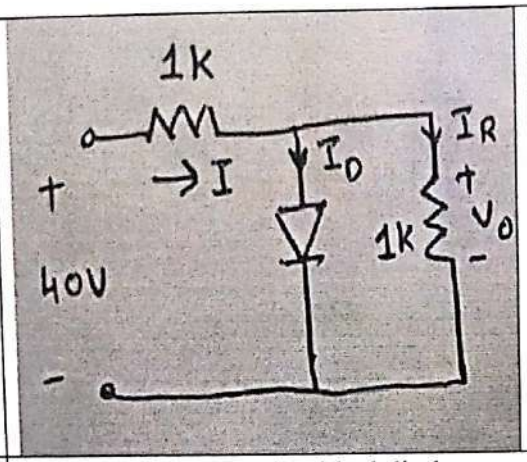
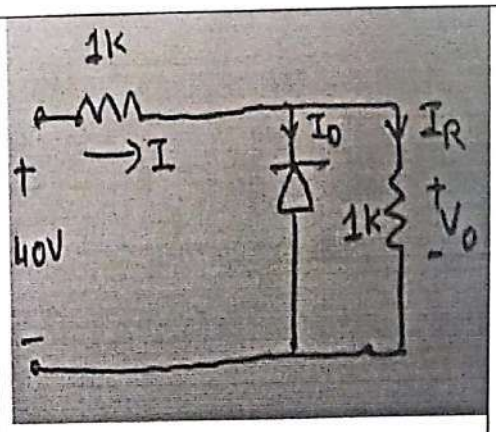
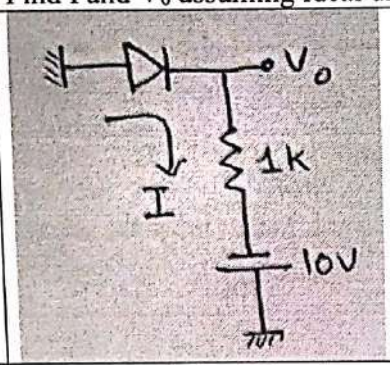
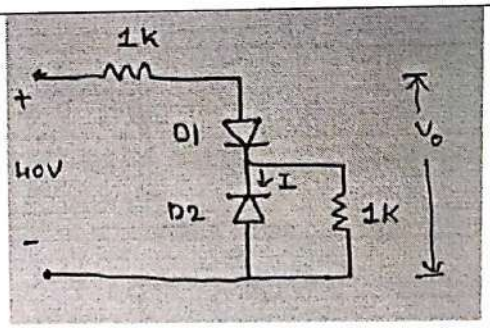
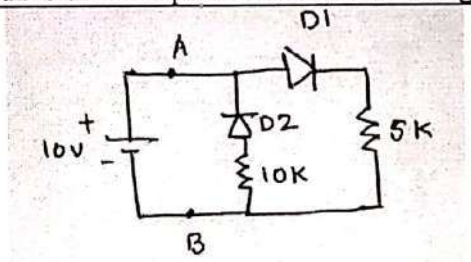
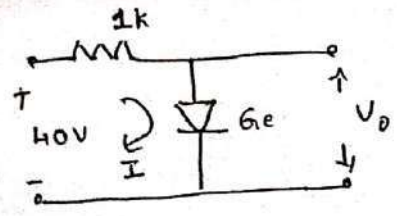
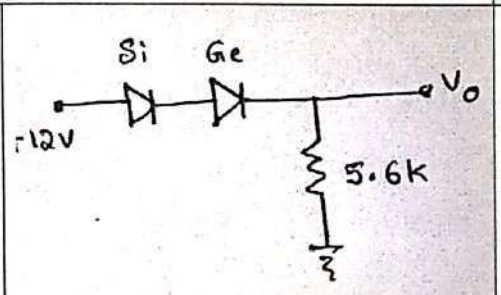
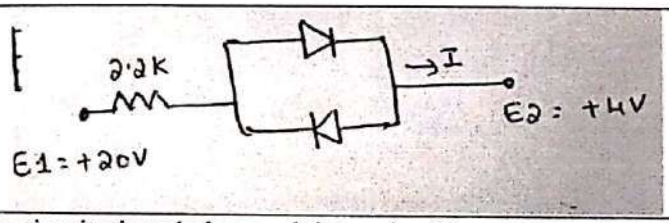
2. Tutorials

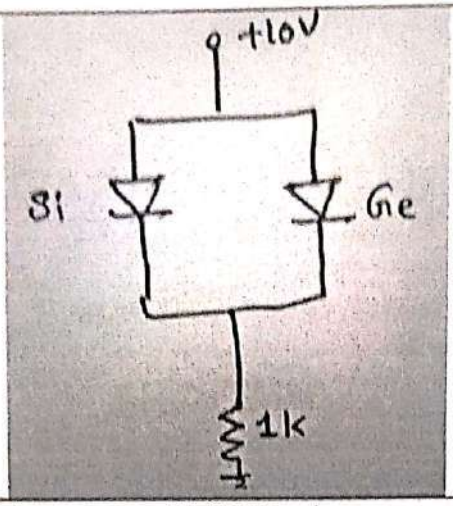
Chaitanya Bharathi Institute of Technology (A)
Department of Electronics and Communication Engineering

Electronic Devices (18EC C02)
Tutorial

Date: 16.09.2020

Q.No		CO	BT
1	For what voltage will the reverse current in p-n junction Germanium diode reach 90% of its saturation value at room temperature?	2	4
2	If the reverse saturation current is 10 μA, calculate the forward currents for a voltage of 0.2V, and 0.3V respectively.	2	3
3	Find the value of D.C resistance and a.c resistance of a Germanium junction diode, if the temperature is 25°C and I_0= 20μA with an applied voltage of 0.1V.	2	4
4	A Si diode operates at a forward voltage of 0.6V. Calculate the factor by which the current will be multiplied when the temperature changes from 25 to 150°	2	5
5	The circuit given below consists of two identical diodes with η=1. Assume V_T=25Mv, evaluate V_{D1} and V_{D2} 	2	4
6	Interpret the following circuits assuming ideal diodes and determine I and V_0	2	5
	 		
7.	Evaluate V_0, I, I_R and I_D assuming ideal diodes	2	5

	 		
8.	Find I and V_0 assuming ideal diodes	2	5
	 		
9	Determine the impedanc between points A and B assuming ideal dioded	2	5
			
10	Analyze the circuits given below assuming practical diodes and estimate I and V_0	2	4
	 		
11	Assess the value of I in the given circuit assuming the cut-in voltage of diode as 0.7V	2	4
			
12	Analyze the circuit given below and determine V_0	2	5

			
13	What is reverse saturation current (I_o)? Mention approximate order of I_o for Ge and Si diodes. Discuss the effect of temperature on I_o by writing necessary expression.	2	3
14	Derive the expression for Transistor Capacitance C_T the case of an abrupt p-n junction.	2	3
15	Derive the expression for contact difference of potential V in an open circuited p-n junction.	2	3

3. Group Assignments

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A)

Gandipet, Hyderabad-75

Group Assignment Sample

ASSIGNMENT I

Department : **Electronics & Communication Engineering**

Academic year : **2021-22**

Year & Semester : **B.E & VII Semester**

Subject & Code : **5G Communications** (Program Elective-V) **& 18EC E24**

Faculty : **Dr. Vinodh Kumar Minchula**

***CO – Course Outcomes, *BT – Blooms Taxonomy levels**

1. Fundamental knowledge from Level 1 & 2
2. Knowledge on application and analysis from Level 3 & 4
3. Critical thinking and ability to design from Level 5 & 6

Level-1 - Remembering Level-2 - Understanding	-- Fundamental Knowledge
Level-3 - Applying Level-4 - Analysing	-- Knowledge on Application & Analysis
Level-5 - Evaluating Level-6 - Creating	-- Critical Thinking

Last Date of Submission: 13-09-2021

Q.No	Questions	CO	BTL
1.	List and briefly describe the different performance requirements to have an effective 5G technology?	1	2
2.	Outline and explain the enhancement of 8 key capabilities from IMT-Advanced (4G) to IMT-2020 (5G)	1	2
3.	Explain the three high level 5G key usage scenarios (eMBB, mMTC, and URLLC) and map the 8 key capabilities in different usage scenarios with a neat diagram	1	1

4.	a) What is the difference between peak data rate and user-experienced data rate? b) List and briefly explain the Key efficiency indicators of 5G	1	2
5.	a) Distinguish any five differences between 4G(LTE-A), 5G sub 6 and 5G mmWave technologies	1	4
6.	a) Illustrate the physical properties (coverage, capacity & latency) of different spectrum bands in 5G b) What are the frequency ranges of 3GPP defined FR1 & FR2? and briefly explain its impact of cell size in 5G	1	3
7.	Write a short notes on any four 5G Use cases with challenging Key Performance Indicators (KPIs) and desired values requirements that characterize each use case.	1	1
8.	a) Briefly describe the 5G system concept showing the three generic 5G services and the four main enablers b) Explain the different categories of Spectrum Sharing Scenario	1	2

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY
(A)
Gandipet, Hyderabad-75

ASSIGNMENT I

Department	: **Electronics & Communication Engineering**
Academic year	: **2021-22**
Year & Semester	: **B.E & VII Semester**
Subject & Code	: **DIP** (Program Elective-V) **& 18EC E21**
Faculty	: **Dr. P. Narahari Sastry**

***CO – Course Outcomes, *BT – Blooms Taxonomy levels**

1. Fundamental knowledge from Level 1 & 2
2. Knowledge on application and analysis from Level 3 & 4
3. Critical thinking and ability to design from Level 5 & 6

Level-1 - Remembering Level-2 - Understanding	-- Fundamental Knowledge
Level-3 - Applying Level-4 - Analysing	-- Knowledge on Application & Analysis
Level-5 - Evaluating Level-6 - Creating	-- Critical Thinking

Last Date of Submission: 14-09-2021

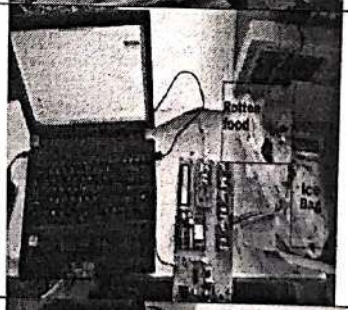
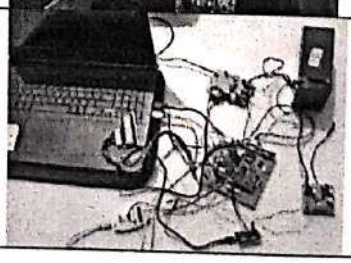
Q.No	Questions	CO	BTL
1.	List and briefly explain the applications of DIP.	1	2
2.	Draw necessary figures and explain what is a digital image? Also explain what a pixel in it is.	1	1
3.	Draw the block diagram of the Digital Image processing system and explain in detail all the components in DIP.	1	2
4.	Explain the concept of sampling and quantization in digital image processing using suitable diagrams. Define the same.	1	2

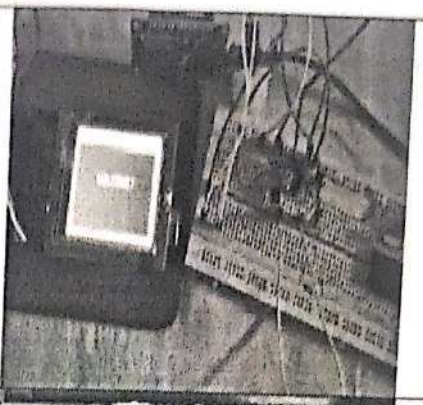
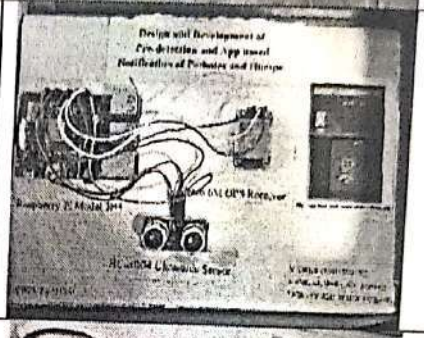
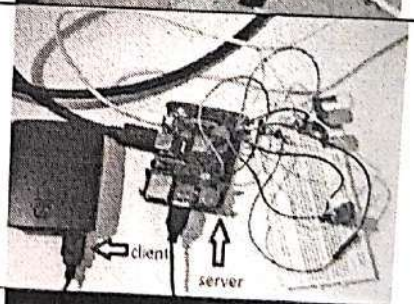
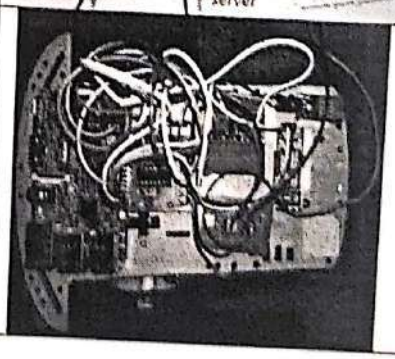
5.	What is gray level, explain in detail. Also show the matrix of a binary image and explain how to get a binary image from the gray level image.	1	4
6.	Explain the concept of neighborhood. Explain N_4 and N_8. What is the use of neighborhood concept in processing a digital image.	1	3
7.	Write notes on elements of visual perception with neat diagrams explain the concept.	1	1

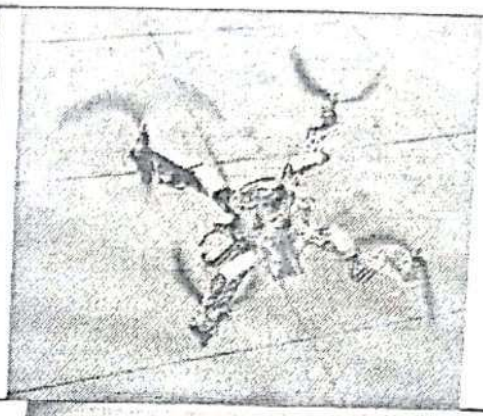
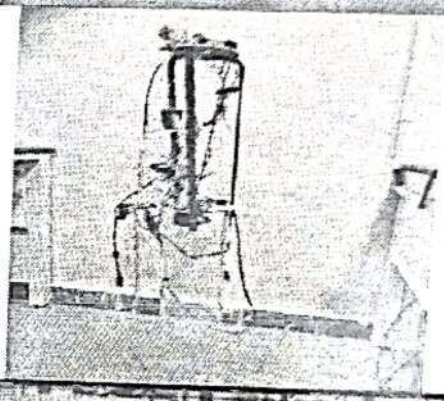
4. Working Models

As part of the academic final year projects, faculty and students are developed the following products.

Sample products developed are shown below

S.No.	Academic Year	Product Title	Sample Images
1.	2020-21	IoT Based Anti-Theft Detection System using image Processing	
2.	2020-21	Design and Implementation of NavIC Based Reefer Monitoring System	
3.	2019-20	NaVIC Based Precision Time and Air Quality Monitoring System.	

4.	2019-20	Smart Building Prototype using IoT	
5.	2018-2019	Design and Development of Pre-detection and App based Notification of Potholes and Humps	
6.	2018-2019	IoT based Heart Monitoring System and Simulation of Heart Pumping	
7.	2018-2019	IoT based smart home security system using light weight cryptography	
8.	2018-2019	Deep Learning based Fire fighting Robot	

9.	2017-2018	Unmanned Aerial Vehicle Based Smart Agricultural System	
10.	2017-2018	Smart Child Rescue System for Borewells using Embedded Systems	
11.	2017-2018	Implementation of WSN For IoT Based Smart Home Using Flask Web Server	

5.

2. Industrial Internships

The following no of students are participated in the industrial internships in various academic years from the Department of ECE.

S.no	Academic year	No. of students
1	2017-18	68
2	2018-19	84
3	2019-20	220
4	2020-21	13
5	2021-22	57

Chaitanya Bharathi Institute of Technology (Autonomous)

(Regd. No. 655/2009)

Chaitanya Bharathi P.O., CBIT Campus, Gandipet, Kokapet (V),
Gandipet Mandal, Ranga Reddy District, Hyderabad - 500 075, Telangana
e-mail: principal@cbit.ac.in, Website: www.cbit.ac.in, Ph: 040 - 24193276, 277, 280, Fax: 040 - 24193278

Hyderabad
Dt: 23-02-2019

TO
The superintendent Engineer
TSGENCO,
PCHES, Pulichintala
Vajine Palli Village
Suryapet District

Dear Sir,

Sub: Industrial visit permission requested-Reg

I am pleased to introduce myself as the Head of EEE department, Chaitanya Bharathi Institute of Technology, Gandipet, Hyderabad. To expose our students to latest trends and developments in the field of Electrical Engineering ,we are arranging visits to various industries which are part of our curriculum.

Our students are interested in visiting your esteemed organization. The convenient date for the proposed visit is 02-03-2019.

The total number of students visiting your organization will be around 140 along with 5 Staff members will accompany them. Kindly accord the permission for a Full day visit and oblige.

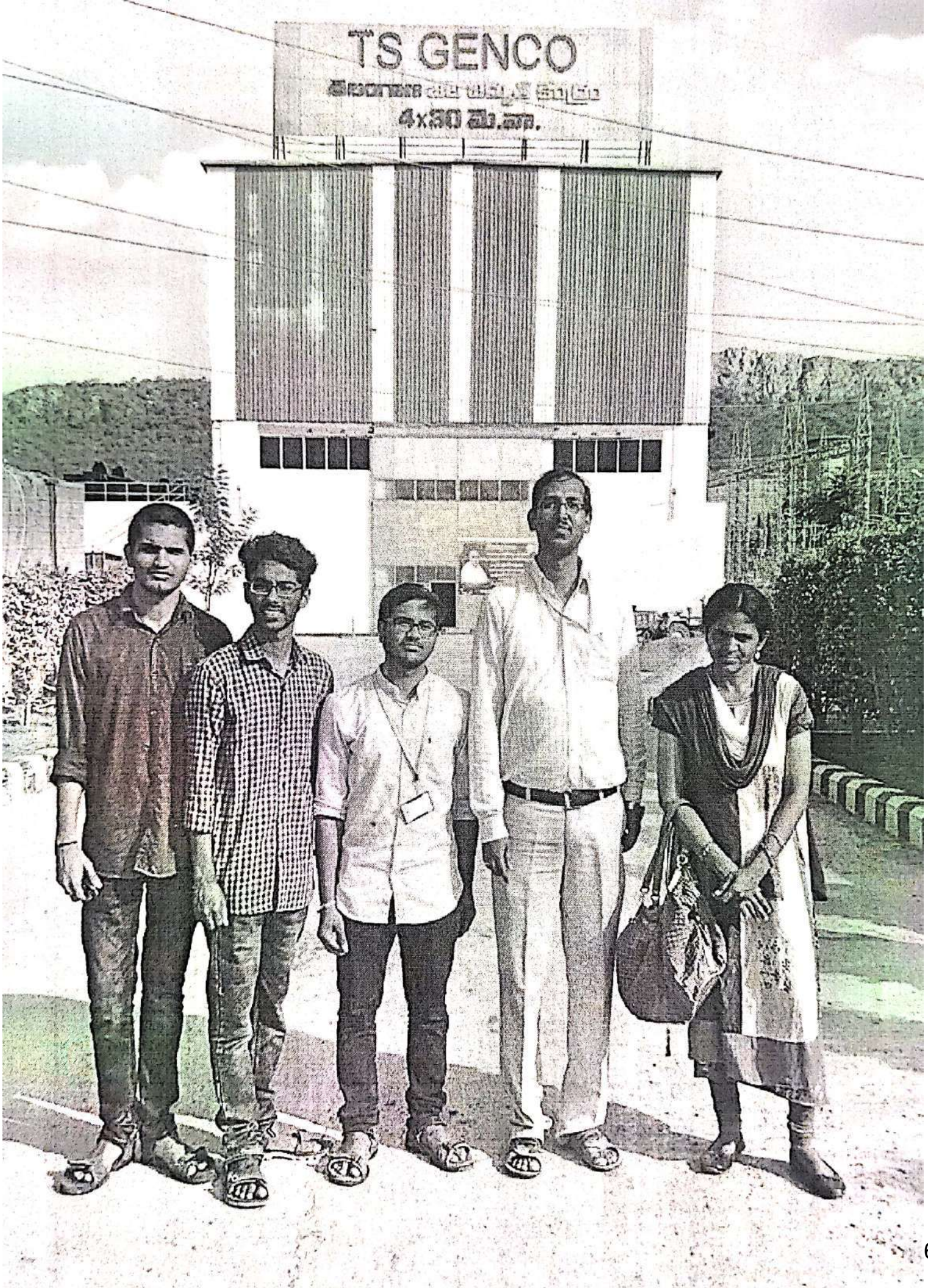
Anticipating a positive reply.

Yours sincerely

Mr.D.Harsha
Asst.Prof.EEE Dept.
In-charge-Industrial Visit

Dr.Suresh Babu
Professor and Head
EEE Dept.

please arrange


TS GENCO
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CHAITANYA BHARATHI
INSTITUTE OF TECHNOLOGY (A)
Affiliated to Osmania University

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

BE-VIII SEM (EEE-1) MAJOR PROJECTS (AY: 2021-22)

2021-2022-EEE-D1

Batch No	HT No	Name of the Student	Title of the Project	Hardware/ Simulation	Name of the Supervisor
1	160118734005	CHIMARLA KEERTHANA	Iot Based Demand Side Energy Management System Using Non-Intrusive Load Monitoring	Hardware	Sri. P. Hemeshwar Chary
	160118734003	GUJJA INDRANI			
	160118734042	CHILLAMCHARLA SAI RAGHU			
2	160118734016	BATTULA RASAGNA	Simulation And Analysis Of Solar Powered Induction Motor Drive With V/F Control For Electric Vehicle Applications	Simulation	Sri M. Naga Raju
	160118734305	AJAY KUMAR SAHANI			
	160118734037	NARAYANA NITHIN			
3	160118734304	RAMAVATH SAIKUMAR	Wifi Based Substation Monitoring, Controlling And Protection Using Things peak And Blynk In MATLAB	Hardware	Ms. M. Deepthi
	160118734002	PUTLA DHARANI			
	160117734031	KAUSHAL			
4	160118734009	KASHA MAHATHI	MPPT Of Solar Energy Conversion Using Optimization Technique"	Simulation	Sri Ch. Harish
	160118734047	M SHANMUKHESH			
	160117734029	JASWANTH			
5	160118734041	ARRA RASHMITH REDDY	Cloud Based Irrigation System With Machine Learning And Iot	Hardware	Sri. D. Harsha
	160118734015	ERPULA RANI			
	160118734058	ZIYAD AHMED MOHAMMED			
6	160118734025	VINUTHNA REDDY GUTHA	Solar Pv Reconfiguration	Simulation	Dr. T. Sudhakar Babu
	160118734030	KOBBAI DILEEP KUMAR			
	160118734306	KURMA RAVI			
7	160118734034	NAMAN GUPTA	Optimal design of wireless charging for an electric vehicle charging station"	Simulation	Dr. M Bala Subba Reddy
	160118734036	NAVID PABANI			
	160118734040	MOTUPALLI RAMA KRISHNA SAI			

8	160118734010	MYAKA MANIDEEPIKA REDDY	Load Forecasting Using Machine Learning Techniques	Simulation	Dr. B. Krishna Chaitanya
	160118734050	SUHAS REDDY M			
	160118734001	KUMMARI CHANDRAKALA			
9	160118734004	KAVYA TAMMALI	Modulation Techniques For An Asymmetric Source Configuration Of Single-Phase Chb-Mli Topology	Simulation	Dr. P .Kowstubha
	160118734045	VANGALA SAI SRUJAN			
	160118734021	VATTIKONDA SUSHMITHA			
10	160118734303	MUNJA YAMINI	Design and control of micro grid fed by renewable energy sources.	Simulation	Dr .N .Venkata Phanendra Babu
	160117734019	K ABHIRAM			
	160118734049	BOGE SIDDARTH			
11	160118734044	MOTHUKURI SAI SRINIVAS	Grid Synchronization Of FPGA Based DFIG	Simulation & Hardware	Dr. G Suresh Babu
	160118734051	G TARUN			
	160118734052	NUGURI TARUN			
12	160118734008	JAGATHKARI LAXMIPRIYA	Iot Based Air Purification/ Air Monitoring Using Arduino	Hardware	Dr. K. Krishna Veni
	160118734007	KHYATI BHAREDWAJ			
	160118734054	KALVA VENU			
13	160118734028	MOHAMMED AMAAN FAROOQUI	Adaptive Sliding-Mode Voltage Control For Inverter Operating In Islanded Mode In Microgrid	Simulation	Sri. D. Sathish
	160118734019	SHIVARATHRI SRAVANI			
	160118734014	BAKKAREDDY PRIYANKA			
14	160118734022	SANIKOMMU VAISHNAVI	Iot Based Transformer Monitoring	Hardware	Dr. N. Vasantha Gowri
	160118734302	T KARTHIK			
	160118734033	NABEEL KHAN			
15	160118734035	AMANCHI NAVEEN	Unified Power Flow Controller Using Power Electronic Transformer	Hardware	Sri M. Thirupathaiah
	160118734039	GUGGILLA RAGHAVESHWAR			
	160118734055	KATAKAM VINAY KUMAR			
16	160118734018	DARAPU SAI AKSHAYA	Iot Enabled Wireless Charger	Hardware	Sri N. Santosh Kumar
	160118734031	KSHITEISSH BHARADWAJ			
	160118734056	CHENNA VINEETH			
17	160118734026	KANTHALA ADITH CHANDRA	Fuzzy Logic Controller For Bi Directional Dc- Dc Converter	Simulation	Dr. T. Murali Krishna
	160118734023	BURRA VARSHITHA			
	160118734053	VEERAPRADYUN GONUGONDLA			

18	160118734012	P NEHASREE	Solar Streetlight Monitoring System	Hardware	Sri. I. Pranav
	160118734017	KANDANELLY SAHITHI PRIYA RATHOD			
	160118734013	PRAVEENA BOBBALA			
19	160118734301	BIRRU VEDAVYAS	Vehicle Monitoring And Tracking System Using Node-Mcu	Hardware	Sri. G .Hari Krishna
	160118734029	K CHINNA RAMUDU			
	160118734006	SOLIPURAM KEERTHANA REDDY			
20	160118734043	D SAI SIDHARTH KASHYAP	Comparison And Analysis Of Single-Phase Transformer less MOSFET Inverter Topologies For Photovoltaic Applications	Simulation	Dr. Ahmad Syed
	160118734024	THODUPUNURI VASAVI			
	160118734057	VISHWAS P			
	160118734020	NARAYANA SRINIDHI REDDY			
21	160118734032	AGGADI MANI DEEP	Simultaneous Fast Frequency Control And Power Oscillation Damping By Using PV Solar System As PV STATCOM	Simulation	Dr. B. Suresh Kumar
	160118734027	KULAKARNI ADITHYA			
	160118734046	GUDIMALLA SANJAY			
	160118734011	NAZIYA BEGUM			

