



Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



CRITERIA II (2.3)

TEACHING - LEARNING PROCESS

2.3.1 Student Centric Methods, Such As Experiential Learning, Participative Learning And Problem Solving Methodologies Are Used For Enhancing Learning Experiences Using ICT Tools



Milind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

■ Tel. No. : 9657667030 ■ E-mail : office@cumminscollege.edu.in,
■ website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110



Cummins College of Engineering for Women



Sharpening Engineering Acumen with a difference

NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



The college intends to adopt innovative and better methods of teaching, learning and evaluation to blend with the conventional methods and in that process has tried to focus on activity-based teaching - learning. The activities are focused on but not limited to identification of parts & equipment, its uses, its applications, concept learning, logical reasoning, technological requirements, societal requirements, functions, characteristics etc. Students are given a flavor of experiential learning, problem solving methodologies and participative learning by activity-based learning through laboratory sessions, tutorials, projects, internships, industrial visits, programming practice coding sessions, workshop practices etc with extensive use of IC tools. Students are made to learn and explore various software like MATLAB, CATIA, CREO, CAD CAM, ANSYS and VLSI, SCILAB, ECLIPSE, NET BEANS, VISUAL STUDIO CODE, LABVIEW, TURBOC, ORACLE SQL, R STUDIO, ANACONDA, SPYDER, POWER BI etc. and major hardware platforms like 3D printers, lathe, turbo charger, spectrum analyzer, IoT kits, Robotics, IC engines, data routers etc in addition to conventional experimental setups. There are various clubs like the CODERS, MEGA, Mukhtangan, Techno former, Rise & Shine, GDSC and professional society chapters & associations like IEEE, IETE CSI and ASM to further facilitate the experiential enhanced learning experience. Faculties urge students to create miniature working models of mechanisms and machine components, consequently growing their curiosity and level of learning. Students are made to prepare and deliver presentations. Classroom quizzes aided in generating interest by breaking up the monotony of normal classes while also improving the learning experience. Students are motivated to attend exhibitions, training sessions, workshops, seminars, conferences, and students' development programs conducted within and outside the college. Live problem statements are given as projects / internships to be implemented in laboratories & workshops. Journals, Research articles, Magazines are made available to the students for reference to topics of their interest taught during lectures. Industrial visits are arranged for better learning of the industrial set-ups and work culture. Student centric activities include awareness of the latest technologies which industries use, understanding drone technologies, applications of software, soft & technical skills, etc. Students are given the opportunity for active experimentation and concrete experience through a variety of carefully designed project-based learning experience, problem- based internship learning experience, game-based learning experience, laboratory experiments, service-based learning, and other activities. Apart from the skillsets provided by the college, students are participating in groups for projects / internships performed by them, during skill development weeks, and training through external agencies and faculties. Apart from those identified by the students, problem statements are thrown at them and expected to be solved. The courses / curriculum has theory/practical/ Tutorial / project / internships components. Laboratories courses are provided in sufficient proportion to give enough exposure to experiential learning. Theory courses have problem solving methods as a part of curriculum. Few theory courses have tutorials in which problem-solving sessions are conducted for small groups of students. Projects/ Internships provide a platform to students/group for actual implementation in the form of experiential learning of what they have studied theoretically.



Kinind

Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



TEACHING - LEARNING PROCESS

Teaching Learning Process is one of the main objective and strength of our institute. To enhance learning experience among students we ensure to blend advanced and traditional methods. Methodologies like experiential learning, participative learning and problem solving are adopted and imparted to ensure overall lifelong learning of our students.

Following are the methodologies activities under are listed:

EXPERIENTIAL LEARNING:

1. Each department in this institute ensures to conduct Tutorial and laboratory session to correlate theoretical and practical learning as per the curriculum.
2. Skill development programs are conducted to provide adequate training that makes students to improve their productivity and make them employable.
3. Students are encouraged to utilize and test their technical knowledge by taking innovative and social need problems and implementing through mega-projects and mini-projects.
4. To go through internships to gain real knowledge and learning goal-specific skills.
5. Activities like Coders Club are conducted to get through the coding problems and improve logical thinking.
6. Students are motivated to perform practicals on Virtual Lab.