Dr. M. Bala Subba Reddy

Dr. G. Suresh Babu
Head, Dept. of EEE

Sri. D. Sathish
Project Coordinators

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A)
Affiliated to Osmania University

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

BE-VIII SEM (EEE-2) MAJOR PROJECTS (AY: 2021-22)

2021-2022-EEE-D2

Batch No	Roll number	Name of the Student	Title of the Project	Hardware/ Simulation	Name of the Supervisor
1	160118734100	K.Saiteja	IOT based auto control of stand-by transformer	Hardware	Mr. I Pranav
	160118734112	Ch.n.s.n.s.Tarun			
	160118734111	Sumanth Setty			
2	160118734307	D.Umesh	Implementation of PM Motor Drive in propulsion technology for weightless drones/flying machines.	Simulation	Dr. U K Chowdhury
	160118734106	Sohan Kumar			
	160118734118	Yashwanth			
3	160118734079	Ummay Salma	Design and Simulation Of STATCOM Based Reactive Power Compensation	Simulation	DR. M. Bala Subba Reddy
	160118734089	Jayanth.D			
	160118734069	Rishitha Arikotla			
4	160118734062	S Chella Meenakshi	Detection and Classification Of Faults In Transmission Lines Using Machine Learning Algorithms	Simulation	Dr. B Krishna Chaitanya
	160118734061	Bhargavi.S			
	160118734067	K.Nishma Reddy			
5	160116734313	Sk.Neha Gulshan	A Hybrid Cascaded Multilevel Converter For Battery Energy Management Applied In Electric Vehicles	Simulation	Dr. C H V. Krishna Reddy
	160116734317	P.Akshay Kumar			
	160118734104	Sherank Dasarath			
6	160118734101	Sai kiran Kolloju	Micro Generation System And Gesture Controlled Home Automation	Hardware	Mr. P.Hemeshwar Chary
	160118734114	A.V.Manikanta Sai			
	160118734310	V.Buddik Vararaj			
7	160118734080	M Abhishek	Underground cable fault distance locater using Arduino	Hardware	Ms. M. Deepthi
	160118734097	Annam Rakesh			
	160118734084	D Chakravarty			
8	160118734085	Cherupally Charan Kumar	Energy Theft Detection and Intimation using wireless Communication Media	Hardware	Dr. P. Kowstubha
	160118734109	Jamalpur Srinivas Gaurav			
	160118734086	Bukya Dinesh			
9	160118734092	Manideep Pandula	Simulation of solar energy conversion with optimization technique	Simulation	Mr. Ch. Harish
	160118734113	Uday shankar doddi			
	160118734083	Akshay more			

10	160118734076	Sravya Sankarneni	IOT based Smart irrigation system using Raspberry Pi	Hardware	Mr. C. Srisailam
	160118734072	Sneha Bhandhavi			
	160118734082	Ajay Gunnala			
11	160118734065	K.Manasvini	Harmonic and Unbalance Compensation based on Direct Power Control for Electric Railway Systems	Simulation	Dr. P V Prasad
	160118734110	M.Sujith Reddy			
	160117734119	Yashwanth			
12	160118734074	G. Sravanthi	A Deruced Switching Devices Multilevel Inverter Topology	Simulation	Mr. G Hari Krishna
	160118734078	P. Sunitha			
	160118734308	R. Navya			
13	160118734063	kavya	Buck boost transformer less inverter to grid connected solar pv system	Simulation	Mr. N. Santosh Kumar
	160118734064	A.Lohitha Reddy			
	160118734073	B.Soumya			
14	160118734117	Vinay	Solar powered Electric Vehicle (EV) Charging Station	Hardware	Dr. T. Murali Krishna
	160118734091	Lokesh			
	160118734115	Varun			
15	160118734312	Ganasala hepsiba rani	Selective Compensation of Voltage Harmonics in an Islanded Microgrid	Simulation	Mr. D. Satish
	160118734309	Vaddadi Vikas			
	160118734081	M.Abhishekh			
16	160118734105	Animesh	analytical modelling simulation and performance analysis of a solar cell	Simulation	Mr. D. Harsha
	160118734095	Prudhvi			
	160118734087	Eswar			
17	160118734311	Nenavath Prashanth	GSM Based Wireless electronic notice board using Arduino	Hardware	Mr. M Nagaraju
	160118734075	Sadineni Sravanthi			
	160118734116	Thaduri Venkatesh Babu			
18	160118734090	G. Jeevan Kumar	Hybrid Boost Converter Based Pv Charging Enhancement	Simulation	Dr. N. Vasantha Gowri
	160118734099	N. Sai Lokesh Reddy			
	160117734094	Chitla Pavan			
19	160118734119	V. Yogesh	Reduced Switch Technique For Solar Pv System Based Multilevel Inverter For Power Quality Improvement	Simulation	Mr. M. Thirupathaiah
	160118734070	M.Sai Varsha			
	160118734077	G. Sree Vidya			
20	160118734066	S.Nishitha	Analysis of Three phase Transformer less Photovoltaic Inverter topologies for Leakage current reduction	Simulation	Dr. Syed Ahmad
	160118734071	K.Sandhya			
	160118734068	A.Rachel			

21	160118734088	V.Hari kiran	Observality based PMU Placement for Southern-region of Indian Grid Line by PMU	Simulation	Dr. N V Phanendra Babu
	160118734094	D.Naveen			
	160118734313	P.Chakradhar			
22	160118734102	Lakkarsu Saiteja Varma	Power Quality Improvement in Micro-grid System using UPQC with Lithium-ion battery system	Simulation	Mr. M Anil/ Dr. Nishant Patnaik
	160118734107	Sri Vamsi			
	160118734108	Sri Sai Wenkat			

Dr. P Kowstubha

Dr. G. Suresh Babu
Head, Dept. of EEE

Dr. K. Krishna Veni
Dr. Ch. Venkata Krishna Reddy
Project coordinators

Department of Information Technology

1. Experiential Learning Methodologies:

a) **Students Internships**
b) **Projects**

2. Participative Learning Methodologies:

a) **Roleplay**
b) **Crossword Puzzles**
c) **Mind Maps**
d) **Quizzes**
e) **Group Discussions**
f) **Guest Lectures delivered by Industry Experts**

3. Problem Solving Methodologies:

a) **Group Assignments**
b) **Major Project**
c) **Mini Project**
d) **Hackathons**
e) **Paper and Project Presentations**

Student Internships Details for the last 5 Years

Academic Year	No. of Internships
2017-18	17
2018-19	46
2019-20	202
2020-21	64
2021-22	221

Student Internships (Paid) : A.Y. 2021-22

S. No.	Roll No	StudentName	Company Name	Package (INR)	Duration
1.	160118737001	Aditi Indoori	VisCommerce	10,000/-	08.01.2022 to 08.07.2022
2.	160118737002	Devi Abhigna Amarraju	Head Digital Works	30,000/-	21-02-2022 to 30-06-2022
3.	160118737003	P.Harika	Kore.ai	16,800/	01-04-2022 to 01-07-2022
4.	160118737004	Harini Bandaru	VisCommerce	10,000/-	08.01.2022 to 08.07.2022
5.	160118737005	Ishita Gangadara	Cognizant	12,000/-	18.02.2022 to 20.07.2022
6.	160118737008	SLS Harshitha	JPMorgan Chase & Co	50,000/-	10-01-2022 to 30-06-2022
7.	160118737009	K. Mahita	Brane Services Pvt. Ltd	20,000/-	24-01-2022 to 25-07-2022
8.	160118737012	M.Rishitha	GE Appliances	20,000/	10-01-2022 to 08-07-2022
9.	160118737013	Rithika chintala	Brane Services Pvt. Ltd	20,000/-	24-01-2022 to 24-07-2022
10.	160118737014	P Rohini Aparna	Cognizant	12,000/-	18.02.2022 to 18.08.2022
11.	160118737015	Snigdha K	GE Appliances	20,000/-	10.01.2022 to 08.07.2022
12.	160118737016	P Sathvika	JPMC	50,000/-	10-01-2022 to 30-06-2022
13.	160118737019	M.Sumedhaa	JPMC	50,000/-	10-01-2022 to 30-06-2022
14.	160118737020	V.Swetha	Amazon	80,000/-	17-01-2022 to 24-06-2022

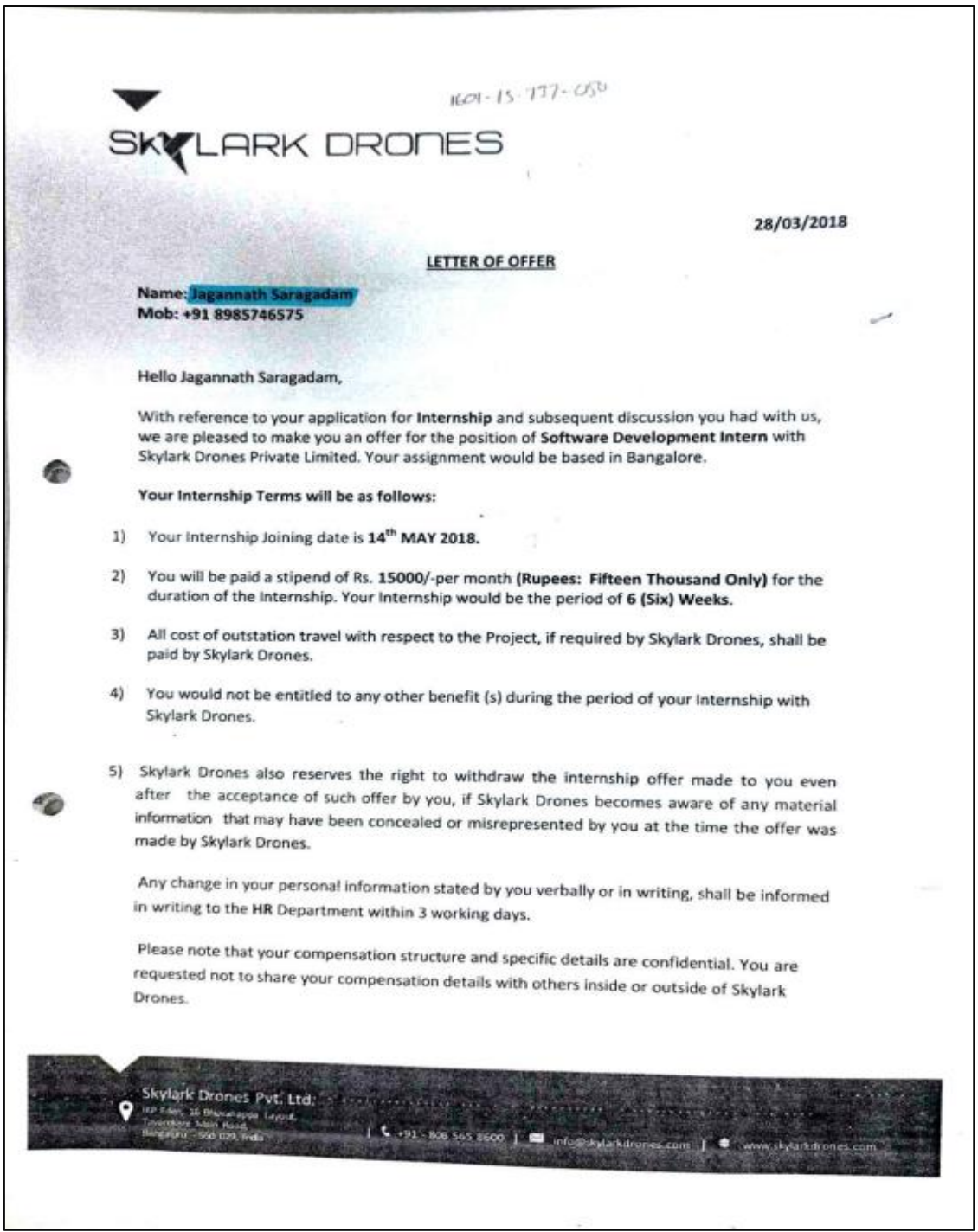
15.	160118737023	Abdul Mateen Mohammed	Cognizant	12,000/-	22-01-2022 to 21-07-2022
16.	160118737024	Sahik Abdullah Adnan	Cognizant	12,000/-	12.02.2022 to 14.07.2022
17.	160118737026	B. Dhanunjay	Cognizant	12,000/-	22-01-2022 to 24-06-2022
18.	160118737027	K JAISAI	JPMorgan Chase & Co	50,000/-	10-01-2022 to 30-06-2022
19.	160118737028	G Kalyan Reddy	Head Digital Work	30,000/-	21-02-2022 to 21-06-2022
20.	160118737029	Talla Ravi	Hexaware Technologies	25,000/-	10-03-2022 to 10-06-2022
21.	160118737030	Ehab Karamullah Sharief	Blue Yonder	35,000/-	14-02-2022 to 14-08-2022
22.	160118737031	NikhilRanga	SAMSUNG	30,000/-	24-01-2022 to 24-06-2022
23.	160118737034	K. Praneeth Kumar	JPMorgan Chase & Co.	50,000/-	10-01-2022 to 24-06-2022
24.	160118737036	Rajender Meti	MIQ	35,000/-	17.01.2022 to 17.07.2022
25.	160118737037	Rajesh Kumar Begari	Capgemini	25,000/-	24-01-2022 to 20-04-2022
26.	160118737038	P. Ranveer reddy Deshmukh	Antal (SAIMEDHA TECHNOLOGIES PVT LTD)	10,000/-	02/02/2022
27.	160118737039	Sai Charan Reddy Pakkirgari	Capgemini	25,000/-	24-01-2022 to 30-04-2022
28.	160118737041	Saiteja Chitti	Arcesium	75,000/-	10-01-2022 to 13-05-2022
29.	160118737042	K.Sai Vamshi	JP Morgan and Chase	50,000/-	10.01.2022 to 30.06.2022

30.	160118737044	Balla Satyanarayana	Bizacuity	25,000/-	4-03-2022 to 01-07-2022
31.	160118737045	S. Shashank	Cognizant	12,000/-	18-02-2022 to 18-08-2022
32.	160118737046	Shashi Priyatham	Synchrony Financials	30,000/-	01-02-2022 to 01-08-2022
33.	160118737048	Sairam Gunda	PEGA	25,000/	11-04-2022 to 11-07-2022
34.	160118737050	Supreeth Reddy Parapati	Oracle	50,000/-	12-01-2022 to 08-07-2022
35.	160118737051	Tarun Kumar PV	Nutanix	50,000/-	03-01-2022 to 29-06-2022
36.	160118737053	Vamshi Krishna reddy	Capgemini	22,000/-	28.02.2022 to 20.05.2022
37.	160118737055	P.Varshith	Cognizant	12,000/-	22-01-2022 to 21-07-2022
38.	160118737301	Shaik Sameer	Samsung R&D	30,000/-	24-01-2022 to 24.06.2022
39.	160118737302	B. Bhanu Chander	Samsung R&D	30,000/-	01-02-2022 to 31-07-2022
40.	160118737061	Akhilandeswari Bhukya	Cognizant	12,000/-	08-01-2022 to 08-07-2022
41.	160118737065	Noorain Fathima	Cognizant	12,000/-	08-01-2022 to 08-07-2022
42.	160118737069	D.Madvika	Hexagon	12,000/-	24-01-2022 to 30-06-2022
43.	160118737070	Y. Manasa	Head Digital Work	30,000/-	21-02-2022 to 30-06-2022
44.	160118737071	D. Neha	Arcesium	75,000/-	10-01-2022 to 13-05-2022
45.	160118737075	B.Rishitha	GE Appliances	20,000/-	10.01.2022 to 08.07.2022

46.	160118737076	Sai Rithika	Cognizant	12,000/-	22-01-2022 to 11-07-2022
47.	160118737080	Sathwika. S	Accolite	20,000/-	14-02-2022 to 12-08-2022
48.	160118737082	B. Sree Keerthi Megana	Oracle	50,000/-	12-01-2022 to 08-07-2022
49.	160118737083	Sreeja Palla	JPMorgan Chase & Co.	50,000/-	10-01-2022 to 30-06-2022
50.	160118737084	Srija Chitikesi	JPMorgan Chase & Co.	50,000/-	10-01-2022 to 30-06-2022
51.	160118737085	Sri Yagna	Samsung R&D	30,000/-	24-01-2022 to 15-07-2022
52.	160118737087	S.Swetha	JPMorgan Chase & Co.	50,000/-	10-01-2022 to 30-06-2022
53.	160118737090	Vennela Paladugu	Amazon	50,000/-	24-01-2022 to 24-06-2022
54.	160118737092	Fawaz Arshed Khan	Sure Energy Systems Pvt. Ltd.	15,000/-	01-03-2022 to 01-06-2022
55.	160118737093	T. Bgheswar Singh	Cognizant	12,000/-	22-01-2022 to 24-06-2022
56.	160118737094	Bhavesh Juluri	BlueYonder	35,000/-	21-02-2022 to 21-08-2022
57.	160118737096	B. Harsha Vardhan	Cognizant	12,000/-	18-02-2022 to 18-07-2022
58.	160118737097	M Hemanth	Ctrls/ Cloud4 C Services	10,000/-	03-03-2022 to 03-05-2022
59.	160118737098	T. Jashwanth	Oracle	50,000/-	12-01-2022 to 08-07-2022
60.	160118737099	K.Jaswanth Nath	Cognizant	12,000/-	22-01-2022 to 24-06-2022

61.	160118737100	Saad Mohammed Khaled	Collins Aerospace	12,000/-	21-03-2022 to 02-07-2022
62.	160118737103	S. Nithin Reddy	Micron.	30,000/-	24-01-2022 to 15-07-2022
63.	160118737105	K. Prashanth	Oracle	50,000/-	12-01-2022 to 08-07-2022
64.	160118737106	Rohan Talaka	Reves	10,000/	31-01-2022 to 04-04-2022
65.	160118737108	Ch. Sai Tharun	Amazon	50,000/-	24.01.2022 to 24.07.2022
66.	1601187371110	SK Sameer	Cognizant	12,000/-	12-02-2022 to 18-08-2022
67.	160118737111	T. Satish	Oracle	50,000/-	12-01-2022 to 08-07-2022
68.	160118737112	K Satya Trinadh Rama Naga Rakesh	Cognizant	12,000/-	22-01-2022 to 22-07-2022
69.	160118737116	M. Sriman Murari	Samsung	30,000/-	24-01-2022 to 15-07-2022
70.	160118737117	D. Susheel Kumar	Smartserv Company's-Business Intern	20,000/-	24-01-2022 to 24-07-2022
71.	160118737307	Manvith Reddy Ponnala	Copart	18,000/-	03-01-2022 to 03-07-2022
72.	160118737308	Mohammed Mumtaz Ahmed	Cognizant	12,000/-	24-01-2022 to 02.06.2022
73.	160118737310	K.Nikitha	Cognizant	12,000/-	22-01-2022 to 21-07-2022
74.	160118737311	P.Sai Prasanna	Cognizant	12,000/-	22-01-2022 to 21-07-2022

Sample Internship Offer Letters:



1604-15-737-050

SKYLARK DRONES

28/03/2018

LETTER OF OFFER

Name: Jagannath Saragadam
Mob: +91 8985746575

Hello Jagannath Saragadam,

With reference to your application for **Internship** and subsequent discussion you had with us, we are pleased to make you an offer for the position of **Software Development Intern** with Skylark Drones Private Limited. Your assignment would be based in Bangalore.

Your Internship Terms will be as follows:

1) Your Internship Joining date is **14th MAY 2018.**

2) You will be paid a stipend of Rs. **15000**/-per month **(Rupees: Fifteen Thousand Only)** for the duration of the Internship. Your Internship would be the period of **6 (Six) Weeks.**

3) All cost of outstation travel with respect to the Project, if required by Skylark Drones, shall be paid by Skylark Drones.

4) You would not be entitled to any other benefit (s) during the period of your Internship with Skylark Drones.

5) Skylark Drones also reserves the right to withdraw the internship offer made to you even after the acceptance of such offer by you, if Skylark Drones becomes aware of any material information that may have been concealed or misrepresented by you at the time the offer was made by Skylark Drones.

Any change in your personal information stated by you verbally or in writing, shall be informed in writing to the **HR** Department within 3 working days.

Please note that your compensation structure and specific details are confidential. You are requested not to share your compensation details with others inside or outside of Skylark Drones.

Skylark Drones Pvt. Ltd.
IKP Eden, 16 Bhoopasandra Layout,
Tavarekere Main Road,
Bangalore - 560 029, India
+91 - 806 565 8600 | info@skylarkdrones.com | www.skylarkdrones.com

Tech Mahindra GROWTH FACTORIES

Tech Mahindra Growth Factories Limited
A-7, Sector -64 Noida 201301, India
Tel : +91 120 40050000

Registered office
W-1 Oberoi Estate Gardens,
Off Saki Vihar Road,
Next Chandivali Studio,
Chandivali, Saki Naka,
Mumbai 400072, Maharashtra, India

U72200MH2015PLC269129

Ref: HR/CERT/ **C76685**
Date:03-October-2018

Associate Name: **Khushbu Jindal**
GID : **C76685**
Address: S/O: Flat no 501, Badanika block, vbg garden,
Mehdipatnam,
Hyderabad 500008
Telangana

Subject: Internship Completion Certificate

This is to declare that **Ms. Khushbu Jindal** has successfully completed internship program with **Tech Mahindra** ltd from **20 June 2018** and has completed her internship titled **"UpX"** under the guidance of **Madhusudhan Madireddy** (Project Manager) on **17 August 2018**.

Best Wishes for your future endeavors.

Yours sincerely,
For Tech Mahindra Limited

SATPAL TALWAR
Group Manager - Human Resources.

IT-1(414) Bhavitha.M(7842539567)
Sureela(7995267170)

merilytics

December 19, 2018

To,
Ms. Bhavitha Maile,
Hyderabad.

Dear Bhavitha,

Congratulations!!!

With reference to your interview conducted by us at Chaitanya Bharathi Institute of Technology, Hyderabad, we are pleased to inform you that your internship request at Meritus Intelytics Private Limited ("Merilytics") has been accepted.

We would like you to start your internship with us on **24th Dec 2018** and during this period, you will be paid a stipend of Rs. 20,000.00 per month, less all applicable taxes. Also, please note that, as a "temporary employee", you will not be eligible for any company benefits and other perks. You will be allocated a fixed number of leaves per month (apart from the declared holidays), exceeding which will result in loss of pay. You will be based out of our Hyderabad offices.

Your internship is expected to **last for 6 months from the start date**. However, you have the right to terminate internship for any reason, or no reason, at any time by giving 14 days' notice. Merilytics also reserves the right to terminate your internship by giving 7 days' notice, which is not applicable if reasons are related to performance and fraud issues. The terms of internship are not subject to change or modification of any kind except if in writing and signed by you and the CEO of Merilytics.

During your internship, you may have access to confidential and sensitive information belonging to the Company. By accepting this internship offer, you acknowledge that you will keep all such information strictly confidential and refrain from disclosing it to anybody outside the Company, including friends and family members. In addition, you agree that, upon completion of your internship, you will immediately return all the Company assets as required. Also, you agree that throughout your internship, you will adhere to the Company policies and procedures governing the conduct of business and employees. Non-compliance on any of the above clauses will result in disciplinary action, up to and including termination of the internship.

Once again, we are glad to have you onboard for rewarding internship experience at Merilytics. We look forward to working with you soon.

Cognizant

04-Dec-2018

Dear Hari Priyanka Sankari Amasuya,
B.Tech/B.E., Information Technology
Chaitanya Bharathi Institute of Technology

Candidate ID – 12485546

In continuation to our discussions, we are pleased to offer you the role of **Programmer Analyst Trainee** in **Cognizant Technology Solutions India Private Limited ("Cognizant")**.

During your probation period of 12 months, which includes your training program, you are entitled to an Annual Total Remuneration (ATR) of **Rs. 338,005/-**. This includes an annual incentive indication of **Rs.20,000/-** as well as Cognizant's contribution of **Rs.21,005/-** towards benefits such as Medical, Accident, Life Insurance and Gratuity. The break up is presented in **Annexure A**

On successful completion of the probation period, clearing the required training assessments and subject to you being part of a delivery project, your annual Total Remuneration (ATR) would stand revised to **Rs.383,755/-**. This includes an annual incentive indication of **Rs.20,000/-** as well as Cognizant's contribution of **Rs. 21,755/-** towards benefits such as Medical, Accident, Life Insurance and Gratuity.

Your appointment will be governed by the terms and conditions of employment presented in **Annexure B**. You will also be governed by the other rules, regulations and practices in vogue and those that may change from time to time. Your compensation is highly confidential and if the need arises, you may discuss it only with your Manager.

Cognizant is keen that there is a secure environment for clients and internally too. You are required to be registered with the National Skills Registry (NSR) and provide the ITPIN while joining the organization. Please refer Annexure B for more details.

Please note
- This appointment is subject to satisfactory professional reference checks and you securing a minimum of 60% aggregate (all subjects taken into consideration) with no standing arrears in your Graduation/Post-Graduation.
- Prior to commencing employment with Cognizant you must provide Cognizant with evidence of your right to work in India and other such documents as Cognizant may request.

We look forward to you joining us. Should you have any further questions or clarifications, please log into https://campus2cognizant.cognizant.com

Yours sincerely,
For Cognizant Technology Solutions India Pvt. Ltd.,

Suresh Bathavarapu
Global Head-Talent Acquisition
I have read the offer, understood and accept the above mentioned terms and conditions.

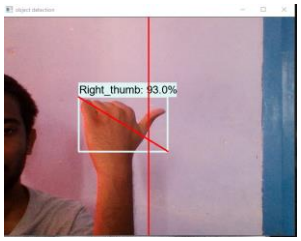
Signature :

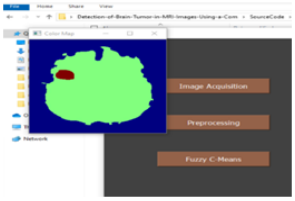
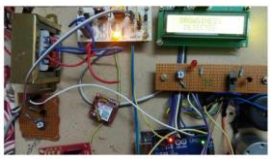
Date:

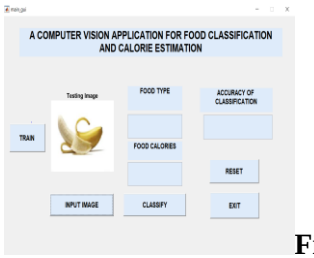
SA. Sudhakar

Product development as part of Student Projects:2020-21

S No.	Project Name	Faculty Supervisor	Student Names & Roll No. s	Snapshots of Results
1.	Image Generation from Text Description	Dr. B.Veera Jyothi	Meghana Vishwanathula, 160117737009 Shagufta Naaz, 160117737020	 Figure 1 Image generated for the caption "a red bird"
2.	A Neural Network Based Social Distance Detection	Ms. A.Sirisha	M. Sanjana, 160117737019 G. Sravani 160117737024	Identifying the social distancing between the people , Displaying Violations on Output Window and generating the alert 
3.	Reverse Image Search	Ms. B. SwathiSowmya	P. Andal Sri Vaishnavi (160117737065) P. Vinay (160117737117)	

4.	Virtual mouse using vision-based image processing	Mr. U. Sairam	G Dharani Kumar Reddy 160117737091 K Sai Charan 160117737105	
5.	Bird Species identification from an Image	Dr. K. Radhika	Jagadeesh Reddy (160116737039) Manideep Chenna (160116737042)	
6.	Object detector for visually impaired with distance calculation for humans	Ms. E. Rama Lakshmi	K Dixitha (160116737003) & V Gouthami (160116737005)	
7.	Smart water consumption monitoring system using IOT, android and cloud computing	T.Satya Kiranmai	Haritha Chowdary (160116737007) G. Lakshmi Harika (160116737013)	

8.	Detection of Brain Tumour Using a Combination of Fuzzy C Means and Thresholding Using MRI	Ms B Swathi Sowmya	Aiswarya Jayanthi (160116737068) Sameera Pokala (160116737077)	
9.	Smart irrigation and crop security system in Agriculture using IoT	Ms K Sugamya	R Sangeetha S.Harika	
10.	Auto Jotting	Dr.M.Trupthi	Srinivas .G (160116737058.) Venkata Vamsi .M (160116737060.)	 Fig.5.8. Text spotting by EAST.
11.	Implementation of Driver Drowsiness and alcohol Detection system with IoT	Mr. S. Rakesh	Anusha Gajja (160115737063) Sandhya Lingamalla (160115737073)	

12.	A computer vision application for food classification using machine learning	Dr. B. Veerajyothi	B.Shreeshma (160115737076) V.Vara Lakshmi (160115737081)	 **Figure 1 shows the output after the image is uploaded**
13.	Droos: A Development Environment for Drone Based Applications	Ms. B. Swathi Sowmya	Anirudh Valpadasu (160115737035) Kt Ujwal Pratap Krishna (160115737057)	 

1. Participative Learning Methodologies:

Fig: Role play that played by students in the topic of Polymorphism in Java

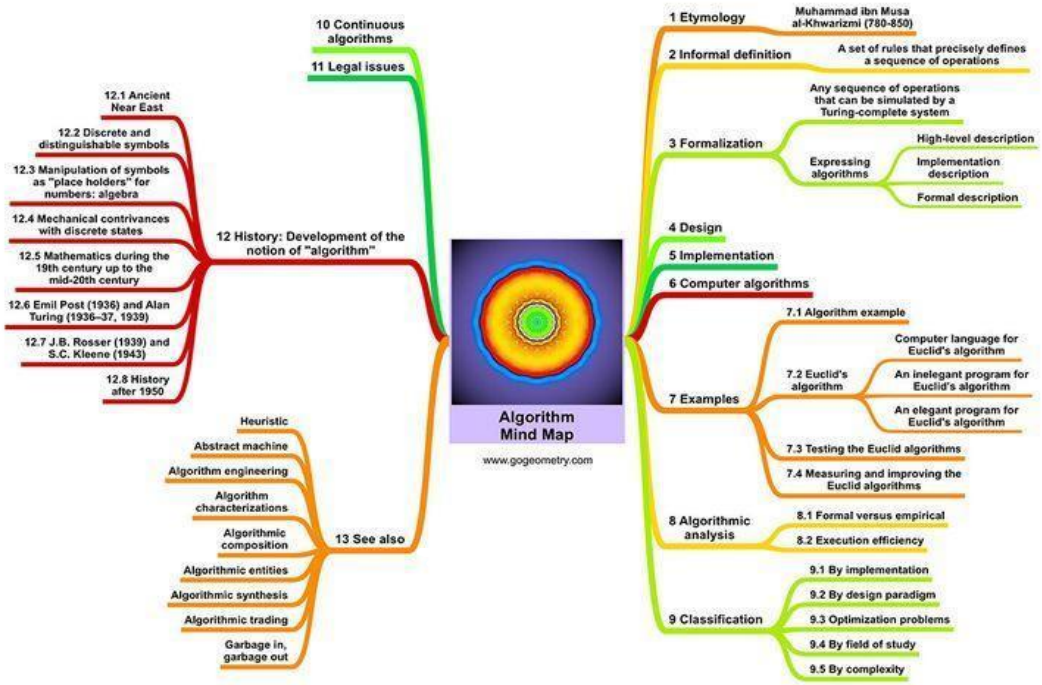
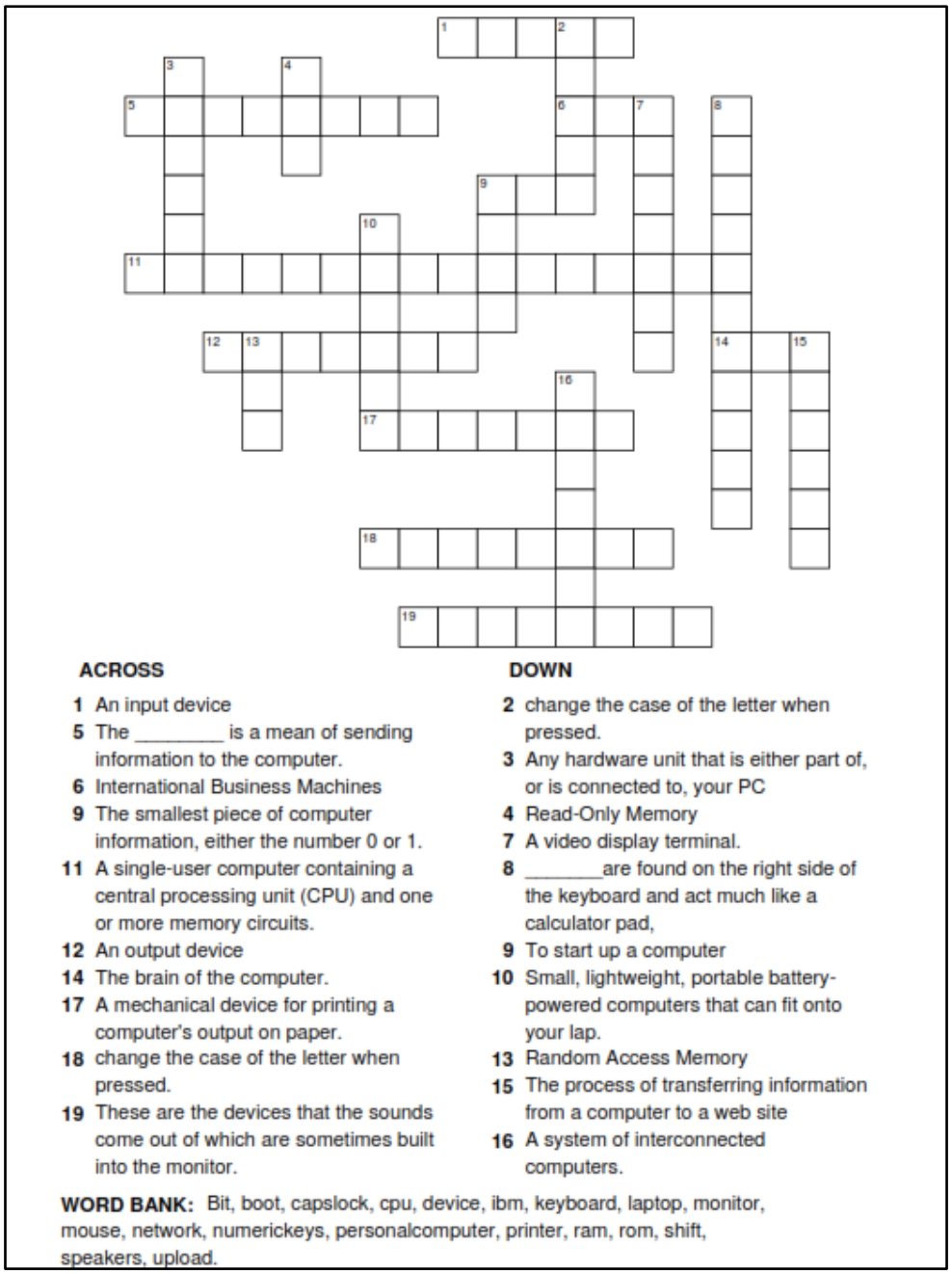


Fig: Mind Map on Algorithm



ACROSS

1 An input device
5 The _____ is a mean of sending information to the computer.
6 International Business Machines
9 The smallest piece of computer information, either the number 0 or 1.
11 A single-user computer containing a central processing unit (CPU) and one or more memory circuits.
12 An output device
14 The brain of the computer.
17 A mechanical device for printing a computer's output on paper.
18 change the case of the letter when pressed.
19 These are the devices that the sounds come out of which are sometimes built into the monitor.

DOWN

2 change the case of the letter when pressed.
3 Any hardware unit that is either part of, or is connected to, your PC
4 Read-Only Memory
7 A video display terminal.
8 _____are found on the right side of the keyboard and act much like a calculator pad,
9 To start up a computer
10 Small, lightweight, portable battery-powered computers that can fit onto your lap.
13 Random Access Memory
15 The process of transferring information from a computer to a web site
16 A system of interconnected computers.

WORD BANK: Bit, boot, capslock, cpu, device, ibm, keyboard, laptop, monitor, mouse, network, numerickeys, personalcomputer, printer, ram, rom, shift, speakers, upload.

Fig: Crossword Puzzle for Basics of Computers

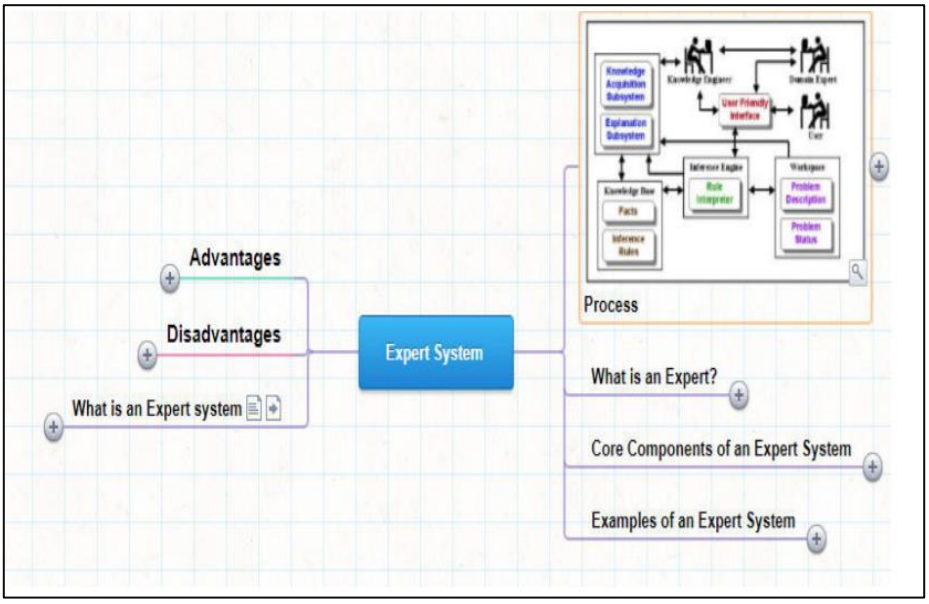


Fig: Mind Map on Expert Systems in Artificial Intelligence

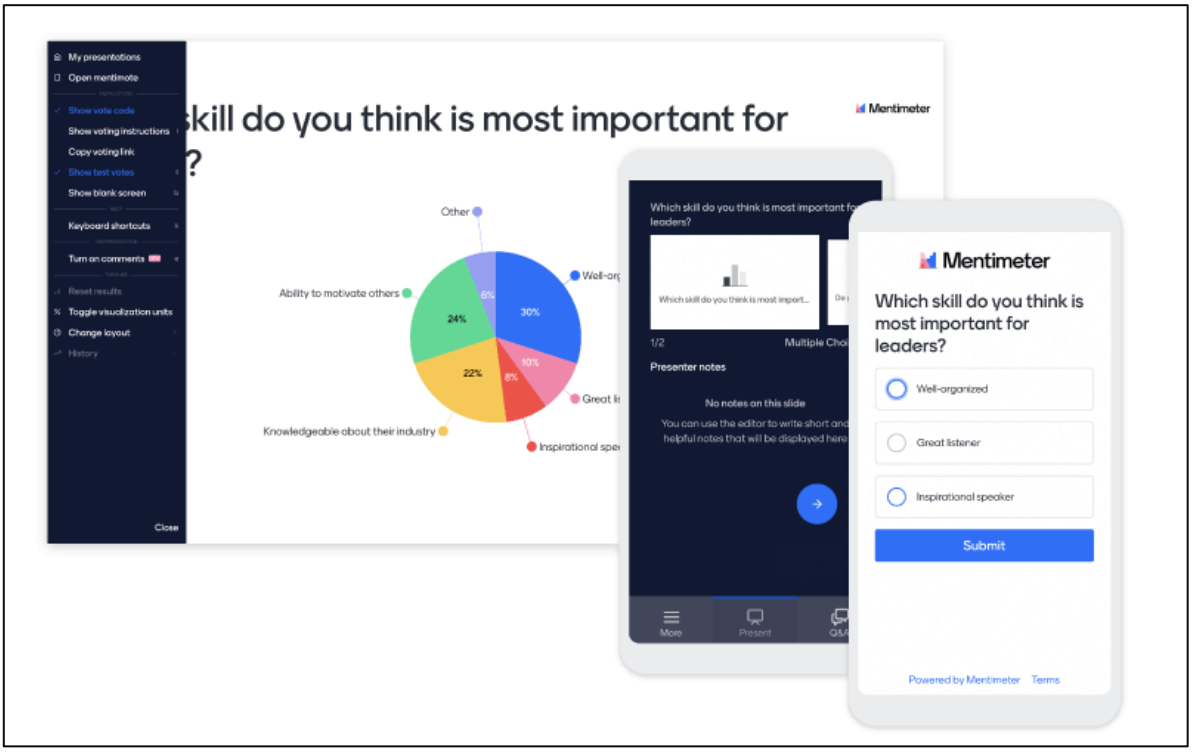


Fig: Presentation by Mentimeter

Sample Group Assignment of Case Studies :
Course Name: Distributed Systems
Course Code: 18ITC30
Explore and analyze the case studies of Distributed Systems. What is your inference for the Distributed systems? Draft your own inferences from the below case studies:

S.No.	Roll No.	Case Study
1	1601-18-737-001	Distributed Randomized algorithms CO4 L5
2	1601-18-737-002	
3	1601-18-737-003	
4	1601-18-737-004	
5	1601-18-737-005	
6	1601-18-737-006	
7	1601-18-737-007	
8	1601-18-737-008	Consistency and fault tolerance in real time environment CO4 L5
9	1601-18-737-009	
10	1601-18-737-010	
11	1601-18-737-011	
12	1601-18-737-012	
13	1601-18-737-013	
14	1601-18-737-014	
15	1601-18-737-015	The Google File System and the replication of information CO4 L6
16	1601-18-737-016	
17	1601-18-737-017	
18	1601-18-737-018	
19	1601-18-737-019	
20	1601-18-737-020	
21	1601-18-737-021	
22	1601-18-737-022	
23	1601-18-737-023	Distributed Algorithms for Sensor Networks CO4 L5
24	1601-18-737-024	
25	1601-18-737-025	
26	1601-18-737-026	
27	1601-18-737-027	
28	1601-18-737-028	
29	1601-18-737-029	
30	1601-18-737-030	Authentication and Security in Distributed Systems(GLOBE) CO5 L5
31	1601-18-737-031	
32	1601-18-737-033	
33	1601-18-737-034	
34	1601-18-737-036	
35	1601-18-737-037	
36	1601-18-737-038	
37	1601-18-737-039	

38	1601-18-737-040	Bitcoin: A peer – to – peer Electronic Cash system CO 4 L5
39	1601-18-737-041	
40	1601-18-737-042	
41	1601-18-737-043	
42	1601-18-737-044	
43	1601-18-737-045	
44	1601-18-737-046	
45	1601-18-737-047	Distributed Object based environment with CORBA architecture CO5 L6
46	1601-18-737-048	
47	1601-18-737-049	
48	1601-18-737-050	
49	1601-18-737-051	
50	1601-18-737-052	
51	1601-18-737-053	
52	1601-18-737-054	Map Reduce and HDFS CO4 L5
53	1601-18-737-055	
54	1601-18-737-057	
55	1601-18-737-058	
56	1601-18-737-059	
57	1601-18-737-060	
58	1601-18-737-301	Spark CO4 L5
59	1601-18-737-302	
60	1601-18-737-303	
61	1601-18-737-304	
62	1601-18-737-305	
63	1601-18-737-306	
64	1601-17-737-036	
65	1601-17-737-302	

Group Assignments
Course: Data Structures and Algorithms
Course Code: 20ITC01

Assignment 1

1. Implement Towers of Hanoi using Recursive Function using Python. [CO1-4]
2. Write a python function to implement for a given value (K > 0) reverse blocks of K nodes in a list. [CO3-4]
   Example: Input: 1 2 3 4 5 6 7 8 9 10. Output for different K values:
   For K = 2: 2 14 3 6 5 8 7 10 9 For K = 3: 3 2 16 5 4 9 8 710 For K = 4: 4 3 2 187 6 5 9 10
3. Implement Python functions to concatenate two circular linked lists producing another circular linked list. [CO3-4]
4. Implement Circular Double Linked List with an example. [CO3-4]
5. Check whether the Linked List is either NULL or not. If there is a cycle find the start node of the loop. [CO3-5]
6. Given pointers to the heads of two sorted linked lists, merge them into a single sorted linked list. Either head pointer may be null meaning that the corresponding list is empty. [CO2-4]

   Example
   headA refers to 1->3->-7->NULL
   headB refers to 1->2->NULL
   The new list is 1->1->2->3->7->NULL
7. Function to remove duplicates from a sorted doubly linked list. [CO2-4]
8. Given an integer k and a queue of integers, how do you reverse the order of the first k elements of the queue, leaving the other elements in the same relative order? For example, if k=4 and queue has the elements [10 20, 30, 40, 50, 60, 70, 80, 90); the output should be [40,30, 20, 10, 50, 60, 70, 80, 90]. [CO3-5]
9. Use quick sort algorithm to sort 15,22,30,10,15,64,1,3,9,2. Is it a stable sorting algorithm? – Justify. [CO2-3]
10. Show how you can efficiently implement one stack using two queues. Analyze the running time of the stack operations. [CO3-4]

Assignment 2

1. An In-order traversal of a binary search tree is performed, and each time a node is visited, it is insertedinto a new binary search tree. What is the shape of the resulting tree? [CO3][U]

2. Suppose we have a binary search tree as described in class. Implement an In-order traversal that printsout the entries in the tree in the form

   3 < 4 = 4 = 4 < 5 < 6 < 7 = 7 < 8

where 3, 4, 4, 4, 5, 6, 7, 7, 8 are the entries in the binary search tree. If the tree is empty, print nothing.Hint: pass-by-reference. [CO3][A]

3. Insert the following *n* objects, in the order given, into a binary min-heap and place your answer into the following table

[CO3][A]

5, 3, 9, 7, 2, 4, 6, 1, 8

0	1	2	3	4	5	6	7	8	9

4. Construct the string-matching automaton for the pattern P = aabab and illustrate its operation on thetext string T = aaababaabaababaab.

[CO4][A]

5. Create a Hash Table for the given keys (54,26,93,17,77,31,44,55,20) by implement Linear Probing and Separate Channing collision resolution Techniques

[CO5][A]

6. Update the following min-heap-as-complete-tree data structure to demonstrate the state following apop operation and place your answer in the following table.

[CO3][A]

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	2	7	4	12	10	5	9	13	17	19	11	6	21	11	15	14	19	18	20

7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
4	4	4	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6

Student Publications along with Faculty Members:

2020-2021

S.No	Authors	Publication Details	Web Link
1	Dr.SureshPabboju Mrs. A.Sirisha 160118737017 Sheetal, 160118737012 Rishitha	"Prediction Of COVID-19 Cases With Time Series Analysis And Machine Learning" In International Journal Of Engineering And Techniques - Volume 7 Issue 3, June 2021	http://www.ijetjournal.org/volume7/issue3/IJET-V7I3P38.pdf DOI: **10.29126/23951303/IJET-V7I3P38**
2	Mrs.E. RamaLakshmi 160117737115- K.Venkata Srinivas , B.Deepika Reddy	"Solar Powered Smart Irrigation And Monitoring System For Greenhouse Farming Using Iot" In International Journal Of Advanced Science And Technology Vol. 29, No.4, (2020), Pp.8239 –8247	http://sersc.org/journals/index.php/IJAST/article/view/30559
3	Mr.S.Rakesh 160116737102- V. Praveen Kumar 160116737091- Mahesh Varma	"Smart Irrigation And Leaf Disease Detection Using Iot And Cnn" In International Journal Of Computer Science And Engineering (IJCSE) ISSN(P): 2278–9960; ISSN(E): 2278–9979 Vol. 10, Issue 1, Jan–Jun 2021; 75–84	https://www.iaset.us/archives?jname=14_2&year=2021&submit=Search
4	Dr. K. Radhika Balaji Phani Pranav Padala- 160116737087 S. Yadavendra Reddy 160116737120	"Disease Diagnosis With Medical Prescription" Aegaeum Journal Vol. 8, Issue 7 Jul 2020	DOI:16.10089.AJ.2020.V8I7.285311.3816
5	Dr.VenuGopalaChari Mr.S.Rakesh 160117737041- L. Manideep, 160117737026- M. Shrutha Keerthi	"Brain Tumor Detection With Deep Learning On MRI Image Dataset" In International Journal For Research In Applied Science & Engineering Technology (IJRASET)ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429Volume 9 Issue VI Jun 2021	https://doi.org/10.22214/ijraset.2021.35482

Experiential Learning Methodologies

1. Industrial Internships (From A.Y 2017-18 To A.Y 2021-22)

Academic Year	No of students done Internship				Total no of students done internship
	1 to 3 weeks duration	3 to 6 weeks duration	More than 6 weeks duration	Whole Semester duration	
2017-18	08	04	00	01	13
2018-19	17	07	00	01	25
2019-20	10	21	04	04	39
2020-21	01	32	07	00	40
2021-22	54	45	20	11	130

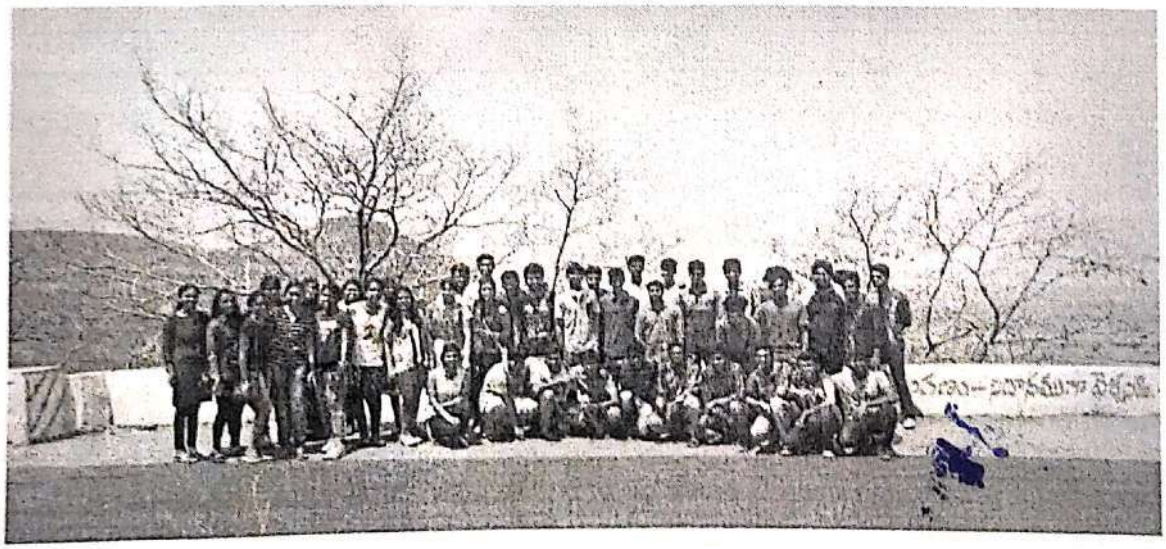
2. Industrial Visits

AY 2017-18

S. No	Name of the Industry Visited	Dates of Industrial Visit	Report and Photographs
1	Srisailam Underground Hydroelectric Power Station	08-04-2017	Available

Industrial Visits Report on **Srisailam Underground Hydroelectric Power Station on 08-04-2017.**
Date of visit: 08-04-2017.
Duration: 1 day
Industry Name: Srisailam Underground Hydroelectric Power Station.

Students of 3rd year Mechanical and Production Engineering visited **Srisailam Underground Hydroelectric Power Station** on **08-04-2017.** It was visited by about 97 students accompanied by 3 faculty members. The students understood the various process and basic principles involved in Hydroelectric Power Plant.



4. Learning by Doing

Undergraduate students of Mechanical Engineering Department will be trained in practical sessions along with theory during their 4 year course work where they will be exposed to various theoretical concepts in a practical way.

S.No	Name of the Labs	Semester
1	Material Science and Metallurgy Lab	III Sem
2	Strength of Materials Lab	
3	Manufacturing Processes Lab	
4	Basic data structures Lab	
5	Fluid Principles and Hydraulic Machines Lab	IV Sem
6	Metal Cutting and Machine Tool Engineering Lab	
7	Dynamics and Vibrations Lab	V Sem
8	Applied Thermodynamics and Heat Transfer Lab	
9	CAD/CAM Lab	
10	Metrology and Instrumentation Lab	VI Sem
11	Machine Drawing Lab	
12	Production Drawing Lab	
13	Thermal Engineering Lab	
14	Finite Element Analysis Lab	
15	Employability Skills Lab	

Final Year Projects

The Department of Mechanical Engineering believes that learning is more effective by doing. Keeping this in view the project work designed in VII and VIII semester is given more emphasis. During the VII sem literature survey is carried out and methodology of the project is formulated. Actual project is carried out during VIII semester. Students do the projects and college or in the industry based on the topic and facilities available.

Outcomes from the project (2021-22 Outgoing Students)

Publications (Research or Review Articles)
1. Venkata Sushma chinta, S. Solomon Raj, P.Ravinder Reddy, Eluka Vincent, "Numerical and Experimental Investigation of Effect of Stacking Sequence on the Fracture Parameters of Composite Materials", Journal of Xi'an University of Architecture & Technology, Volume XIII, Issue 2, pp.76-86, ISSN NO: 1006-7930.
Placements

1. 1601-20-745-102, JADHAV SUNIL KUMAR did project on "Design and analysis of AES type heat exchanger using PV elite", Placed as Graduate Engineer Tranee, Hyundai Motor group, CTC 5 Lakh.
2. 1601-20-745-103, AJMEERA CHARAN TEJ, did project on, "Design and analysis of pressure vessel by using PV elite" placed as Graduate Engineer Tranee, Hyundai Motor group, CTC 5 Lakh.,
3. 1601-20-745-104, DURGAM JAGAPATHI BABU, Control of pollutants of semi-adiabatic diesel engine fuelled with CNG and neem oil, Graduate Engineer Tranee, Hyundai Motor group, CTC 5 Lakh
4. SAREDDY SOUMYA REDDY(ME CAD/CAM) is placed in SKYLARK SMARTMETERS PVT LTD , HYD

Higher Studies
1.Ashish Kethavarapu.University of Bridgeport
2. sindhuja sai batchu , Business Analytics Flex - MS at The University of Texas at Dallas, Office of Admission and Enrollment, 800 W Campbell Road, Richardson, TX 75080-3021
3.Ravi Chandra Dharmavarapu to Purdue University's Graduate School

Outcomes from the project (2020-21 Outgoing Students)

Publications (Research or Review Articles)	**link (proof)**
1) **Pullela Ramalakshmi** , Pinninti Ravinder Reddy and Nakshatram Sarthak, "Finite element analysis on MWNT reinforced S-glass composite", Materials Today: Proceedings 56 (2022) 1364–1368, Available online from 9 December 2021	https://doi.org/10.1016/j.matpr.2021.11.427
2) **S. Abhiram**, Maddali V S Murali KrishnaMaddali V S Murali Krishna, MATHEMATICAL ANALYSIS OF RECEIVER FOR A PARABOLIC DISH COLLECTOR, IJMET,. ISSN Print: 0976-6340 and ISSN Online: 0976-6359, Volume 12, Issue 7, pp. 17-22, July 2021.	https://doi.org/10.34218/IJMET.12.7.2021.003July,
3) **E. Manasa**, Maddali V S Murali Krishna, Indira Priyadarsini, ENHANCEMENT OF THERMOPHYSICAL PROPERTIES OF NANO REFRIGERANT, Volume 12, Issue 7, pp. 10-16ISSN Print: 0976 6340 and ISSN Online: 0976-6359 , July 2021.	https://doi.org/10.34218/IJMET.12.7.2021.002
4) Ch.Indira Priyadarsini, T.Ratna Reddy, **Rajesh chitimireddy**, "Strut flame holder performance for supersonic combustion using computational fluid dynamics", IJRAR, E-ISSN 2348-1269, P- ISSN 2349-5138, Vol.7, No.3, July 20	**http://doi.one/10.1729/Journal.23995**
5) Anjani Devi, P., Indira priyadarsini, C., Avvari, C.,"Design of folded wing mechanism for Unmanned Aerial Vehicle (UAV),Materials Today: Proceedings, 2022, 62, pp. 4117–4125	https://doi.org/10.1016/j.matpr.2022.04.660
Conferences 1. P.Ramalakshmi, K.Sashikant and P.Ravinder Reddy, "Prediction of Instantaneous Shear Modulus in Neat and Multi-Walled Carbon-Nanotube Reinforced E-Glass Epoxy Composites by Finite Element Analysis" presented at 1st International Conference on Developments in Sustainable Materials Manufacturing and Energy Engineering organized by Chaitanya Bharathi Institute of Technology, Hyderabad, Telangana, India , April 3 – 4 ,2021, Page 279 to 285 , (ICDSME-2021) 2. Pullela Ramalakshmi , Nakshatram Sarthak "Effect of notch separation on Instantaneous Shear Modulus in Neat and CNT Reinforced S – Glass Epoxy Composites by Finite Element Analysis", abstract is selected at First International Conference on Advances in Mechanical Engineering and Material Science ICAMEMS – January 22 – 24 , 2022.	

3.P.Anjani Devi,Glaxmaiah , Chandu Avvari" Static and Dynamic Analysis of High Speed Motorized Spindle",1st International Conference on Developments in Sustainable Materials Manufacturing and Energy Engineering organized by Chaitanya Bharathi Institute of Technology, Hyderabad, Telangana, India , April 3 – 4 ,2021,Page 306 to 317 , (ICDSME-2021)

4. E. Manasa, Dr. M. V. S. Murali Krishna, Dr. Ch. Indira Priyadarsini, , Enhancement of Thermophysical Properties of Nanorefrigerant, ISBN: 978-1-956102-42-0 InSc Publishing House (IPH), 1st International Conference (ICDSME-2021), 3-4 April 2021

5. Rajesh chitimireddy, Dr.Ch. Indira Priyadarsini, CFD Analysis of NACA 0012 Wing for Low Subsonic Speed, ISBN: 978-1-956102-42-0 InSc Publishing House (IPH), 1st International Conference (ICDSME-2021). 3-4 April 2021

Placements

1. 1601-19-745-101, Sambaraju Abhiram, "Computerized analysis of pressurized air fuel mixture on piston squish and swirl ratio Engineer on U2 band, Tech Mahindra Limited, Hyderabad Rs. 400,000 (Rupees Four Lakh)
2. 1601-19-745-105, Enugurthi Manasa, "Computational analysis of microchannel condenser using nano refrigerants"' Programmer Analyst Trainee, Cognizant Technology Solutions India Private Limited
3. 1601-19-745-109, Chitmi Reddy Rajesh, "Integrated CFD simulations of fixed wing unmanned air vehicle(UAV)", Aerodynamics Engineer, NextLeap Aeronautics Private Limited, Bangalore, CTC Rs. 4, 70,000
4. Chandu Avvai (ME cad/cam) ,Senior Engineer ,QUEST
5. A sai kiran (ME cad/cam is working as Business Development Analyst , Darwinbox Digital solutions Private Ltd.
6. **Ambati satish is working as Piping Engineer at Petrocon Engineering Services**

Higher Studies

1.Vishal Yanam, Cinema Arts-Directing, Brooklyn College Graduate Admissions

2.Bindu Shankar Ravula , Pace University

3. 1601-19-745-103, Tirunagari Tejakrishna, did project on "Investigation on performance evaluation of photovoltaic based food dryer" Joined Masters, Renewable Energy Managem, Rhine-Waal University of Applied Sciences, Marie-Curie-Straße 1, 47533 Kleve, Germany

Outcomes from the project (2019-20 Outgoing Students)

Publications (Research or Review Articles)	link (proof)
1. Dodda, J.R., Srinivasulu, N.V., Reddy, B.R. (2021). Various Developments in the Design of Hovercrafts: A Review. In: Reddy, A., Marla, D., Favorskaya, M.N., Satapathy, S.C. (eds) Intelligent Manufacturing and Energy Sustainability. Smart Innovation, Systems and Technologies, vol 213. Springer, Singapore. https://doi.org/10.1007/978-981-33-4443-3_50	https://doi.org/10.1007/978-981-33-4443-3_50
2. Dr G Laxmaiah1, P Anjani Devi2, Dr Ch Indira Priyadarshini3, Anirudh Kishan K4, V Karthikeya Reddy5, S Vijaya Bhanu Deepak6, Design and Analysis of Semi-Recumbent Bicycle, International Research Journal of Engineering and Technology (IRJET) ,Volume: 09 Issue: 06 June 2022	https://www.irjet.net/archives/V9/i6/IRJET-V9I6461.pdf
3. 1Dr.R.P. Chowdary, 2 K. Sai Deepak Reddy, 3 M.Shashank, 4 D.Vinay Lalit, FABRICATION AND PERFORMANCE ANALYSIS OF WIND CHILL REFRIGERATION SYSTEM, JETIR2012243 Journal of Emerging Technologies and Innovative Research (JETIR), JETIR December 2020, Volume 7, Issue 12.	https://www.irjet.net/archives/V9/i6/IRJET-V9I6461.pdf
4. V.V.R.Seshagiri Rao, Ch.Indira, Priyadarshini, B.Levi Rakshith, Laminar Free Convection From a Heated Square Cylinder in Bingham Plastic Fluids , The International Journal of Analytical and Experimental Modal Analysis, Volume XIII, Issue VI, 754-761, June-2021	[redacted]OI:18.0002.IJAEMA.2021.V13I6.200001.01568590272[redacted]
5. Venkata Sushma chinta, S. Solomon Raj, P.Ravinder Reddy, Eluka Vincent, Numerical and Experimental Investigation of Effect of Stacking Sequence on the Fracture Parameters of Composite Materials, Journal of Xi'an University of Architecture & Technology,Volume XIII, Issue 2,pp.76-86, 2021.ISSN NO: 1006-7930.	
6. Dr.T.Ratna Reddy, Ch.Indira Priyadarsini, R.Navaneetha, Design and Analysis of Impeller using Corrosion Resistant Materials Vol.2317, No1,, AIP Conference Proceedings 2317, 040003,. MLRIT.	https://doi.org/10.1063/5.0036476
7. Ch.Indira Priyadarsini, Dr.T.Ratna Reddy, Dr.G.Laxmaiah, M.SubhaPradha, "Study of heat transfer in solar collector with water-nano fluid mix",NOVIY MIR Research Journal, Publisher: IZD STVO IZVESTIYA , Vol.6,No.6,pp.73-79,June 21, ISSN No: 0130-7673,	DOI:16.10098.NMRJ.2021.V6I6.256342.1872

Book chapters	
1. Jhansi Reddy Dodda, N. V. Srinivasulu & Balem Rahul Reddy ,Various Developments in the Design of Hovercrafts: A Review, Part of the Smart Innovation, Systems and Technologies book series (SIST,volume 213), DOI: 10.1007/978-981-33-4443-3_50, Chapter length: 10 pages	
Conferences	
1. Dr.T.Ratna Reddy, Ch.IndiraPriyadarsini, PenyalaHareesh Kumar, " Performance Evaluation of Invelox Wind Turbine using CFD Technique, ISBN 978-81-948668-1-7, 5th International Multidisciplinary Research Conference (IMRC-2020), OU, Dec-20 2. Dr.R.P.Chowdary, Ch.Indira Priyadarsini, Shasikanth, Design and simulation of downdraft gasifier for various biomass, ISBN: 978-1-956102-42-0 InSc Publishing House (IPH), 1st International Conference (ICDSME-2021)	
Placements	
1. 1601-18-745-101, MohammadTaj Baba, did project on "Preliminary design of Radial Inflow Turbine for Aircraft Environmental Control System Application", joined as Engineer, ALTEN India Pvt., Ltd., Bangalore CTC Rs. 7,00,000 2. 1601-18-745-108, Bhavana Kokkonda, "Optimisation and numerical analysis of desiccant wheel", Project Associate, Birla Institute of Technology and Science, Pilani Rs.25,000 per month (consolidated) 3. 1601-18-745-110, R. Navaneetha, Design and analysis of centrifugal pump impeller made of ABS plastic, Assistant Professor (contarct), Mechanical Eng. Dept., Chaitanya Bharathi Institute of Technology, Hyderabad Rs.26,250 per month 4. 1601-18-745-112, Bairi Levi Rakshith, Laminar Free convection from a Heated square cylinder in Bingham plastic fluids", Joined Assistant Professor, Mechanical Eng. Dept., Karunya Institute of Technology and Science, Coimbatore Rs.6000 AGP.	
Higher Studies	
1. 1601-18-745-105, Shashi B, "Design and simulation of downdraft gasifiers for various biomass" Msc in mechanical engineering with advanced practice, UK	

Outcomes from the project (2018-19 Outgoing Students)

Publications	link Proof
1. G. Chandra Mohan Reddy, Nihal Kasam, Mohammed Irfan Ahmed, and Kushwaha Jayant Mohan,"Low Cost Robotic Furniture Module for Micro-Apartments", Journal of Automation and Control Engineering Vol. 9, No. 2, December 2021.,	http://www.joace.org/uploadfile/2022/0222/20220222030238293.pdf
2. Pullela Ramalakshmi and Kandaloju Akhil, "Estimation of ILSS in Neat Resin and CNT Reinforced S Glass Composites by Finite Element Analysis ", Journal of Materials Science and Engineering A, Vol 9, Num 7 – 8 , Page 143-148, December 2019 ,	DOI 10.17265/2161-6213/2019.7-8.002
3. M. Baburam, Dheeraj k gara, K. Damodhar&K.Gurubrahmam(Dec 2019)," A review on process parameters associated with constitutive modelling of shape memory alloys-2", International Journal of Mechanical and Production Engineering Research and Development (IJMPERD),ISSN(P): 2249–6890;Vol. 9,Issue 6,pp. 149–160.	https://www.researchgate.net/publication/350452928_A_REVIEW_ON_PROCESS_PARAMETERS_ASSOCIATED_WITH_CONSTITUTIVE_MODELLING_OF_SHAPE_MEMORY_ALLOYS-2
4. K Gurubrahmam, M. Baburam, A. Venkatasaikumar&dheeraj k gara, (Aug 2019.), "A short review on constitutive modelling of the shape memory alloys-1", international journal of mechanical and production engineering research and development (ijmperd)., ISSN (p): 2249-6890; ISSN (e): 2249-8001 vol. 9, issue 4, pp. 849-858.	http://www.tjprc.org/publishpapers/2-67-1562838812-87.IJMPERDAUG201987.pdf
5. KNV SREEDEVI, Dr. MVS MURALI KRISHNA, SUNAYANA & BHOOMIKA, EFFECT OF EGR ON PERFORMANCE OF CI ENGINE WITH DIESEL AND COTTON SEED OIL AS FUELS, International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) ISSN (P): 2249–6890; ISSN (E): 2249–8001, Vol. 9, Issue 5, Oct 2019, 973–984	https://www.researchgate.net/publication/337000529_EFFECT_OF_EGR_ON_PERFORMANCE_OF_CI_ENGINE_WITH_DIESEL_AND_COTTON_SEED_OIL_AS_FUELS
6.Dr B. V. S. RAO1, P. RAVI KIRAN2, Y. SHASHANK3 & S. GOUTHAM4, EXPERIMENTAL INVESTIGATION OF SPRING BACK AND WRINKLING PHENOMENA IN SQUARE PIPES DURING BENDING, International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) ISSN(P): 2249–6890; ISSN(E): 2249–8001, Vol. 9, Issue 5, Oct 2019, 539–550	http://www.tjprc.org/publishpapers/2-67-1568954760-47.IJMPERDOCT201947.pdf
Book chapters	
1.P.Ramalakshmi, T Rushyanth and P. Ravinder Reddy, "Estimation of instantaneous shear modulus in neat resin and multi walled nanotube reinforced carbon epoxy composites by finite element analysis " ,	https://doi.org/10.1007/978-981-16-6738-1_8

Recent Advances in Computational and Experimental Mechanics , Vol – I, Lecture Notes in Mechanical Engineering,, Springer Nature Singapore January 2022. Page 97 -109.	
2. Chinta, V. S., Reddy, P. R., Prasad, K. E., Sai Kiran, B. V., "Experimental and Finite Element Analysis of Fracture Parameters of woven Glass/Epoxy Composite", Recent Trends in Mechanical Engineering, Eds. Singapore: Springer Singapore, pp. 649–660, 2020,	doi:10.1007/978-981-15-1124-0_56.(Scopus indexed)
3. Chinta, V. S., Reddy, P. R., Prasad, K. E., Vadapally, K. S.,"Investigation of Fracture Parameters of Jute/Glass Reinforced Hybrid Composite and Analysis by Using FEA," in Emerging Trends in Mechanical Engineering, Eds. Singapore: Springer Singapore, pp. 215–228, 2020.	doi:10.1007/978-981-32-9931-3_22 (Scopus indexed)
4. Chinta, V. S., Reddy, P. R., Prasad, K. E., Vadapally, K. S., Anand, S., Sai Kiran, B. V., "Characterization of Glass/Jute Hybrid Fibre Reinforced Epoxy Composite for Axial Flow Fan Blade", J. Polym. Compos., Volume-7, No- 3, pp. 32–43, 2019. (Web of science indexed Journal, Scientific Journal Impact Factor- 4.22).	doi: 10.37591/jopc.v7i3.3427.
5. Chinta, V. S., Reddy, P. R., Prasad, K. E., Anand, S., "Investigation of Fracture Toughness of Bidirectional Jute / Epoxy Composite and Analysis by using FEA", Int. J. Mech. Prod. Eng. Res. Dev., TJPRC, Volume- 8, No- 6, pp. 227–238, 2018,	doi:10.24247/ijmperddec201827. (Scopus indexed Journal,Impact Factor- 3.2).
6. Ch.Indira Priyadarsini,Sambaraju Abhiram,Rajesh chitimireddy, AnkurShukla, Angle of Attack effect on NACA4404 used in remote-control fixed wing planes, IJRAR2004258, (E-ISSN 2348-1269, P- ISSN 2349-5138), Volume 7, Issue 2, DOI (Digital Object Identifier) -, April 2020.	http://doi.onc/10.1729/Journal.23502
Conferences	
1. Pullela Ramalakshmi and Kandaloju Akhil, BEST E-poster on Estimation of ILSS in Neat Resin and CNT Reinforced S Glass Composites by Finite Element Analysis, Page 78, International Conference on Advanced Materials and Processes for Defense Applications organized by Defence Metallurgical Research Laboratory, Hyderabad ,India (DRDO), Hyderabad , Telangana , India , September 23 – 25 , 2019 2.P Ramalakshmi and T Rushyanth, "Estimation of instantaneous shear modulus in neat resin and multi walled nanotube reinforced carbon epoxy composites by finite element analysis" , 1 st Online International Conference on Recent Advances in Computational and Experimental Mechanics, IIT Kharagpur, West Bengal , India , September 4 – 6 , 2020, Page133 -134, ISBN 978-93-5416-440-8 ISBN 978-93-5416-440-8 (eBook).	

3. Ch Indira priyadarsini, Abhinav kumar reddy A, Mannepalli Sreekanth, Analysis of a 10mw solar power plant at ntpc ramagundam, International Conference on Advances in Renowned Renewable Energy Technologies(ICARRET), 23rd& 24th October, 2019, VR Siddhartha college, Vijayawada.	
Placements	
1.Mr Aravind Ramayampeta(ME CAD/CAM) was working with Primesoft IP solutions .now shifted to INFOSYS 4. 1601-17-745-101, K Manrohith prasad, Achala IT solutions Pvt.Ltd, Plot: 844, Unit: 201 2nd Floor, Road No: 44 Jublee Hills, Behind Peddamma Temple, CBI Colony, Jubilee Hills, Hyderabad-500033, CIN : U7220TG2009PTC065675 3/09/2019, 3 Lacs 5. 1601-17-745-108, ANKUR SHUKLA, Analysis of Non-Symmetrical Airfoils, Joined as Engineer in RCI, DRDO, Hyderabd	

Outcomes from the project (2017-18 Outgoing Students)

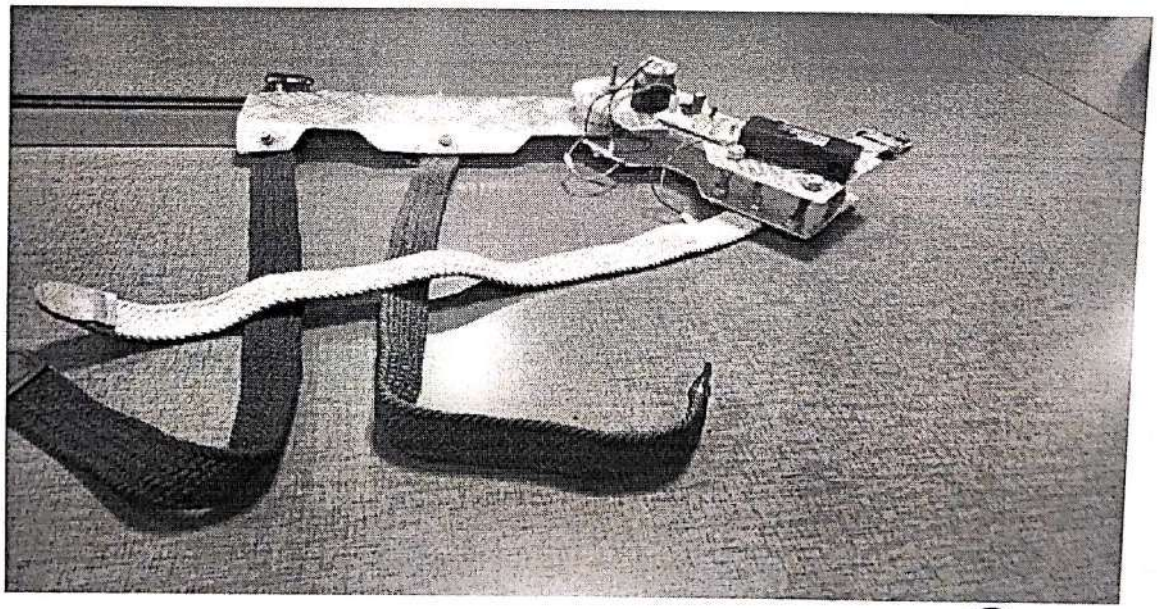
Publications (Research or Review Articles)	
1. Dr. P.V.R Ravindra Reddy1, Gollapalli Kiran Kumar2, Dr. G.Chandra Mohan Reddy3, Dr.P.Prabhakar Reddy "Experimental Studies on the Effect of Liquid Nitrogen cooling on the Machining Forces for Machining of Mild steel and Tool steel specimens" International Journal of Applied Engineering Research ISSN 0973-4562 Volume 14, Number 8 (2019) pp. 1970-1975,Research India Publications. http://www.ripublication.com 1970	https://www.ripublication.com/ijaer19/ijaerv14n8_30.pdf
2. B Likhit, Dr. B V S RAO, Role of 3D Printing in Food Industry- A Review, International Journal of Engineering and Innovative Technology (IJEIT) Volume 10, Issue 1, July 2020, ISSN: 2277-3754.	https://www.ijeit.com/Vol%2010/Issue%201/IJEIT1412202007_04.pdf
Conferences	
1. Ch Indira Priyadarsini, A Akhil, V Srilaxmi Shilpa, Non-premixed Combustion Analysis on Micro-Gas Turbine Combustor Using LPG and Natural Gas, Recent Trends in mechanical Engineering, Springer, Singapore, First Online12 January 2020, , Publisher Name Springer, Singapore, Print ISBN978-981-15-1123-3, Online ISBN978-981-15-1124-0.	**DOIhttps://doi.org/10.1007/978-981-15-1124-0_6**
Placements	
1. 1601-16-745-105, MOHAMMED ABDUR RAHMAN JAWWAD, "Design of HVAC System with Chilled Water Technology on commercial	

Building", FUJAIRAH National Construction Co.L.L.C, "5,500 Dirhams, (Rs. 106379.97)" 2. 1601-16-745-108, VUTUKURU SRILAXMI SHILPA, Associate software engineer in CGI with 5.5 Laks pa	
Higher Studies	
1. 1601-16-745-104, A. AKHIL, "CFD Analysis on Micro Gas Turbine Combustor", IIT Delhi, PhD full time(Teaching Assistantship/Project Assistantship/ Sponsored), No. IITD/Admission/PhD./2018-19, 12/12/2018, Rs.3.72 Lacs as a stipend per annum 2. 1601-16-745-108, VUTUKURU SRILAXMI SHILPACompleted Advanced Management program in B usiness analytics in Indian school of business (ISB)	

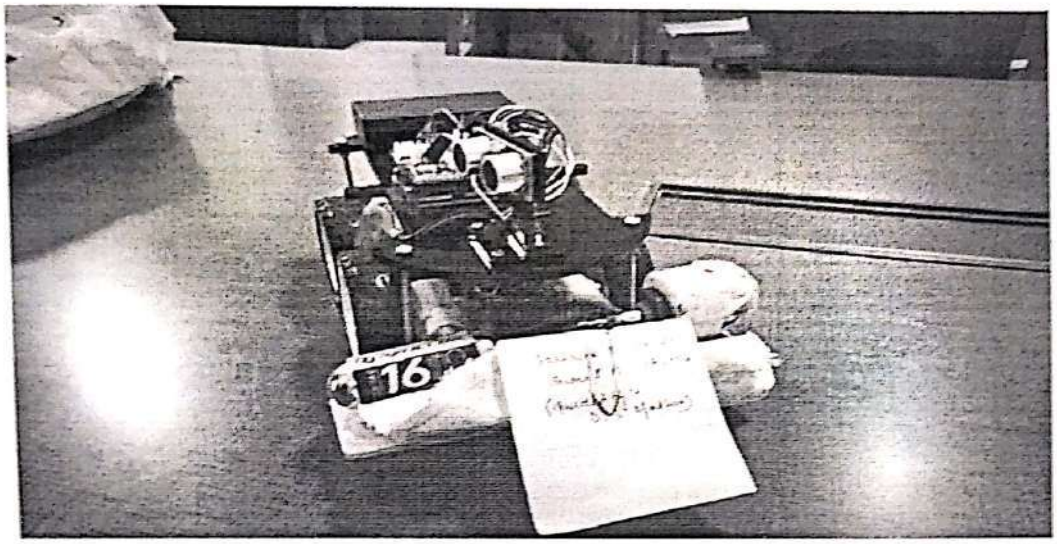
5. Working models/ Projects

The following are the few working models developed by Mechanical Engineering students during 2017-2022

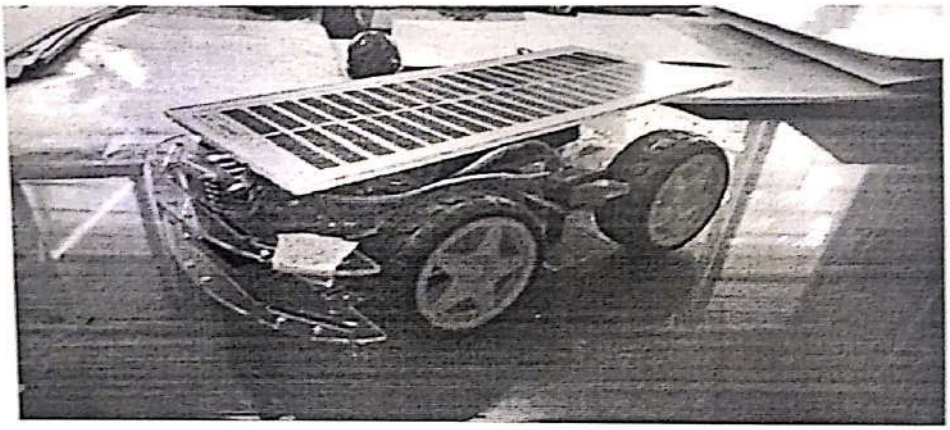
Model1: Power Generation through Knee Strap Hints (1601-18-736-097, 1601-18-736-104, 1601-18-736-108)



Model2: Fabrication of Vehicle External Air bag System (1601-18-736-041, 1601-18-736-046)

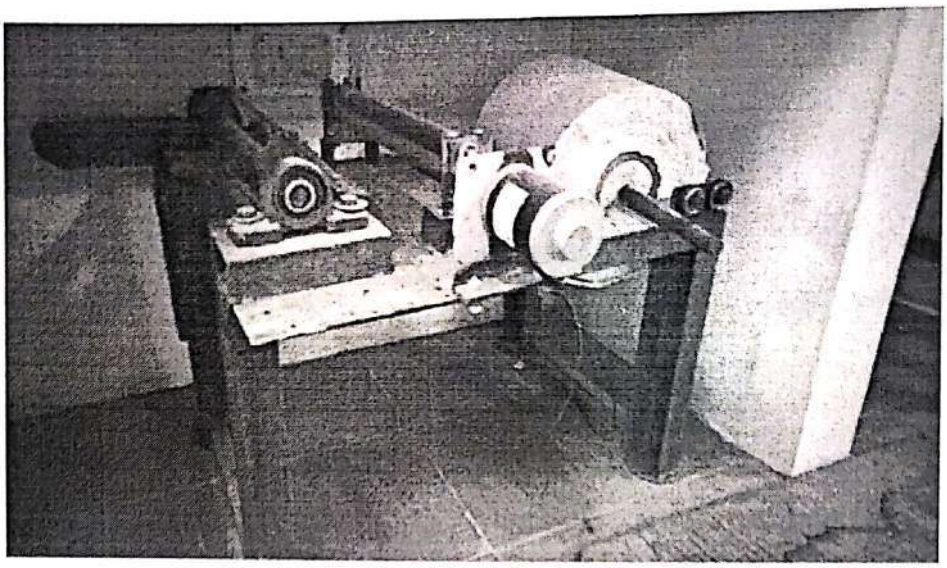


Model3: Fabrication of Solar Car (1601-18-736-100, 1601-16-736-313, 1601-16-736-314)



Model4: Design and Fabrication of Semi-Recumbent Bicycle (1601-16-736-016, 1601-16-736-028, 1601-16-736-058)

Model5: Design and Fabrication of Automatic Paper Cutter (1601-15-736-081, 1601-15-736-103 1601-15-736-105)

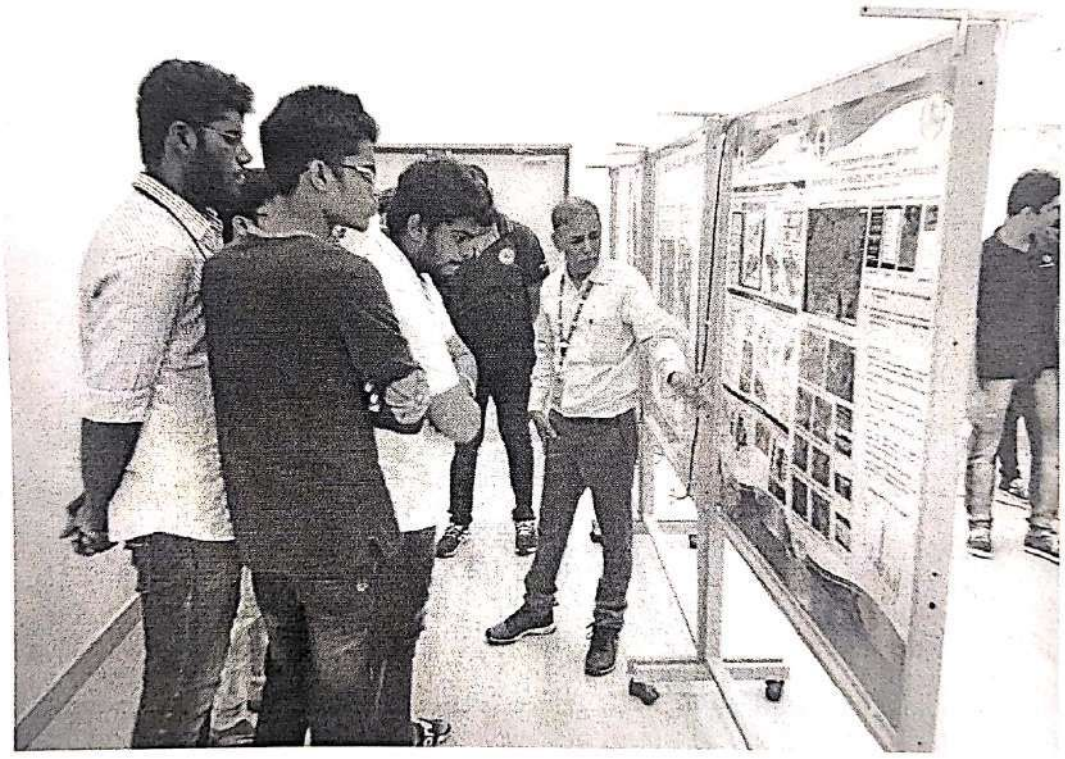


Model6: PRAHETI RACING Team from SAE Club of CBIT participated in the National Level Formula Imperial 2022 competition, organized by ISIE INDIA held at Galgotia University and Buddh International Circuit, Greater Noida, during 26th -30th August 2022.

Experiential Learning Methodologies being practiced in the MCA Department

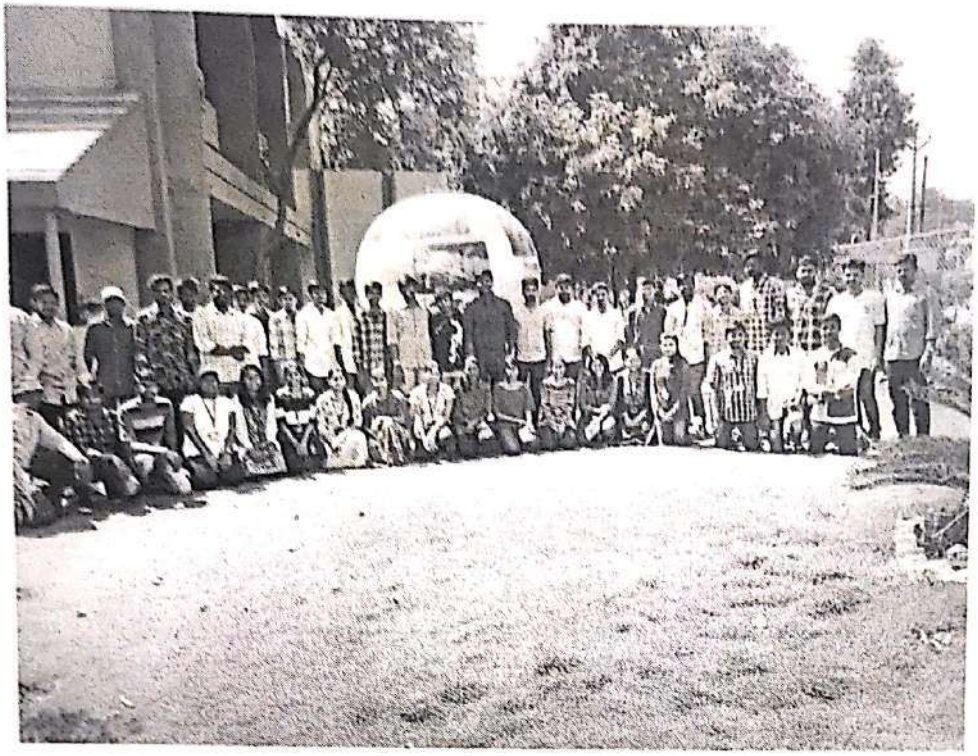
Student Industrial Visits

- Mr. G. N. R. Prasad, organized an Industrial visit to ISRO /NRSC , Hyderabad for MCA Students on 23rd April, 2019.



MCA students listening to a Scientist at NRSC, Hyderabad

29/10/22



MCA Students at NRSC Campus, Hyderabad

Alumni Meet

- As part of Institute Alumni meet - 2019 "Rejoicing Reunion", coordinators have communicated to all the alumni and invited them to visit the Department on 25-12-2019.

MCA faculty with alumni on 25-12-2019

29/10/22

Social Activities

- Mr. M. Kalidas has delivered his opinions on Sirivennela Sitarama Sastry garu - a well-known telugu lyricist in the "**Prime Debate on Sirivennela Sitarama Sastry Life Journey**" on 01st December 2021. The program was conducted by HMTV on the occasion of sudden demise of Sirivennela Sitarama Sastry garu.

Mr. M. Kalidas, Dept. of MCA talk in HMTV about Life Journey of Sirivennela Sitarama Sastry garu

- Dr. G. N. R. Prasad participated in the program "**TAPF - Industrial Tour & Community Services**", organized by FOLK Youth Empowerment club of Hare Krishna Golden temple on 13th November 2021.

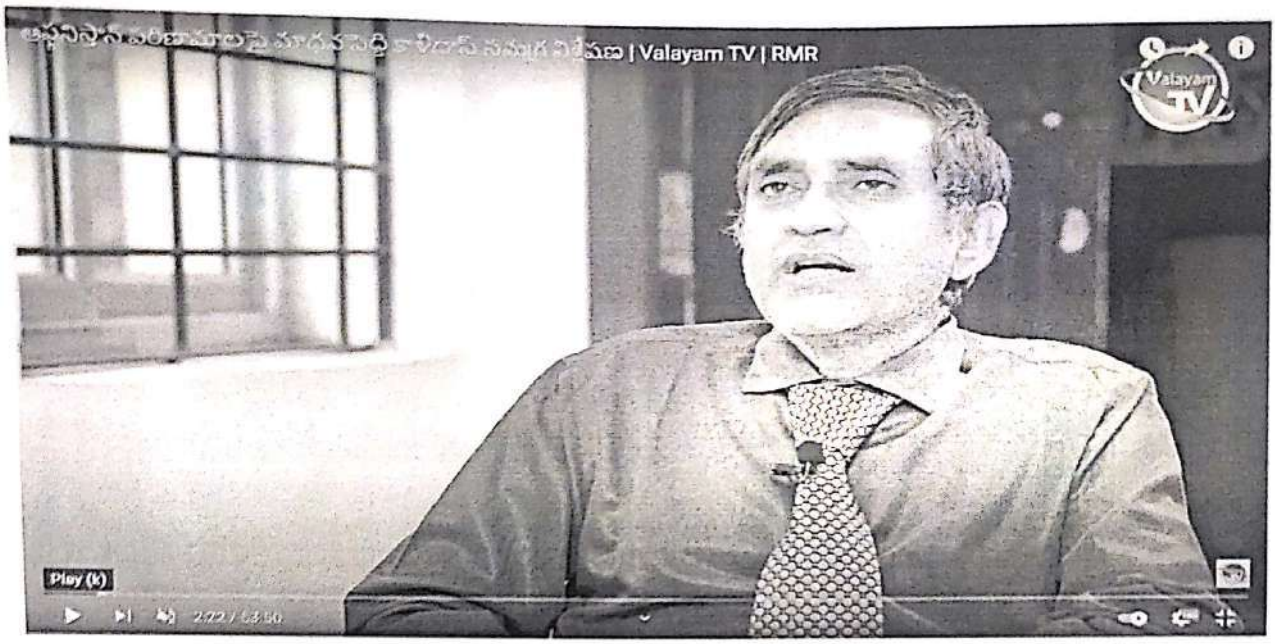
29/10/22

- Mr. M. Kalidas was invited as Guest speaker by iDream News Channel on **"His family background, study, entering into Indian Airforce, Contribution in Kargil War, Analysis on recent attacks on Jammu Airforce station, analysis on how to handle such attacks and motivating younger generation to join in Military services"** in the month of September 2021.

Mr. M. Kalidas, Dept. of MCA talk in iDream News TV about Terrorist Attacks on Jammu Airforce Station

- Mr. M. Kalidas was invited as Guest speaker by Valayam TV on **"In-depth Analysis on Afghanistan status after Taliban takeover"** in the month of August 2021.

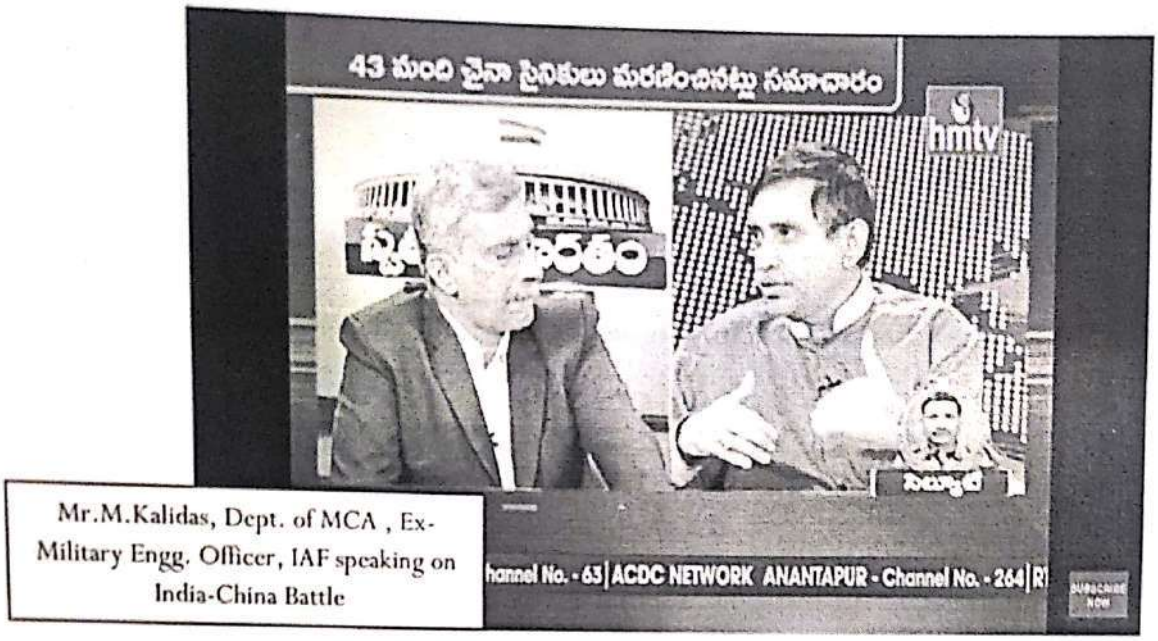
29/12/22



Mr. M. Kalidas, Dept. of MCA talk Valayam TV about Afghanistan Status

- Dr. G. N. R. Prasad participated in the "**Fit India 2K Run**", conducted by the Department of Physical Education, CBIT on 13th August 2021.
- Department staff participated in "**RashtraGaan - an initiative by the Ministry of Cultural**" to mark Azadi Ka Amrit Mahotsav in the month of August 2021.
- Mr. M. Kalidas was invited as Guest speaker on 30th January, 2021 by i NEWS channel, regards to "**Air India Flight crash at Kozhikode airport**".

29/10/22



Mr.M.Kalidas, Dept. of MCA , Ex-Military Engg. Officer, IAF speaking on India-China Battle

Mr. M. Kalidas, Dept. of MCA talk show in hmtv

- On 23rd February 2020, a 2K run conducted as a part of SHRUTHI-2020 curtain raiser, with the theme of "FIT INDIA" at Jalavihar, Hyderabad.

Dr. P. Ravinder Reddy, Principal of CBIT, initiating the 2K run

Dr. P. Ravinder Reddy, principle of CBIT, initiating the 2K run program by shaking the green flag

Assemble of CBIT staff in 2K run

- On the eve of Swachhata Pakhwada, a MHRD initiative was carried out by Teaching and Non-Teaching staff of MCA department has carried out plantation of trees around 100 saplings in the college campus on 27-01-2020. This campaign will help to improve greenery in the campus.. As air pollution, urbanization, construction of heavy buildings and residential complexes in around CBIT campus is increasing at a very rapid phase, plantation and nursing of trees will contribute to a large extent by providing fresh air, reduction of air pollution.

MCA Staff planting saplings in CBIT on the occasion Swachhata Pakhwada on 27-01-2020

29/10/22

The Principal, CBIT and MCA staff in plantation programme, Swachata Pakwada

MCA Staff planting saplings in CBIT on the occasion Swachhata Pakhwada on 27-01-2020

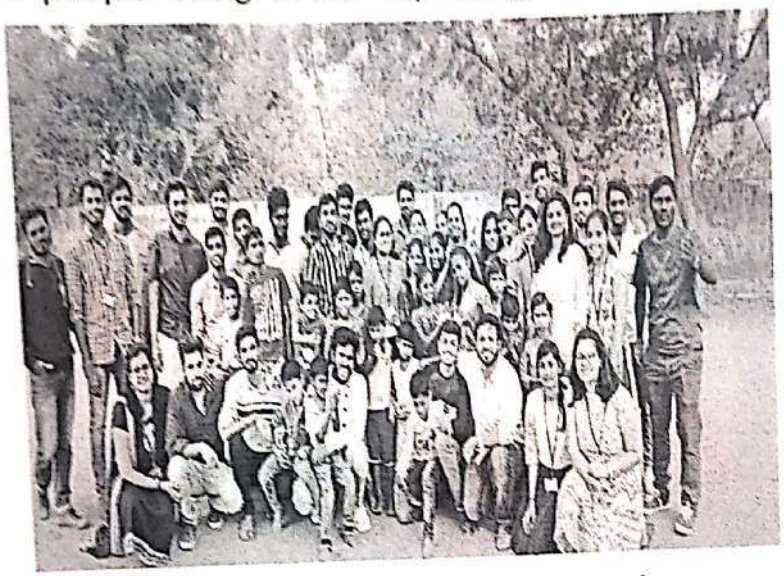
MCA staff planting saplings in CBIT campus

MCA Staff planting saplings in CBIT on the occasion Swachhata Pakhwada on 27-01-2020

Staff of MCA planting saplings

29/10/22

- On 1st January 2020, the NSS CBIT team visited to the Aadharana Orphanage Kismathpur on the occasion of New Year and donated groceries to the people living in the orphanage.



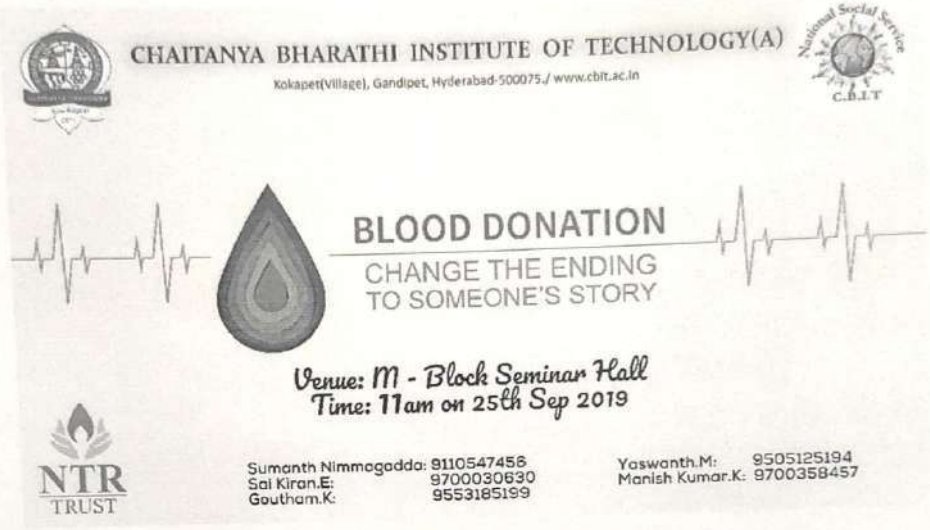
NSS CBIT team in Aadharana orphanage

NSS CBIT team speaking with the people of Aadharana orphanage

- As part of "Beti Padhao - Beti Bachao", on 5th November 2019 the NSS CBIT team interacted with the government school girls of the age

29/10/22

- On 26th September 2019, the NSS CBIT team organized a Blood donation camp in the college campus with the help of NTR Blood donation trust and succeeded with 330+ registrations of blood donations.



CBIT Blood Donation camp brochure

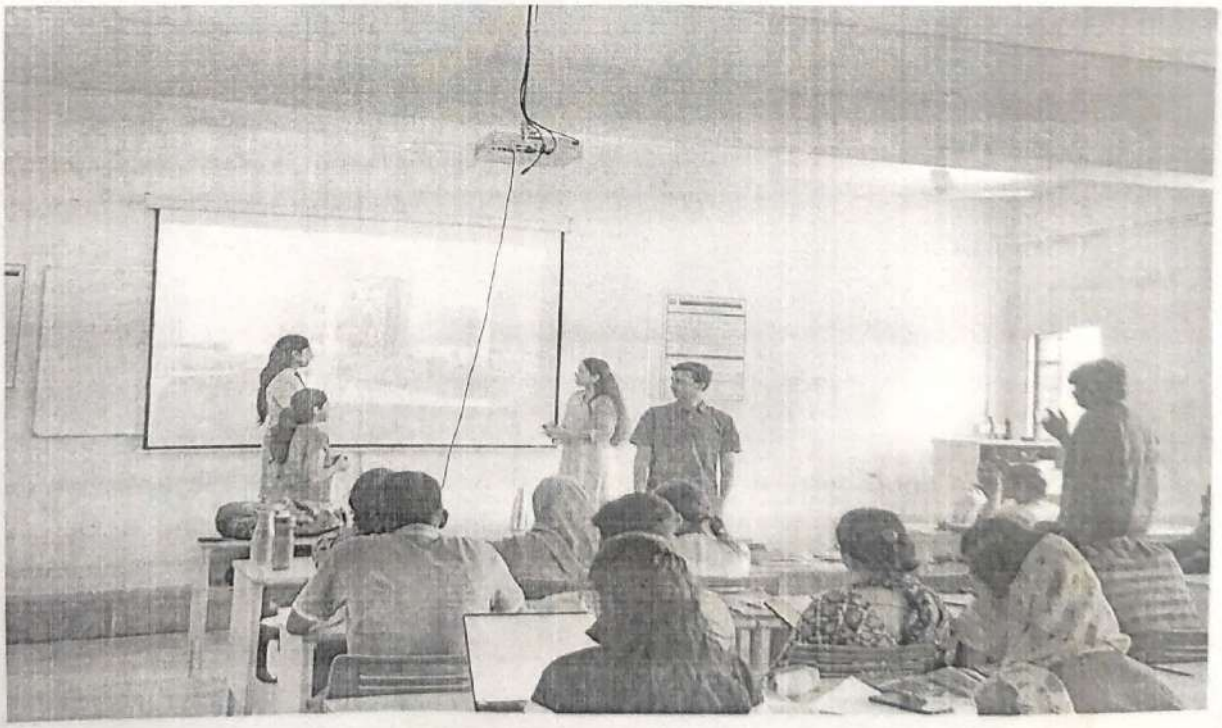
NSS CBIT -MCA & other branches students conducted Blood donation camp

School of Management Studies

Participative Learning Methodologies

1. Team Based Assignments
2. Role Plays
3. Group Discussions
4. Seminars or Workshops or Webinars Organized by Department
5. Guest Lectures delivered by Industry
6. Activities related to non-verbal communication
7. Presentation skills
8. Listening skills
9. Activities related to Situational Awareness
10. Tony Buzan's Mind Mapping Techniques
11. War filed 6-3-5 Method

Role play on resources planning and quality management in Operations Management organised by Smt B.Lavanya



Workshop for HR students on career opportunities organised by Dr.Poorna Chandrika, B Lavanya and P. Varaprasad goud

Seminar on Startup and its Basics- Entrepreneurship Development course organised by Smt B.Lavanya

Group Discussion:

https://drive.google.com/drive/folders/1AZIJVIbHY4TvNuUC_Cvmmso-qko47o_7?usp=sharing

S NO	NAME OF THE EVENT	CHIEF GUEST	DATE	DURATION	TARGET AUDIENCE
1	INVESTOR AWARENESS PROGRAM	Dr P Karthika	05.02.2021	14:30-16:00	MBA II and IV Sem.
2	ENTREPRENEURSHIP IN BUSINESS ANALYTICS	Dr D V Srinivasa Kumar	10.12.2021	11:00 AM TO 12:30 PM	MBA II SEM
3	INVESTMENT BANKING	Mr Praveen Kumar	24.07.2022	10:00 AM to 12:00 PM	MBA II SEM

School of Management Studies

Experiential Learning Methodologies

1. ICT in Teaching and learning process
2. Industrial Internships
3. Industrial Visits
4. Community engagement

ICT in Teaching Learning Process

This institute follows ICT-enabled teaching in addition to traditional classroom education. Subsequent efforts are taken by the institute to provide an e-learning atmosphere in the classroom.

1. In addition to the chalk and talk method of teaching. Faculty members are using the IT-enabled learning tools such as Powerpoint presentations, video clips, Audio system, and Online sources, to expose students for advanced knowledge and practical learning.

2. Classrooms are fully furnished with LCD with Computers, Audio system with mic facility and Wi-Fi facility.

3. Most faculty use interactive methods for teaching. The major emphasis is on classroom interaction in research paper presentations, seminars, group discussions, assignments, quizzes, tests, viva and laboratory work.

4. Well-secured Wi-Fi provided to Wi-Fi users. Its access is controlled by the system administrator.

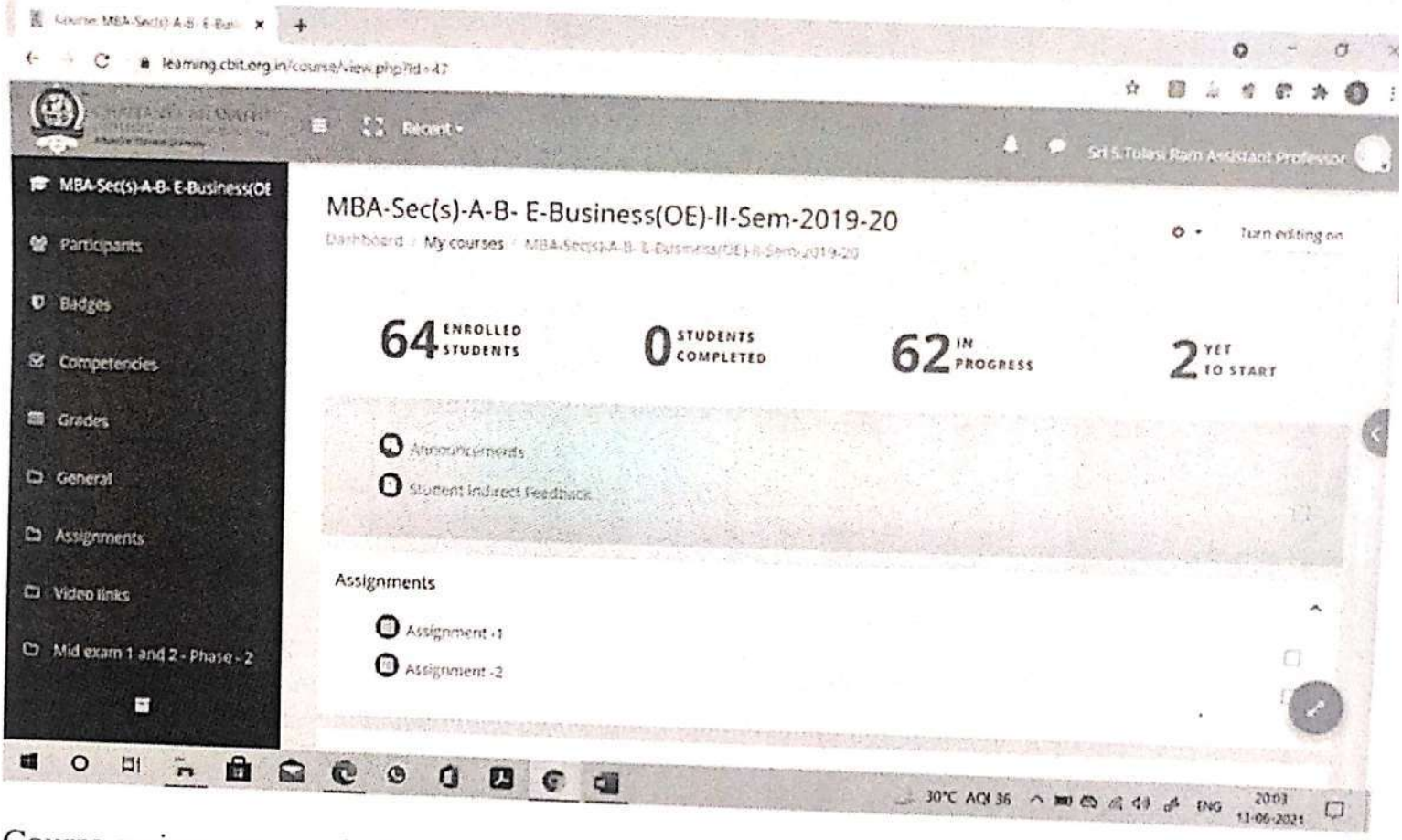
Number of teachers on roll	Number of teachers using ICT *(LMS, e-Resources)*	ICT tools and resources available	Number of ICT enabled classrooms	Number of smart classrooms	E-resources and techniques used
15	15	LED Projector, e-books,	4	-	e-books e-journals Wi-Fi

		e-journals, Intranet, Wi-Fi Campus Videos			

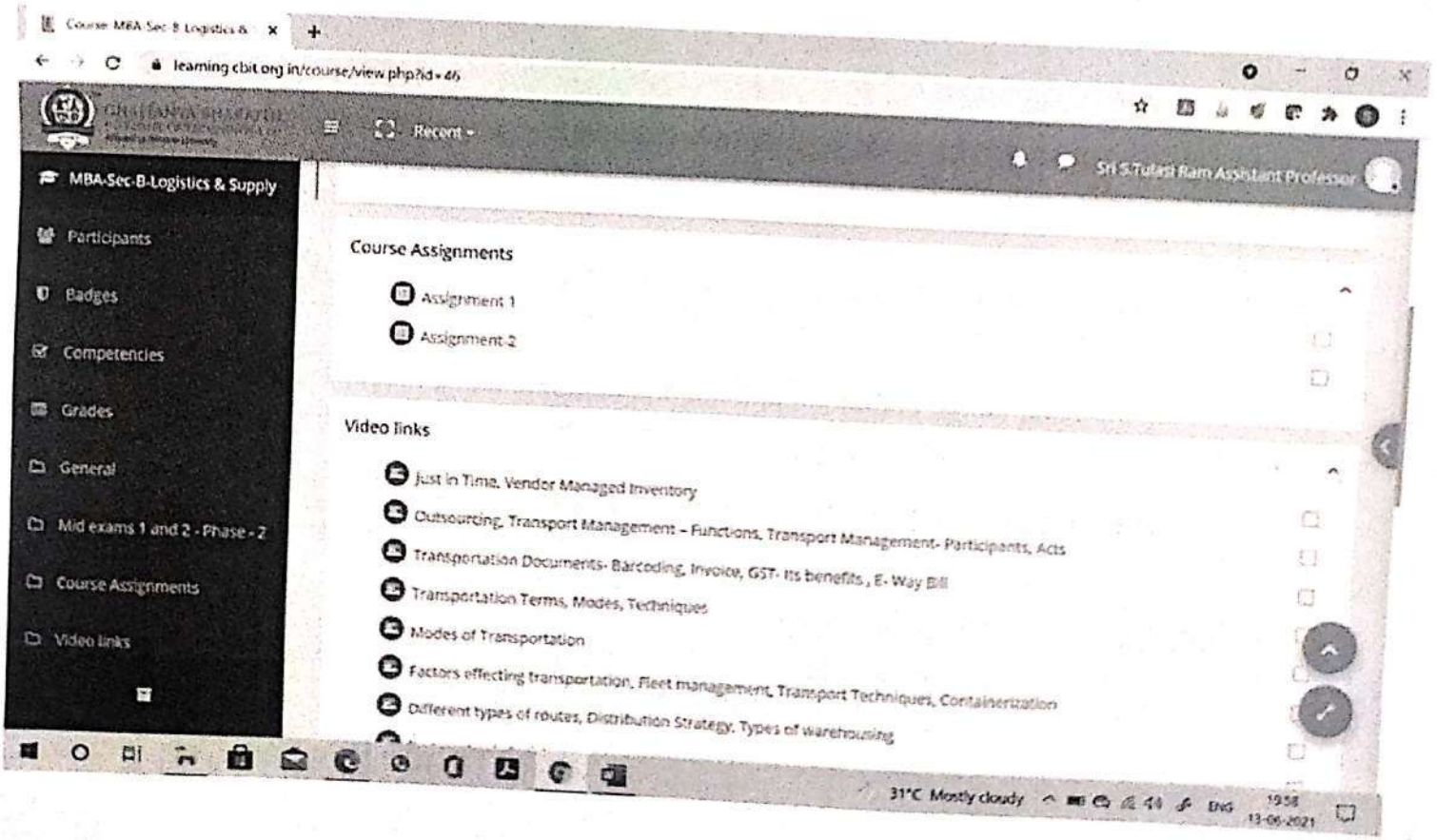
In addition to ICT faculty using LMS (Learning Management System) effectively to keep materials, PPTs, Tests and Assignments through LMS. College maintaining learning.cbit.org.in faculty and students are provided credentials.

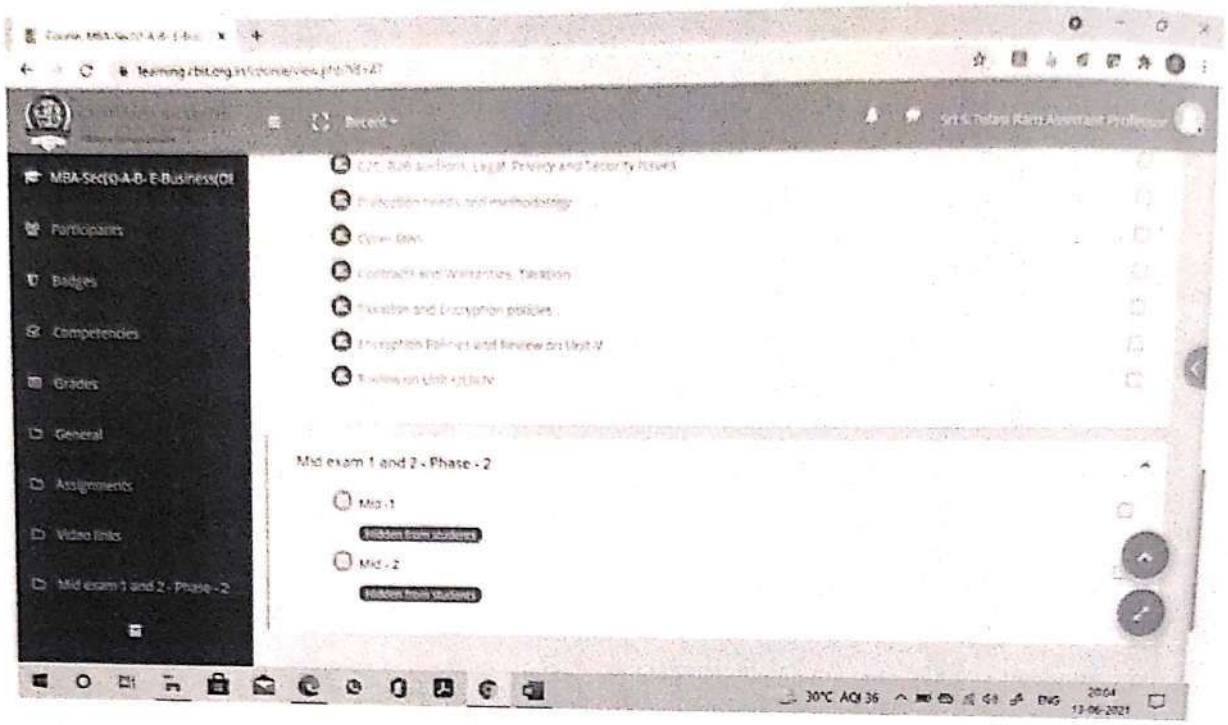
Home page of learning.cbit.org.in

Course page



Course assignments and Video links





2. Industrial Internships

MBA II SEMESTER (2020-2022 BATCH)

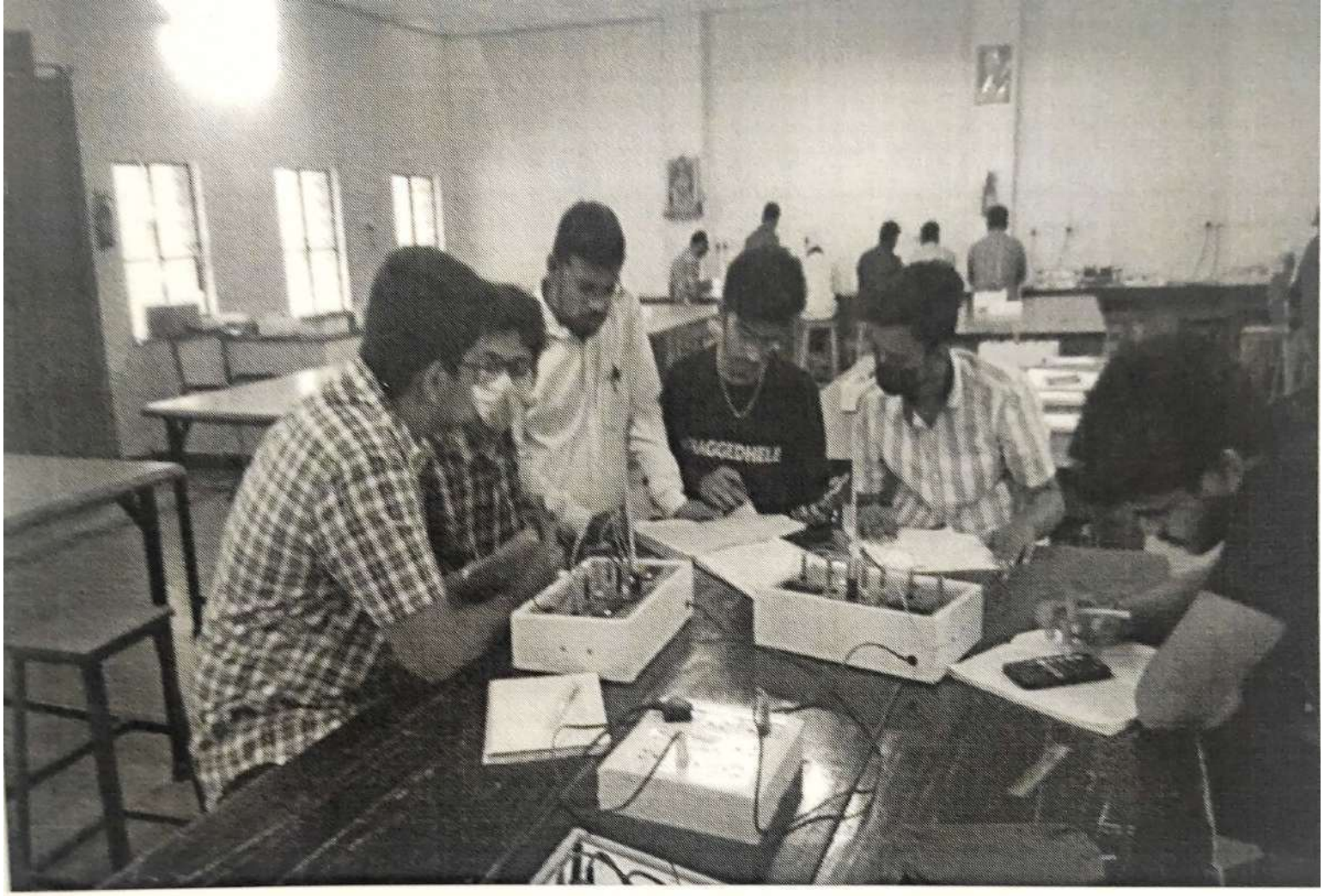
CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A), HYDERABAD			
CBIT- SCHOOL OF MANAGEMENT STUDIES			
MBA II SEMESTER (2020-2022 BATCH) - SECTION - A			
S.No.	**Roll. No.**	**Name of the Candidate**	**Title**
1	1601-20-672-001	AKHILA ANNASARAM	Online Human Resource Coordinator (INTERN)
2	1601-20-672-002	ASHFIYA NASEERUDDIN SYED	HR intern
3	1601-20-672-003	BHAGYASREE KADIMICHERLA	Associate- Business Development

4	1601-20-672-004	HARSHITHA MUTHYALA	financial trainee
5	1601-20-672-005	LAHARI ANUMANDLA	Corporate Ambassador Intern
6	1601-20-672-006	MEGHANA REDDY SANVELLY	HR Intern
7	1601-20-672-007	MONICA AKUNOORI	Digital Marketing Intern
8	1601-20-672-008	MOUNIKA JARAPLA	Digital Marketing Intern
9	1601-20-672-009	NANDINI BADIKE	Sales & Marketing
10	1601-20-672-010	NAVYA PRIYA DARSHIINI	Human Resource Intern
11	1601-20-672-011	NAZNEEN INTESHA	HR Intern
12	1601-20-672-012	NISMA	human resource intern
13	1601-20-672-013	PRINCESS G	HR Intern
14	1601-20-672-014	REVATHI J	Online Human Resource Coordinator (INTERN)
15	1601-20-672-015	RINKU KUMARI	Study on Recruitment and Selection process
16	1601-20-672-016	RUCHITHA MUCHARLA	HR intern

17	1601-20-672-017	SAHADEV KANCHAN SINGH	A study on Talent acquisition process with reference to CBIT
18	1601-20-672-018	SAMYUKTHA YADAVELLY	HR trainee
19	1601-20-672-019	SATYAVENI BODASINGU	Human Resource intern
20	1601-20-672-020	SIREESHA N	finance Intern
21	1601-20-672-021	SOUMYA SRI BAGGAM	finance Intern
22	1601-20-672-022	SUPRIYA	Financial Trainer
23	1601-20-672-023	SUPRIYA MANDADA	Human Resource Intern
24	1601-20-672-025	SWETHA EMMIDI N S	General Banking, Credit management, loan recovery
25	1601-20-672-026	TANUJA GUDAPATI	HR Intern
26	1601-20-672-027	TEJASWINI R	Financial Trainee
27	1601-20-672-028	VAISHNAVI BANDARU	A study on Finance and operations
28	1601-20-672-029	VAISHNAVI REDDY MADI	HR intern
29	1601-20-672-030	VIHARI S	HR intern
30	1601-20-672-	ABHILASH	A study on Recruitment and Selection

	031	MALYALA	process at CBIT
31	1601-20-672-032	ANIL P	UK Taxataion - A study with reference to Deloitte
32	1601-20-672-033	AVINASH BIRADAR	Equity Research Analyst
33	1601-20-672-034	BHARATH KUMAR ALLADI	Human Resource Intern
34	1601-20-672-035	NARAPARAJU CHANDU	Financial Trainee
35	1601-20-672-036	ESHWAR KIRAN ARPULA	A study on Finance and operations
36	1601-20-672-037	FAYAZ SK	Basic Finance and Accounts with Customer Interface
37	1601-20-672-038	GANESH KUMAR G	Financial Trainee,(Finance), A study on Recruitment and Selection process at CBIT (HR)
38	1601-20-672-039	HEMANTH SAI PRASAD RAJU PORANKI	Sales and Marketing Intern
39	1601-20-672-040	JAGADISH LAVUDYA	Supply Chain Management Intern
40	1601-20-672-041	KODANDA SAI NIKHIL PADAM	Human Resources Intern
41	1601-20-672-042	MOHAN S	Digital marketing
42	1601-20-672-043	NAVEEN KUMAR MANTHRI	HR Intern
43	1601-20-672-	PAAVANA	Finance

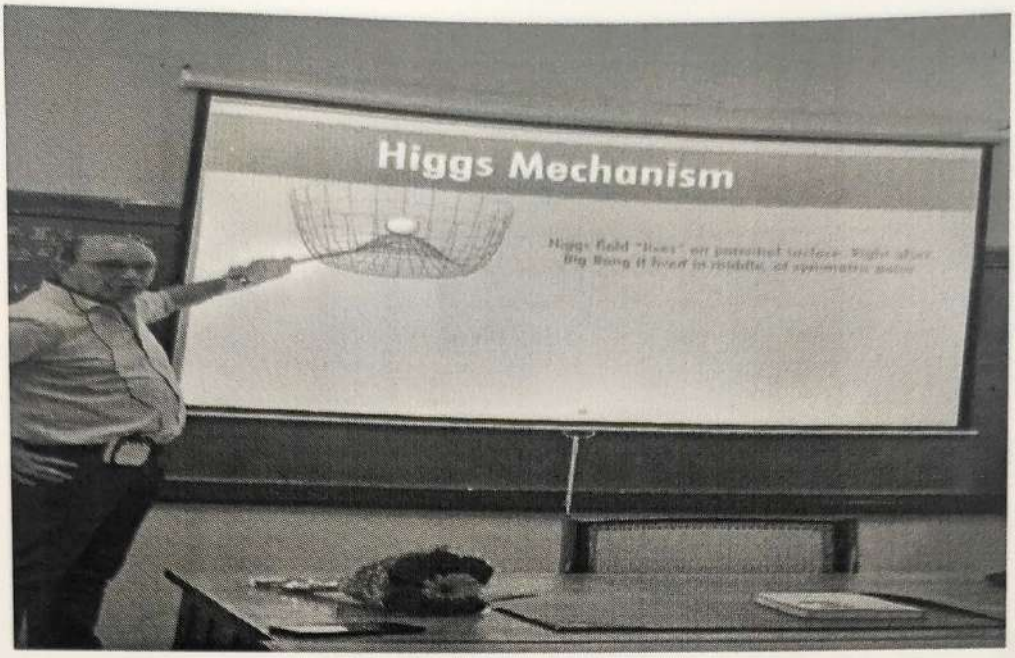
	044	VENKATA SAI MANIKONDA	
44	1601-20-672-045	PRASHANTH DAPPU	Marketing and Sales
45	1601-20-672-046	PRUDHVI ANUGULA	Finance
46	1601-20-672-047	PRUDHVI RAJ MIRYALA	finance intern
47	1601-20-672-048	PRUDHVI RAJ PILLLALAMARRI	Finance intern
48	1601-20-672-049	RAJARAM BHUKYA	Operations Management Intern (Finance)
49	1601-20-672-050	RAMESH JAKKULA	MARKETING INTERN
50	1601-20-672-051	SAI KIRAN VEMULA	A Study on Chartered Accountant at R Krishna & Associates CA Firm
51	1601-20-672-052	SAMARA SIHMA REDDY C	Analysing and operations on accounts
52	1601-20-672-053	SRAVAN KUMAR RENUKUNTLA	corporate ambassador
53	1601-20-672-054	SRI DATTA CHARAN K	Business Analytics Intern
54	1601-20-672-055	SRINIVAS POSHETTI	Finance and Research Intern
55	1601-20-672-056	SUMANTH GORULA	Marketing and sales intern
56	1601-20-672-057	VAMSHI SHIV VENAKATA	An Overview of HRM functions in ONGC



B.E/B Tech, students are performing experiments in Physics-2

HOD, Physic

Professor & Head
Department of Physics
Chaitanya Bharathi Institute of Techr
Gandipet, Hyderabad-500



' Higgs physics and its prospects ' by Prof. Eric Laenen, Professor in Institute of Physics, University of Amsterdam and also a governing Member of CERN Council on 17th Feb 2020

HOD, Physics

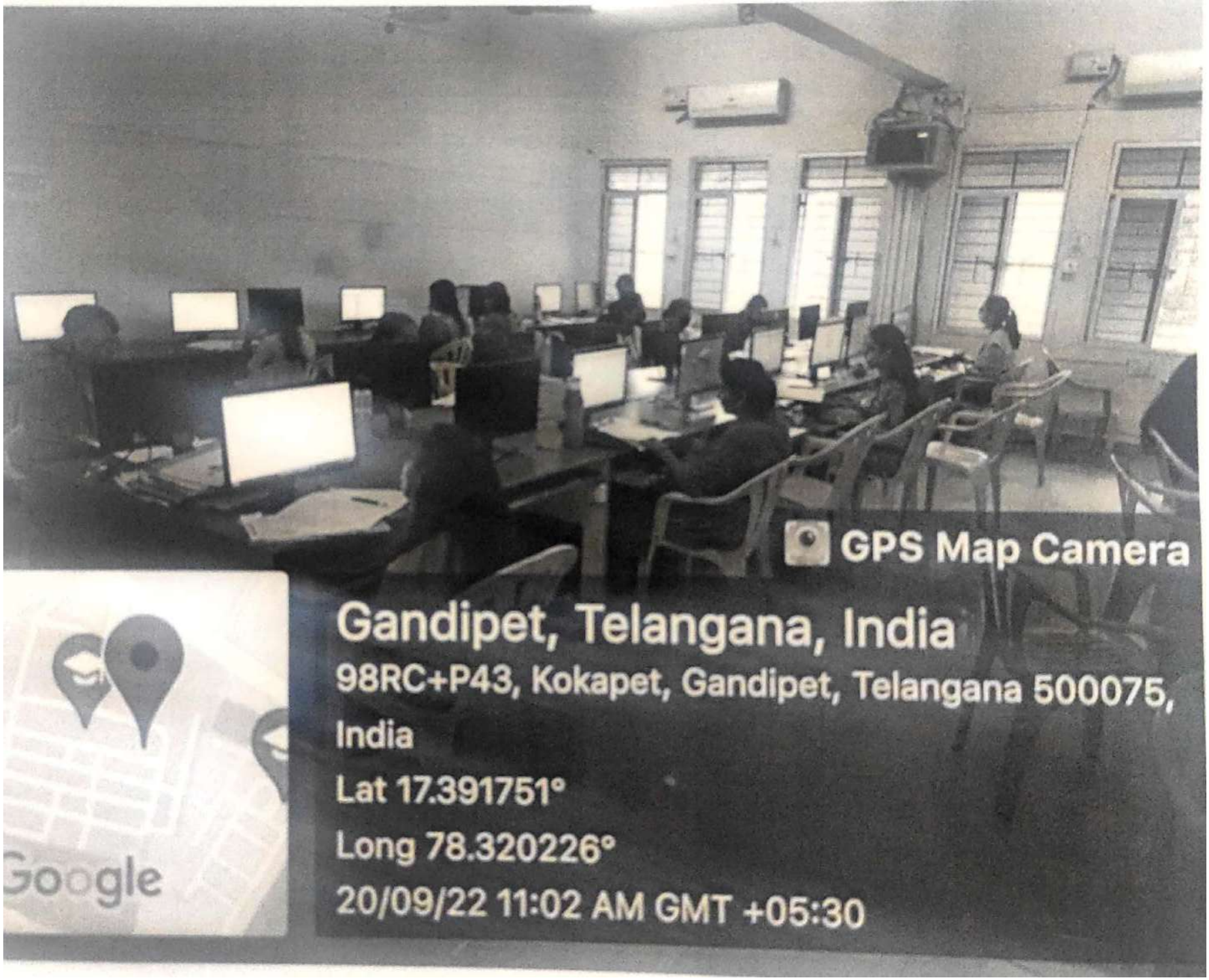
Professor & Head
Department of Physics
Chaitanya Bharathi Institute of Technology (A)
Gandipet, Hyderabad-500075.

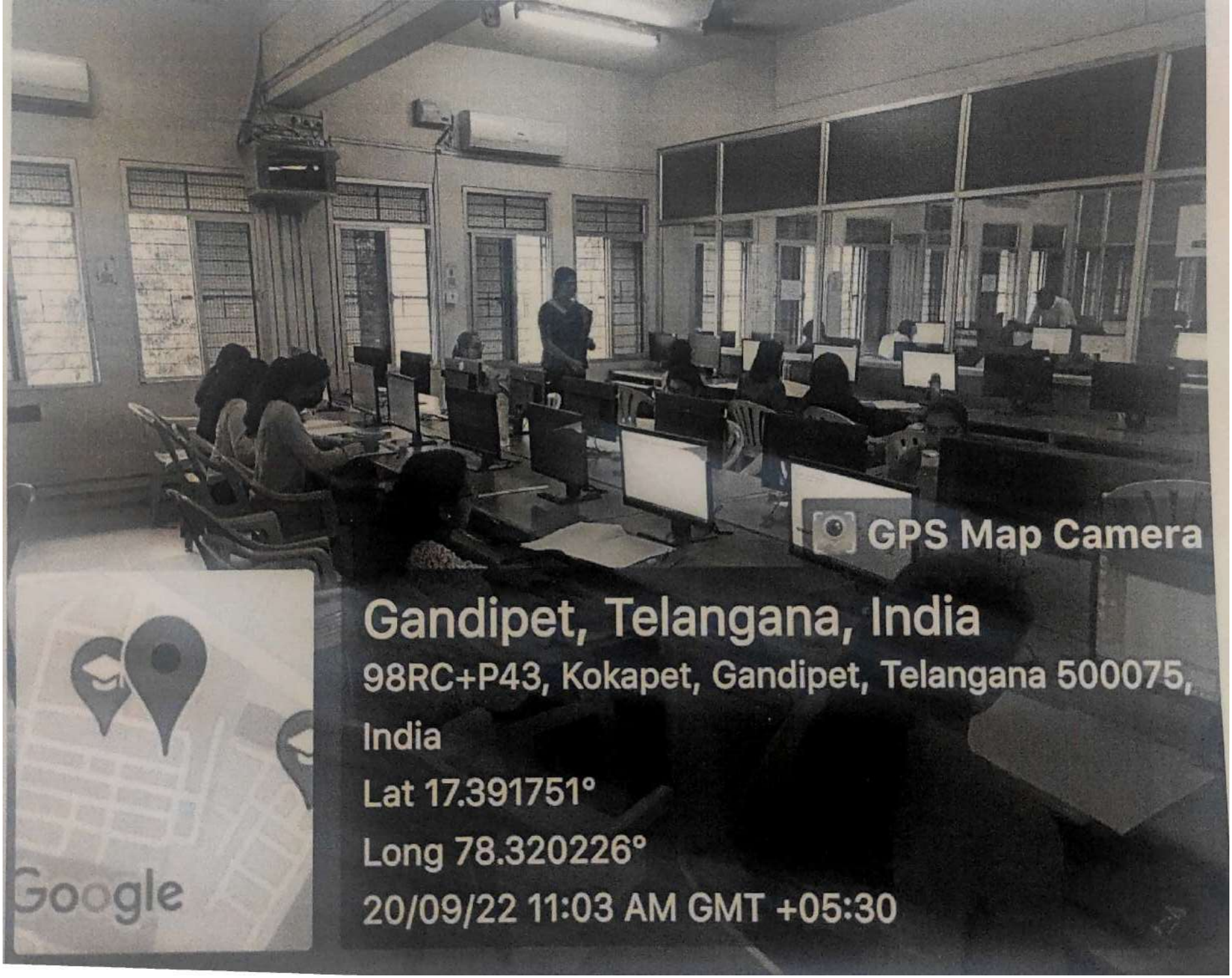
- **LED's and Solar cells** by DR.A Sai Prasad Prof.,& head, dept.of physics vasavi college of engineering, Hyderabad on 20 Feb 2020

HOD, Physics

Professor & Head
Department of Physics
Chaitanya Bharathi Institute of Technology (A)
Gandipet, Hyderabad-500075.

Dept of Mathematics
Experiential Learning Methodologies practicing in the Department


GPS Map Camera
Gandipet, Telangana, India
98RC+P43, Kokapet, Gandipet, Telangana 500075, India
Lat 17.391751°
Long 78.320226°
20/09/22 11:02 AM GMT +05:30
Google


GPS Map Camera
Gandipet, Telangana, India
98RC+P43, Kokapet, Gandipet, Telangana 500075, India
Lat 17.391751°
Long 78.320226°
20/09/22 11:03 AM GMT +05:30
Google

Department of Mathematics

Participative Learning Methodologies Practiced in the department.

- Department conducts various activities every year under Ramanujan club, where the students participate in huge numbers and learn new things.

Guest talk on Innovative Applications in machine learning and deep learning by using linear algebra

Brochure of Guest lecture

Ramanujan club conducted a Guest Talk on 23-03-2022

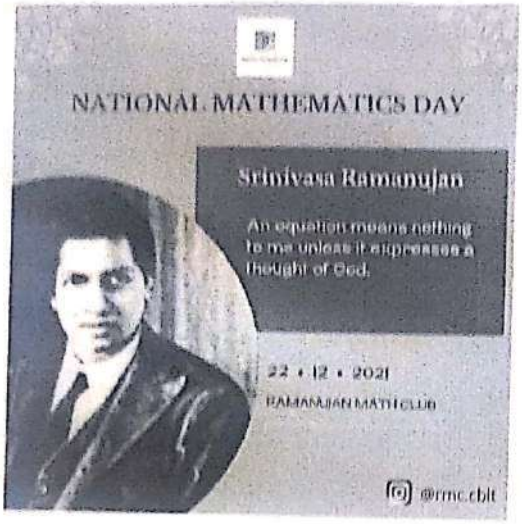
P. Raj Deep

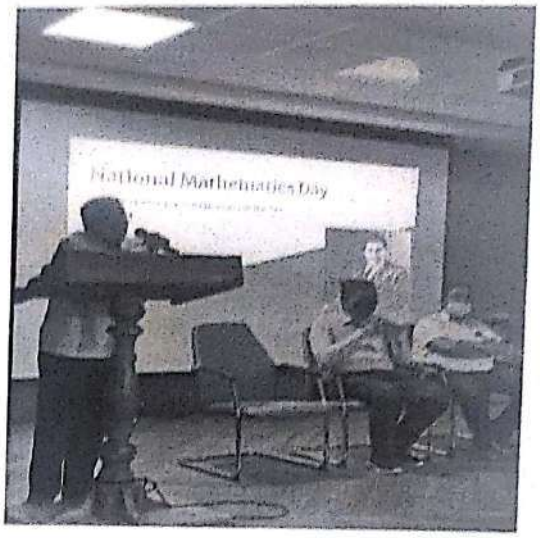
Hod, Mathematics

P. Raj Deep

HEAD
Dept.of Mathematics and Humanities
Chaitanya Bharathi Institute of Technology
Gandipet, Hyderabad-500 075.

National Mathematics celebration on the occasion of Srinivasa Ramanujan Birthday.





Department celebrated National Mathematics Day on 22-12-2021.

As part of the celebrations the department conducted quizzes, paper presentations, poster presentation etc.

P. Raj Deep

HEAD
Dept.of Mathematics and Humanities
Chaitanya Bharathi Institute of Technology
Gandipet, Hyderabad-500 075.

P. Raj Deep

Hod, Mathematics

CHAITANYA BHARATHI
INSTITUTE OF TECHNOLOGY (A)
Affliated to Osmania University

TUTORIAL SHEET

Programme	B.E/B.Tech	Section: ALL Branches	**Date:**	
Academic Year	2017-18	Year: 1st	Semester: I	**Hour:**
Course Name:	**Engineering Mathematics-I**		Code:16MTCO1	**Time:**
Name of the Faculty	M AMARNATH			

1	Rank of the matrix $A = \begin{bmatrix} 1 & 2 & -3 & 4 & 9 \\ 1 & 0 & -1 & 1 & 1 \\ 3 & -1 & 1 & 0 & -1 \\ -1 & 1 & 0 & 2 & 9 \\ 3 & 1 & 0 & 3 & 9 \end{bmatrix}$ is a) **2** b)3 c)4 d)1
2	Find the Eigen Vectors of the Matrix $\begin{bmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \\ 1 & 1 & 1 \end{bmatrix}$ a) $X_1 = \begin{bmatrix} 1 \\ 1 \\ -1 \end{bmatrix}; X_2 = \begin{bmatrix} -1 \\ 0 \\ 1 \end{bmatrix}; X_3 = \begin{bmatrix} -1 \\ 1 \\ 3 \end{bmatrix}$ b) $\mathbf{X_1} = \begin{bmatrix} \mathbf{-1} \\ \mathbf{0} \\ \mathbf{1} \end{bmatrix}$ $\mathbf{X_2} = \begin{bmatrix} \mathbf{-1} \\ \mathbf{1} \\ \mathbf{0} \end{bmatrix}$ & $\mathbf{X_3} = \begin{bmatrix} \mathbf{1} \\ \mathbf{1} \\ \mathbf{1} \end{bmatrix}$ c) $X_1 = \begin{bmatrix} 0 \\ 4 \\ -1 \end{bmatrix}; X_2 = \begin{bmatrix} -1 \\ 0 \\ 1 \end{bmatrix}; X_3 = \begin{bmatrix} -1 \\ 19 \\ 2 \end{bmatrix}$ d) $X_1 = \begin{bmatrix} 0 \\ 1 \\ -1 \end{bmatrix}; X_2 = \begin{bmatrix} -1 \\ 6 \\ 1 \end{bmatrix}; X_3 = \begin{bmatrix} -1 \\ 19 \\ 2 \end{bmatrix}$
3	Determine the characteristic equation of the Matrix A= $\begin{bmatrix} 1 & 0 & 2 \\ 0 & 2 & 1 \\ 2 & 0 & 3 \end{bmatrix}$ a) $\lambda^3 - 6\lambda^2 + 7\lambda - 2 = 0$ b) $\lambda^3 + 6\lambda^2 + 7\lambda + 2 = 0$ c) $\boldsymbol{\lambda^3 - 6\lambda^2 + 7\lambda + 2 = 0}$
4	Determine the definiteness of the quadratic form $x^2 + 2y^2 + 2z^2 - 2xy - 2yz + xz$ a)**positive** b) semi positive c)negative d) indefinite
5	*If* $V = (x^2 + y^2 + z^2)^{-\frac{1}{2}}$, *find the value of* $\frac{\partial^2 V}{\partial x^2} + \frac{\partial^2 V}{\partial y^2} + \frac{\partial^2 V}{\partial z^2}$ a) -1 b) **0** c) 1 d) 2
6	If $u = x^n \sin\left(\frac{y}{x}\right)$ then calculate the $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y}$ a) 0 b) **nu** c)-nu d)n
7	If $u = (x^2 + y^2)^{\frac{1}{2}}$ and $x^3 + y^3 + 3axy = 5a^2$. Find $\frac{du}{dx}$ at x = a and y = a. a) **0** b) 1 c)2 d)-1
8	If $u = x + y + z$; $uv = yz$; $uvw = z$ Find $\frac{\partial(x,y,z)}{\partial(u,v,w)}$ a) $\frac{1}{u^2v}$ b) u^2v c)- $-u^2v$

	a) -1 b)1 c) 2 d) -2
10	Find the Radius of curvature of the curve $x^3 + y^3 = 3axy$ at the point $\left(\frac{3a}{2}, \frac{3a}{2}\right)$ a) $\frac{3\sqrt{2}}{16}$ b) $\frac{3a\sqrt{2}}{8}$ c) $-\frac{3a\sqrt{2}}{16}$ d) $-\frac{3a\sqrt{3}}{16}$
11	*Find the coordinates of the center of curvature and the equation of the Evolute of the curv* $x = a(cost + tsint); y = a(sint - tcost)$. a) $(-acost, asint)$ b) $(acost, -asint)$) c) **(acost, asint)** d) $(cost, sint)$
12	Find the Envelop of the family of straight lines $2y - 3tx + at^3 = 0$, *where t isthe parameter* a) $ay^2 = x^3$ b) $y^2 = ax^3$ c) $y^2 = x^3$ d) $ay^2 = -x^3$
13	Evaluate $\int_0^1 \int_0^{1-x} \int_0^{1-x-y} \frac{dz\,dy\,dx}{(x+y+z+1)^3}$ a) $\frac{1}{8}[8\log 2 - 5]$ b) $\frac{1}{8}[8log2 + 5]$ c) $\frac{1}{8}[log2 - 5]$ d) $\frac{1}{8}[8log2]$
14	Evaluate $\int_1^z \int_1^{logy} \int_1^{e^x} logz\,dz\,dx\,dy$ a) $\frac{1}{4}(e^2 + 13)$ b) $\frac{1}{4}(e^2 + 8e + 13)$ c) $\frac{1}{48}(e^2 - 8e + 13)$ d) $\frac{1}{4}(e^2 - 8e + 13)$
15	find the complete area bounded by the parabola $y^2 = 4ax$ and its Latus rectum a) $\frac{8}{3}a$ b) $\frac{8}{3}a^3$ c) $\frac{8}{3}a^2$ d) $\frac{8}{3}a^4$
16	Change the order of integration and evaluate $\int_0^3 \int_1^{\sqrt{4-y}} (x+y)\,dx\,dy$ a) $\frac{24}{60}$ b) $-\frac{241}{60}$ c) $\frac{241}{60}$ d) $\frac{241}{69}$
17	Solve $(y\,e^{xy})\,dx + (xe^{xy} + 2y)dy = 0$ a) $e^{xy^2} + x^4 + y^3 = C$ b)$e^{xy} + y^2 = c$ c) $e^{xy^2} + x^4 - y^2 = C$
18	Integrating factor of the Differential equation $y(x^2y^2 - 1)\,dx + x(x^2y^2 + 1)\,dy = 0$ a) $\frac{1}{xy}$ b) $-\frac{1}{2xy}$ c) $\frac{2}{xy}$ d) $-\frac{1}{3xy}$
19	*Find the orthogonal trajectories for the family of curves* $r = a(1 - cos\theta)$ a) $r = C(1 + cos\theta)$ b) $r = C(1 + sin\theta)$ c) $r = C(1 - sin\theta)$ d) $r = C(1 - cos\theta)$
20	Orthogonal trajectory of the $y^2 = 4a(x + a)$*is* a) $y^2 = 4a(x + a)$ b) $y^2 = 4a(x)$ c) $y^3 = 4a(x + a)$ d) $y^2 = (x + a)$

Answer:

Q1) c	Q2) b	Q3) c	Q4)a	Q5)b
Q6) b	Q7) a	Q8) a	Q9)b	Q10)c
Q11) c	Q12) a	Q13) a	Q14)d	Q15)c
Q16) c	Q17) c	Q18) b	Q19)a	Q20)a

Signature of the Faculty

Head of the Department

HEAD
Dept.of Mathematics and Humanities
Chaitanya Bharathi Institute of Technology
Gandipet, Hyderabad-500 075.

TUTORIAL SHEET

Programme	B.E/B.Tech	Section:	Date:	
Academic Year	2017-18	Year:1st	Semester: I	Hour:
Course Name:	**Engineering Mathematics-II**		Code:16MTCO2	Time:
Name of the Faculty	M.AMARNATH			

1	Solve the second order differential equation $y'' - 2y' + y = e^{3x}x^2$ a) $y = (c_2x)e^x + \frac{e^{3x}}{8}(2x^2 + 4x + 3)$ b) $y = (c_1 + c_2)e^x + \frac{e^{3x}}{8}(2x^2 - 4x + 3)$ c) $\boldsymbol{y = (c_1 + c_2x)e^x + \frac{e^{3x}}{8}(2x^2 - 4x + 3)}$
2	Solve $(D^2 + 5D + 6)y = 0$, given $y(0) = 0$ and $y'(0) = 15$ a) $15(e^{-2x} - e^{-3x})$ b) $20(e^{-2x} - e^{-3x})$ c) $1.5(e^{2x} - e^{-3x})$ d) $15(e^{2x} - e^{3x})$
3	Solve the Cauchy-Euler equation $x^2\frac{d^2y}{dx^2} - 2x\frac{dy}{dx} - 4y = x^2$. a)$y = c_1x^2 + \frac{c_2}{x^2} + \frac{x^2logx}{4}$ b) $y = c_1x^3 + \frac{c_2}{x^4} + \frac{x^2logx}{4}$ c) $y = c_1x^2 + \frac{c_2}{x^2} + \frac{logx}{4}$
4	Find the complimentary function and particular integral of the differential equation $y'' - 4y' + 4y = e^{2x} + cos2x + 9$ a)$y = (c_1 + c_2x)e^{2x} + \frac{x^2.e^{2x}}{2} + \frac{sin2x}{8} + \frac{9}{4}$ b)$y = (c_1 + c_2x)e^{-2x} + \frac{x^2.e^{2x}}{2} + \frac{sin2x}{8} + \frac{9}{4}$ c)$y = (c_1 + c_2x)e^{2x} + \frac{e^{2x}}{2} + \frac{sin2x}{8} + \frac{9}{4}$
5	The value of the integral $e^{2t}\int_0^t e^{-2t}\,tsinht\,dt$ is $a)\ \frac{2s}{(s-2)(s^2-1)^2}$ $b)\ \frac{2s}{(s+2)(s^2-1)^2}$ $c)\ \frac{2(s-2)}{(s-2)(s^2-1)^2}$ $d)\ \frac{2(s+2)}{(s+2)(s^2-1)^2}$
6	$L\{e^{2t} + 4t^3 - 2sin3t + 3cos3t\} =$ $a)\ \frac{1}{s-2} + \frac{24}{s^4} + \frac{3(s-2)}{s^2+9}$ $b)\ \frac{1}{s-2} + \frac{16}{s^4} + \frac{3(s-2)}{s^2+9}$ $c)\ \frac{1}{s+2} + \frac{24}{s^4} + \frac{3(s+2)}{s^2+9}$ $d)\ \frac{1}{s-3} + \frac{24}{s^4} + \frac{3}{s^2+9}$
7	The inverse Laplace transform of $\left\{\frac{s}{(s+1)^2(s^2+1)}\right\}$

	a) $\frac{1}{2}[-te^{-t}+sint]$ b) $\frac{1}{2}[te^{-t}+sint]$ c) $\frac{1}{2}[-te^{-t}-sint]$ d) $\frac{1}{2}[-te^{-t}+cost]$
	Apply Laplace transforms to solve the third order differential equation $y'''+2y''-y'-2y=0$ with the initial conditions $y(0)=y'(0)=0$ and $y''=6$ a) $y=e^{2t}-3e^{-t}-2e^{-2t}$ b) $y=e^{2t}-3e^{-t}+2e^{-2t}$ c) $y=e^{2t}+3e^{-t}+2e^{2t}$
9	The value of the integral $\int_0^{\infty} e^{-\sqrt{x}}x^{\frac{1}{4}}dx$ a) $\frac{3}{2}\sqrt{\pi}$ b) $\frac{1}{2}\sqrt{\pi}$ c) $\frac{3}{2}$ d) $\frac{5}{2}\sqrt{\pi}$
10	$\left(\int_0^{\frac{\pi}{2}}\sqrt{sin\theta}\ d\theta\right)\left(\int_0^{\frac{\pi}{2}}\frac{d\theta}{\sqrt{sin\theta}}\right)=$ a) $\frac{\pi}{3}$ b) $-\frac{\pi}{3}$ c) $\frac{\pi}{6}$ d) $\frac{4}{3}$
11	$\int_0^{\infty}e^{-x^2}\sqrt{x}\,dx\,.\int_0^{\infty}\frac{e^{-x^2}}{\sqrt{x}}dx=$ a) $\frac{3\sqrt{2}}{16}$ b) $\frac{\pi}{2\sqrt{2}}$ c) $-\frac{\pi}{2\sqrt{2}}$ d) $-\frac{1}{2\sqrt{2}}$
12	The value of the Beta integral $\int_a^b(x-a)^m(b-x)^n\,dx$ = from the following is a) $(b-a)^{m+n+1}\beta(m+1,n+1)$ b) $(b-a)^{m+n+1}\beta(m+1,n+2)$ c) $(b-a)^{m+n+1}\beta(m,n)$
13	The directional derivative of $\emptyset=xy+yz+zx$ in the direction of the vector $i+2j+2k$ at the point (1,2,0) a) 10/3 b) −48/5 c) 5/15 d) 48/50
14	If $\vec{F}=3y^4z^2\,\vec{i}+4x^3z^2\vec{j}-3x^2y^2\vec{k}$ then Curl of $\vec{F}$ at *(1,1,1)* is a) $-14\vec{i}-6\vec{j}$ b) $--14\vec{i}+10\vec{j}$ c) $-14\vec{i}+12\vec{j}$ d) $-14\vec{i}-12\vec{j}$
15	The value of a for which the vector $\overrightarrow{F}=(axy-z^3)\,\vec{i}+(a-2)x^2\vec{j}+(1-a)xz^2\vec{k}$ is irrotational is a) - 4 b) $\frac{8}{3}$ c) 4 d) 3
16	The Curl of the vector point function $\vec{F}=xz^3i-2x^2yzj+2yz^4k$ at *(1,-1,1)* is a) $3\vec{j}+4\vec{k}$ b) $3\vec{j}+6\vec{k}$ c) $-3\vec{j}+4\vec{k}$ d) $3\vec{j}-4\vec{k}$
17	The value of the line integral $\int(xdy-ydx)$ around the curve $x^2+y^2=1$ is a) -2π b) 2π c) 6π
18	The value of the surface integral $\iint_S \vec{F}.\hat{n}\,ds$ where $\vec{F}=x^2\vec{i}+y^2\vec{j}+z^2\vec{k}$ that lies in the first octant, where S is the portion of the plane $x+y+z=1$ is

	a) $\frac{1}{4}$ b) $\frac{1}{8}$ c) $\frac{6}{4}$
19	The value of $\iint_S \vec{F}.\hat{n}\,ds$ lying in the first octant, where S is the surface of the cylinder $x^2 + y^2 = 16, z = 0$ and $z = 5$ is a) 90 b) 100 c) 70 d) 20
20	By Gauss-Divergence theorem the value of $\iint_s$ (xdydz + ydzdx + zdxdy) that lies in the first octant of the surface S representing the plane $x + 2y + 3z = 6$ a)18 b) 10 c) 30 d) 45

Answer:

Q1) a	Q2) a	Q3) c	Q4)a	Q5)a
Q6) a	Q7) a	Q8) b	Q9)a	Q10)b
Q11) a	Q12) a	Q13) a	Q14)d	Q15)c
Q16) c	Q17) b	Q18) a	Q19)a	Q20)a

Signature of the Faculty

Head of the Department

HEAD
Dept.of Mathematics and Humanities
Chaitanya Bharathi Institute of Technology
Gandipet, Hyderabad-500 075.

Department of English

List of the faculty using ICT Tools

S.No	Name of the Faculty
1	Mrs. A. Vijaya Lakshmi
2	Mr. Srinivas Andoju
3	Mr. K. Naveen Kumar
4	Dr. Shagufta Parween
5	Dr. Shirisha Deshpande
6	Dr. Nandigama Madhu
7	V.Laxman
8	Dr. Diya Narayan Panjwani

HOD
Dept of English

HEAD
Dept.of Mathematics and Humanities
Chaitanya Bharathi Institute of Technology

Presentations made by students using audio-visual aids in the language lab.

HOD

Dept of English

HEAD
Dept.of Mathematics and Humanities
Chaitanya Bharathi Institute of Technology
Gandipet, Hyderabad-500 075.

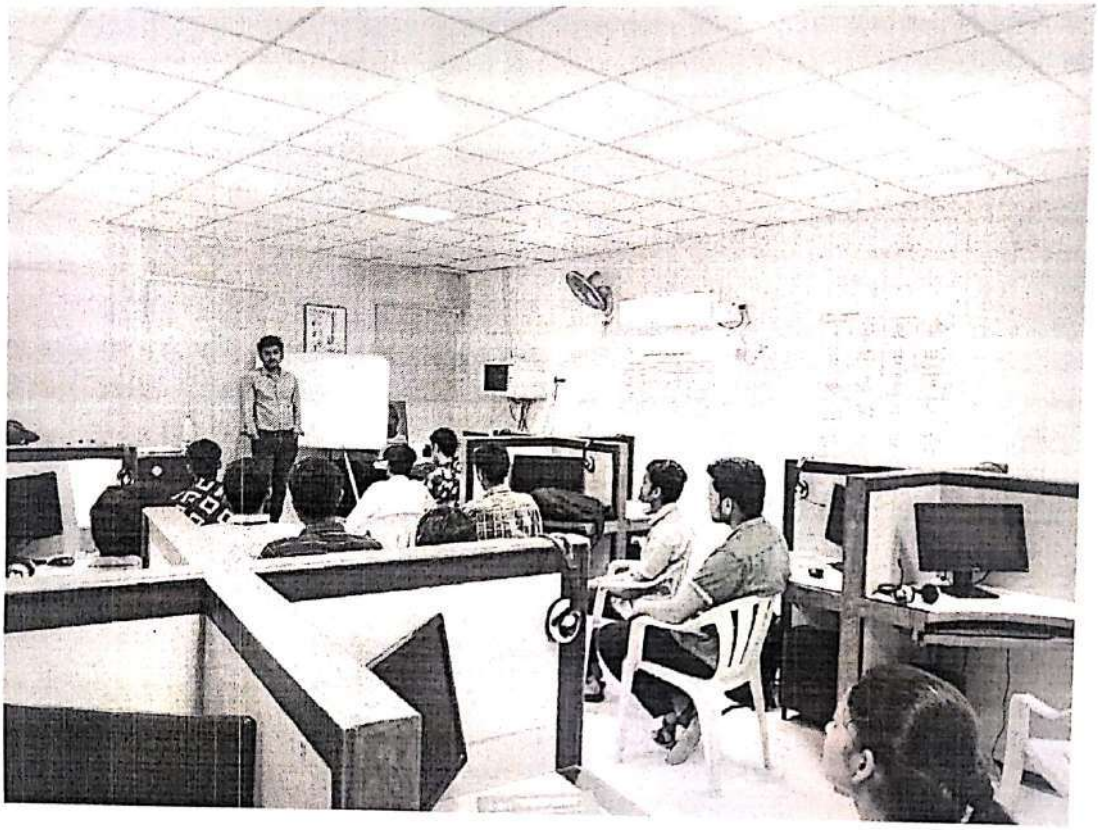
Learning the nuances of Group Discussion in Communication Skills Lab

P. Roy Deep

HOD

Dept of English

HEAD
Dept.of Mathematics and Humanities
Chaitanya Bharathi Institute of Technology
Gandipet, Hyderabad-500 075.



Learning about pronunciation of words through Phonetics in the Computer Assisted Language Lab

P. Vijdeep
HOD

Dept of English

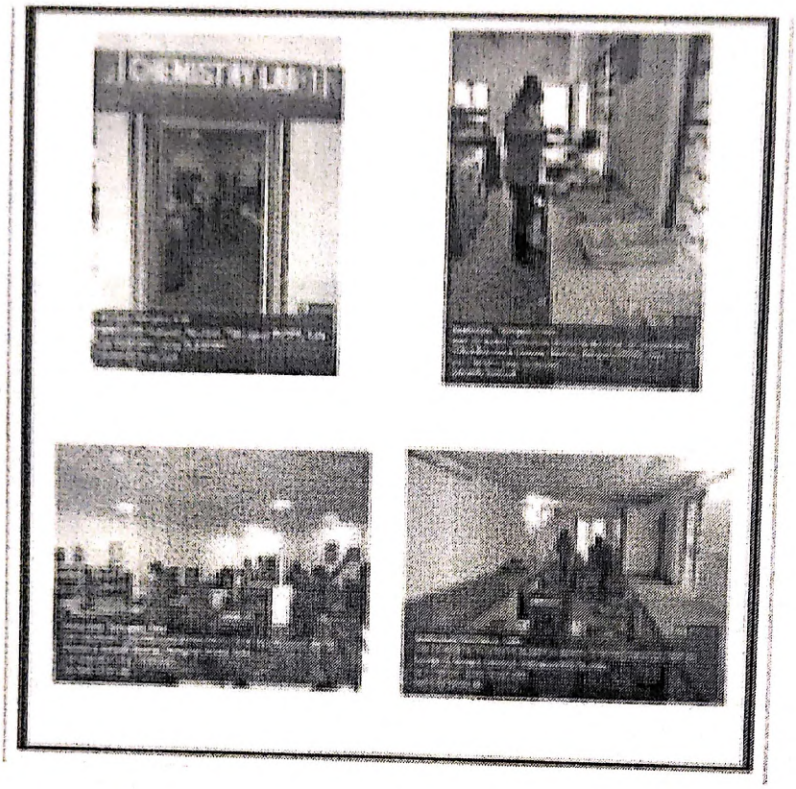
HEAD
Dept.of Mathematics and Humanities
Chaitanya Bharathi Institute of Technology
Gandipet, Hyderabad-500 075.

Department of Chemistry

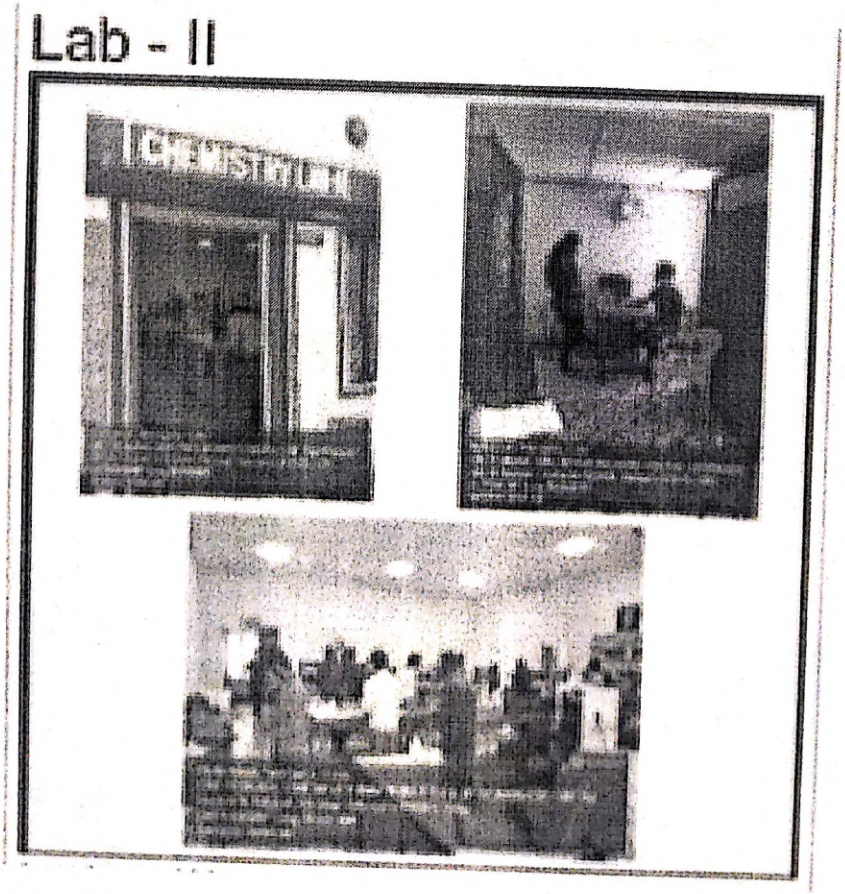
Criteria 2.3.1 (Experimental Learning Methodologies)

Four Laboratories:

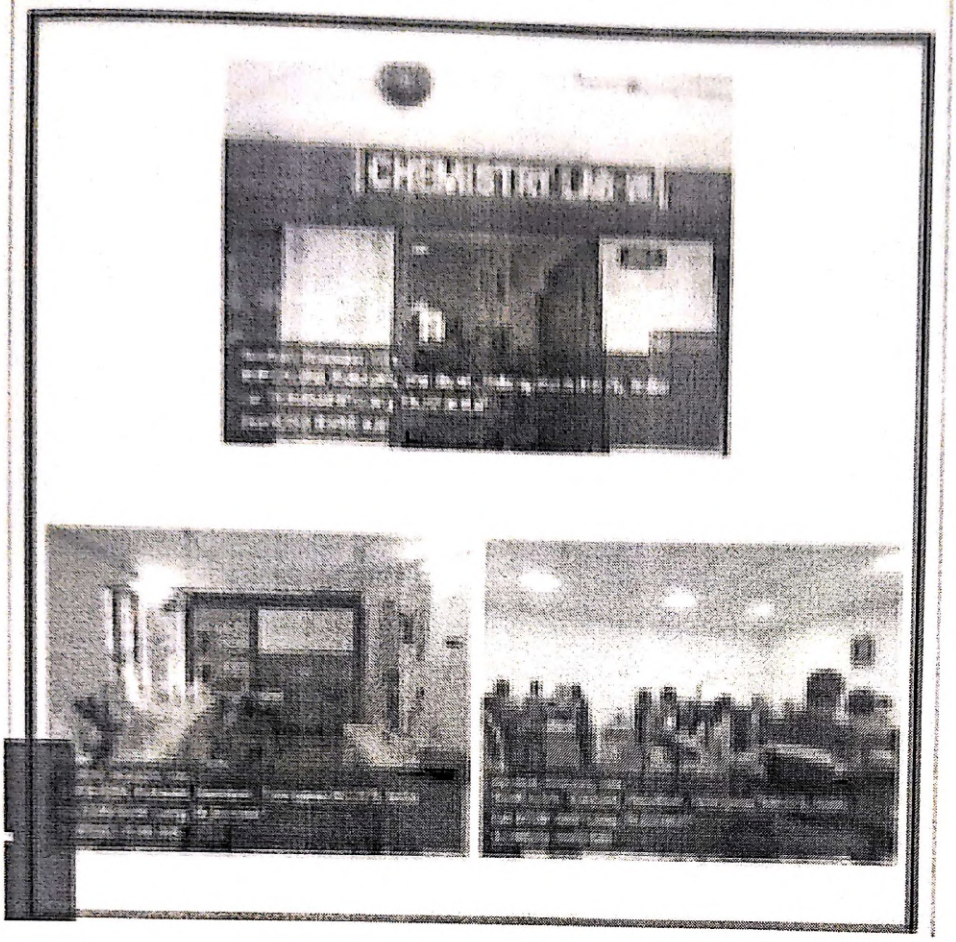
Lab I



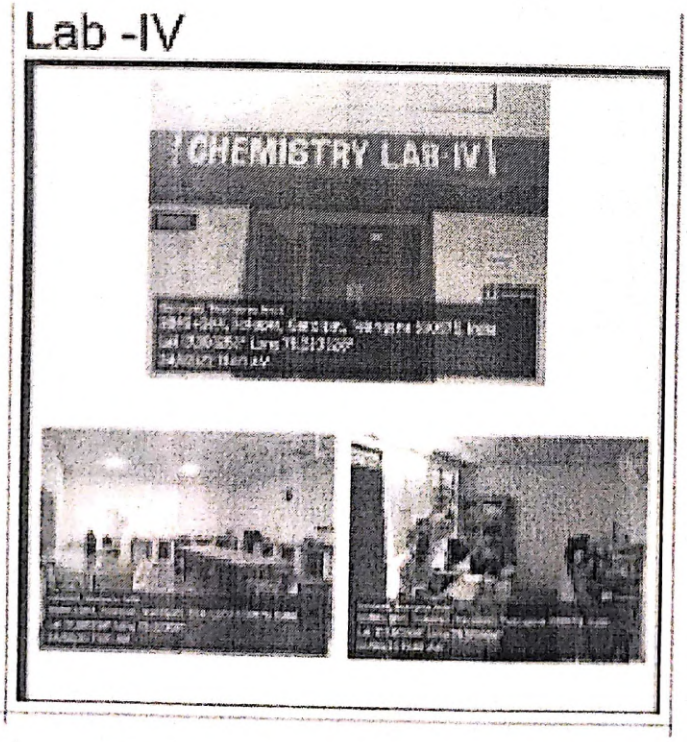
Lab - II



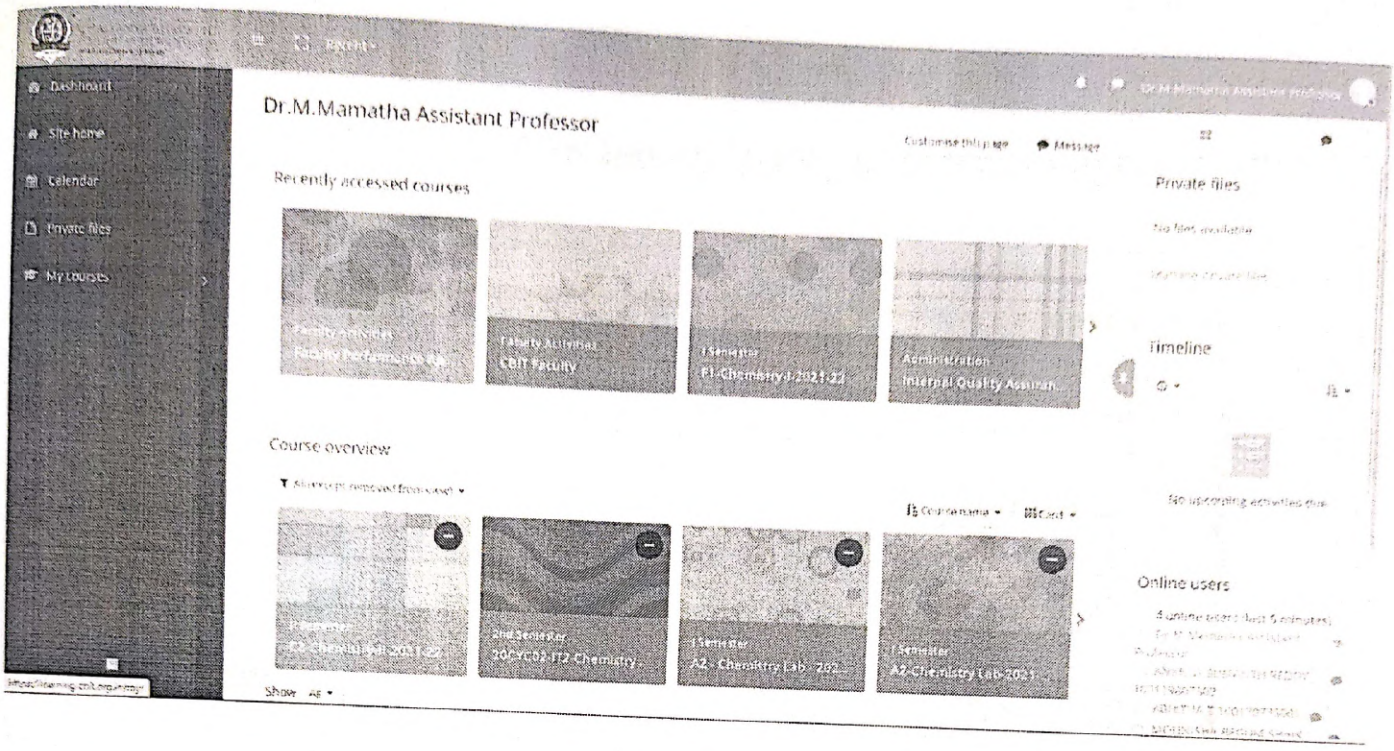
Lab - III



Lab -IV



Use of LMS for experimental learning:


Dashboard
Site home
Calendar
Private files
My courses
Dr.M.Mamatha Assistant Professor
Recently accessed courses
Private files
Timeline
Course overview
Online users
Show

Department of Chemistry

Criteria 2.3.1 (Participating Learning Methodologies)

Conducted an FDP programme on March 2021

Chief Patron
Kavi Kiranti
Dr. V Malakonda Reddy
President, CBIT

Advisor
Prof. G. P. Saradhi Varma
Principal – CBIT

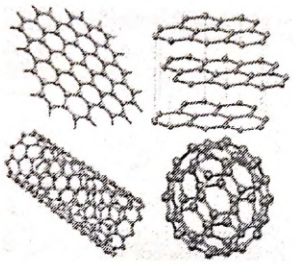
Convenor
Prof. K. LAXMI
Head, Department of Chemistry

Coordinators
Dr. S. Shylaja
Dr. M.Mamatha
Dr. P. Muralikrishna
Dr. M.Rama Devi

Members
Dr. K. Ramesh
Dr. D. Saritha
Dr. G. Venkata Ramesh
Dr. N. Mahender Reddy
Dr. K. Satish Kumar

Guidelines

- Eligible participants will be selected based on first come first serve basis and will be intimated by e- mail only.
- e-Certificate will be issued to the participants, who have an attendance of minimum 80%



Registration Details

- No Registration Fee
- All the participants are requested to register using the following link

https://forms.gle/1jGctonVsQBH1dcj6

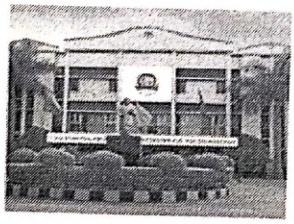
For Further Details
Please Contact
9848711523; 7075428999
Email Id: fdp2021_chemistry@cbit.ac.in
www.cbit.ac.in

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY 42 years

One Week Online
Faculty Development Programme
on

RECENT TRENDS IN ADVANCED MATERIALS SCIENCE AND ENGINEERING TECHNOLOGY (RTAMSET-21)

08th – 12th March, 2021



Organized by

Department of Chemistry
Chaitanya Bharathi Institute of Technology
(Autonomous under UGC)
Affiliated to Osmania University
Gandipet, Hyderabad – 500075
Telangana State, India.

About CBIT

CBIT is one of the premier Engineering Institutes in India, pioneer in Telangana State, which is at idyllic surroundings of Gandipet Lake, Hyderabad. The college offers Nine UG and Eleven PG programs. It has been standing as a temple of knowledge for the past 42 years by producing about 25,000 Eminent and skilful Graduate Engineers, who are successful in their Career, serving all over the Globe. Brilliant and Meritorious Candidates with good EAMCET Rank are seeking admissions at CBIT. CBIT Students are prepared and perfected to secure Placements in reputed MNCs. The Institute has been accredited by NAAC – UGC with 'A' Grade and the various programs are accredited by NBA – AICTE. The UGC has granted Autonomous Status from the Academic Year 2013-14 onwards. The Grants received from AICTE/UGC are worth about Rs. 2.75 Crores. Stringent Academic Standards, Industry Compliant Teaching Methodology, Research Projects from Private and Public Sector organizations, Industries in Engineering and Management and Consultancy Practice, enabled the Institute to establish its identity in the Technical Education land as Ranked No. 1 amongst the Private Engineering Colleges in both the Telugu Speaking States.

About the Department

The Department of Chemistry serves the purpose of imparting knowledge in the core science subject, which is a foundational building block for most engineering disciplines.

As such, high tech labs with the latest technology greet any students and faculty members of the college looking to strengthen their base in this subject. A team of extremely capable teachers and staff members keep the department running in full throttle.

The vision of the department is to develop it into a centre of learning, offering postgraduate and research programs in pure and applied chemistry.

The mission of the department is to impart value based technical education so that the next generation engineers who serve society will be produced.

About the Faculty Development Programe

- The main objective of this one week intensive Faculty Development Program is to bring together experts from industry and academia to facilitate effective interaction leading to knowledge sharing.
- To provide a forum to the faculty to quench their thirst for creativity in frontier areas of materials science.
- Materials science is a key technology for environmental sustainability development and therefore this is a growing input of materials in engineering technology.
- To focus on technologies developments in the field of basic sciences, nano technology, mechanical engineering, etc.

Topics to be covered in the FDP

The topics include introductory concepts and advanced topics with various applications. The following topics will be covered but are not limited to:

- Nano materials its biomedical applications
- Composite materials synthesis and characterization
- Solar cells
- Polymer materials
- Smart materials and its applications
- Advanced functional materials
- Artificial Intelligence based modeling - design of functional materials
- Magnetic oxide nano particles

Resource Persons

Resource Persons will be from Renowned Institutions, universities, Industries and CBIT.

Eligibility

The faculty members of AICTE approved institutions, research scholars, PG Scholars and Industries.

One week online Faculty Development Programme on *Recent Trends in Advanced Materials Science and Engineering Technology*

8th - 12th March, 2021

Prof.Dr.V.Jayathirtha Rao, CChem, FRSC, FTASc, FAPAS, Consultant, Emeritus Scientist CSIR-IICT, Hyderabad

8th March 2021, 10.00-11:30AM

"Organic Materials for Various Applications"

Dr.P.Muralidhar Reddy
Department of Chemistry
Osmania University

8th March 2021, 11:45-1:15PM

"Biomedical Applications of Functionalized Magnetic Iron Oxide Nanoparticles"

Dr.Sumana Chenna
Senior Principal Scientist
Process Engg and Technology Department
CSIR-IICT, Hyderabad

9th March 2021, 10.00-11:30AM

"AI based modelling and design of functional materials"

Dr.Venkataiah George
School of Physics
University of Hyderabad

9th March 2021, 11:45-1:15PM

"Correlation between size, shape and physical properties of magnetic oxide nanoparticles"

Dr.N.V.Srinivasulu,
Professor
Dept of Mechanical Engineering
CBIT-Hyderabad

10th March 2021, 10:00 – 11:30AM

"Smart Materials and their Applications"

Dr.G.Upender
Department of Physics
Nizam College (A)
Osmania University

10th March 2021, 11:45 – 1:15PM

"Functional Materials for Biological and Environmental Applications"

Dr. G.Prasad
Professor (Retd.)
Department of physics
Osmania University

11th March 2021, 10:00 – 11:30AM

"Polymer piezoelectric composites-synthesis, characterization and applications"

Dr Subhendu Kumar Panda
Senior Scientist, CSIR - Central Electrochemical Research Institute (CECRI), Karaikudi, Tamilnadu.

11th March 2021, 11:45-1:15PM

"Generation of Solar Cells: Concept, Materials and Performance"

12th March 2021

12th March 2021

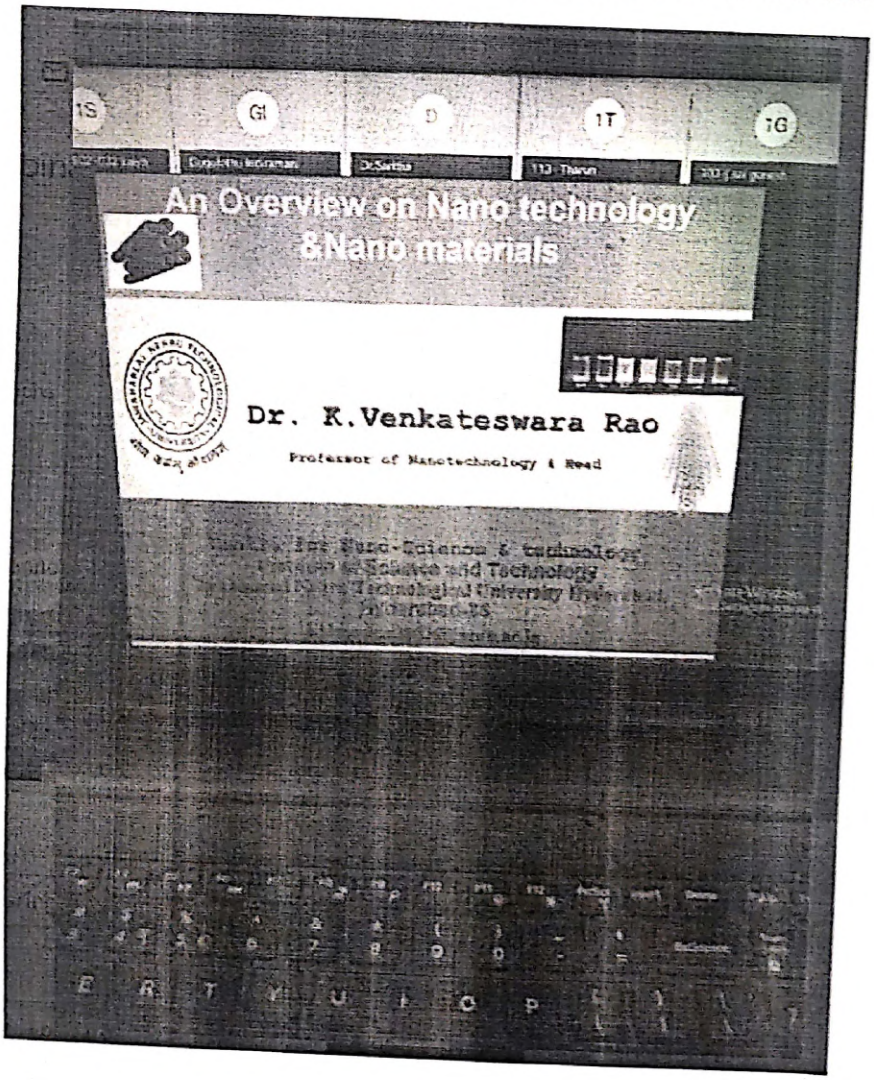
Inaugural Address by C.P.Sarada Varma, Principal, CBIT

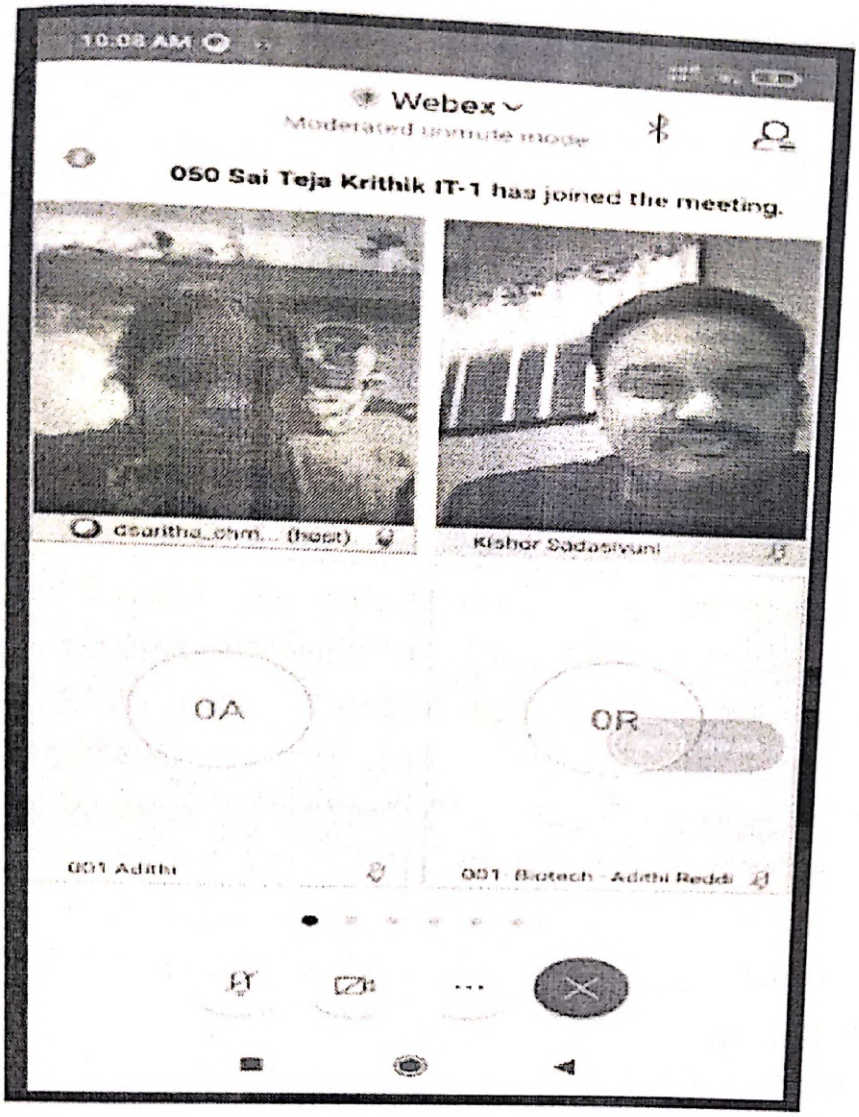
Free Registration @

E Certificate to all the Participants

Organized by Departme[nt]
Chaitanya Bharathi Institute of Technology (A), Hyderabad

Conducted a online guest lecture for B.E/B.Tech 1st sem students in June 2020




10:08 AM
Webex
Moderated unmute mode
050 Sai Teja Krithik IT-1 has joined the meeting.
OA
OR
001 Adithi
001 Biotech - Adithi Reddi

Department of Chemistry

Criteria 2.3.1 (Problem Solving methodologies)

Question Bank:

1. Define molecular orbital.
2. Why is O2 paramagnetic in nature.
3. What are the units of first and second order rate constant.
4. Summarize the aromatic nature of benzene.
5. Compare the order and molecularity of a reaction.
6. Summarize the main postulates of molecular orbital theory.
7. Making use of an example, write order, characteristics, units, half life period and its rate constant.
8. Sugar is fermented in a 1st order process (using enzyme as a catalyst) with a rate constant of3.3 *10-4. Solve the half life of this reaction.
9. Apply MOT to draw the energy level diagram of CO.
10. Construct the MO energy level diagram of O2-
11. What are nanomaterials? Give some applications.
12. Classify carbon nanotubes? Explain their unique characteristics & its applications
13. Define conducting polymers? Explain its applications.
14. Demonstrate synthesis of Aspirin and uses of Aspirin
15. What is the difference between lithography and photolithography?
16. Identify main difference between scanning and transmission electron microscopy?
17. Explain the preparation of nano materials by using sol-gel methods. 2. Classify conducting polymers? Give its applications.
18. Explain the synthetic procedure and uses of Aspirin.
19. Show the Synthesis of (i) Paracetamol (ii) Atenolol.
20. Demonstrate the fabrication of integrated circuit.
21. What is photolithography process?
22. Define intensive and extensive properties with examples
23 Discuss the statements and limitations of first law of thermodynamics.
24. Why entropy decreases with increase in temperature?
25. Explain the physical significance of entropy
26. Explain the criteria for spontaneity in terms of Gibbs free energy.
27. Define the terms SOP and SRP.
28. What do you understand by electrochemical series? Give its applications.
29. Write Nernst equation and mention the terms involved in it.
30. Represent saturated calomel electrode and write the electrodic reactions for oxidation and reduction processes.
31. Consult the table on standard electrode potentials and suggest three substances that can oxidise Fe2+ ions under suitable conditions.
32. Suggest two materials other than hydrogen that can be used as fuels in the fuel cells.
33. Arrange the following metals in the order in which they displace each other from their salts. Al, Cu, Fe, Mg and Zn
34. What are fuel cells? Give any two examples of a fuel cell.

35. Define the following (i) Plane of symmetry (ii) Centre of symmetry.
36. What is stereoisomerism? Give the classification of stereoisomerism
37. Outline the stereochemistry of Tartaric acid and lactic acid
38. What is Saytzeff rule?
39. Explain the Diels - Alder reaction with examples.
40. What are the differences between cis and trans geometrical isomers?
41. Illustrate the sequence rules for R, S nomenclature.
42. Explain mechanism of SN1and SN2reactions.
43. Explain the mechanism of nitration of benzene.
44. Describe and apply the E, Z nomenclature for naming of olefins.
45. Define Hard water and how do you distinguish hard water with soft water? BT-1
46. Give the reactions of soap with hard water.
47. Explain the terms Carbonate hardness (temporary) & Non-Carbonate hardness (permanent hardness).
48. How do you express the concentration of hardness in terms of equivalents of $CaCO_3$? & why $CaCO_3$ is chosen as standard to express the concentration of hardness present in water.
49. Bring out the significance of $CaCO_3$ equivalents.
50. Define alkalinity of water & name the types of alkalinity based on the alkalinity causing ions.
51. Give the significance of Reverse Osmosis method for softening water.
52. Give the specifications of potable water according to ICMR & W.H.O.
53. Give the significance of Break-point chlorination.
54. Define i). Biological Oxygen Demand (B.O.D) & ii) Chemical Oxygen Demand.