PARTICIPATIVE LEARNING:

Students are encouraged,

1. To take Massive Open Online Courses provided by premier institutions.
2. To participate in Smart India Hackathon.



Km.Ind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

3. To participate in event like “Unnat Bharat Abhiyan” offered by Ministry of Education, Bharat Sarkar.
4. Visiting Industry and having discussion with experts on recent trends and problem statements.
5. Students Work Together In Project, Coding Activity And Mind Mapping Shows Participative Learning

PROBLEM SOLVING METHODOLOGIES:

1. Role-play which allow students to act out a situation and reflect on their behaviors and those of others.
2. Group Discussion and Brain Storming
3. Quizzes are conducted by subject teachers
4. Solving Problems in Tutorial Hours

ICT Tools, Smart Boards and Online Learning Resources are provided to make Teaching Learning Process effective



Kinlind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

■ Tel. No. : 9657667030 ■ E-mail : office@cumminscollege.edu.in,
■ website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference

NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



EXPERIENTIAL LEARNING

■ Tel. No. : 9657667030 ■ E-mail : office@cumminscollege.edu.in,
■ website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

EXPERIENTIAL LEARNING

1. Each Department In This Institute Ensures To Conduct Tutorial and Laboratory Session To Correlate Theoretical And Practical Learning As Per The Curriculum

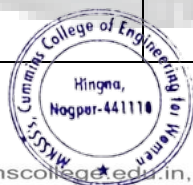
Tutorial and Laboratory session provide students first-hand experience with course concepts and the opportunity to explore methods. Leading a laboratory and tutorial session has particular challenges and opportunities that differ from those in a standard classroom environment.

Following Table Shows The Contribution of Experiential Hours (Laboratory+Tutorial) In Week In Teaching Learning Process

CUMMINS COLLEGE OF ENGINEERING FOR WOMEN, NAGPUR

Contribution of Experiential Hours in Teaching

Sr. No	Branch	Tutorial+ Activity Hrs (In Week)	Practical Hrs (In Week)	Theory Hrs (In Week)	Experiential Hours (In Week)	Total Hrs of Teaching (In Week)	Contribution of Experiential Hours in % (In Week)
1	First Year Engineering	6	22	31	28	59	47
2	Mechanical Engineering	4	58	87	62	149	42
3	Computer Engineering	7	56	89	63	152	41
4	Electronics & Telecommunication Engineering	19	44	88	63	151	42



Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Following Are The Schemes of First Year Engineering

R.T.M. Nagpur University, Nagpur
FOUR-YEAR B.E. COURSE
 (Revised Curriculum as per AICTE Model Curriculum)
SCHEME OF EXAMINATION FOR
B.Tech. FIRST YEAR (All Branches of Engineering)
 (SEMESTER - I)

Code	Subject	Teaching Scheme				Credits				MARKS				
		L	P	T/A	Total	L	P	T/A	Total	Theory		Practical		Total Marks
										Internal	Univ.	Internal	Univ.	
BSE1-1T	Mathematics-I	3	-	1T	4	3	-	1	4	30	70	-	-	100
BSE1-2T	Applied Physics	3	-	1T	4	3	-	1	4	30	70	-	-	100
BSE1-3T	Energy and Environment	2	-	1T	3	2	-	1	3	30	70	-	-	100
BSE1-4T	Communication Skills	2	-	-	2	2	-	-	2	15	35	-	-	50
BSE1-5T	Engineering Graphics	1	-	-	1	1	-	-	1	15	35	-	-	50
BSE1-6T	Basics of Civil & Mechanical Engineering	4	-	-	4	-	-	-	AUDIT	50	-	-	-	AUDIT
BSE1-2P	Applied Physics Lab	-	3	-	3	-	1.5	-	1.5	-	-	25	25	50
BSE1-3P	Energy and Environment Lab	-	2	-	2	-	1	-	1	-	-	25	25	50
BSE1-4P	Communication Skills Lab	-	2	-	2	-	1	-	1	-	-	25	25	50
BSE1-5P	Engineering Graphics Lab	-	4	-	4	-	2	-	2	-	-	25	25	50
	Three weeks Induction Program													
Total		15	11	3T	29	11	5.5	3	19.5	120	280	100	100	600

- L- Lecture, P-Practical, T- Tutorial, A- Activity (Half Credit perHour)
- Audit course marks are not counted in totalmarks



KmJind

Dr. M.M. Kulkarni
 Principal
 Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441116.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

**SCHEME OF EXAMINATION FOR
 B.Tech. FIRST YEAR (All Branches of Engineering)
 (SEMESTER - II)**

Code	Subject	Teaching Scheme				Credits				MARKS				
		L	P	T/A	Total	L	P	T/A	Total	Theory		Practical		Total Marks
										Internal	Univ.	Internal	Univ.	
BSE2-1T	Mathematics-II	3	-	1T	4	3	-	1	4	30	70	-	-	100
BSE2-2T	Advanced Engineering Materials	2	-	1A	3	2	-	1	3	30	70	-	-	100
BSE2-3T	Applied Chemistry	3	-	1T	4	3	-	1	4	30	70	-	-	100
BSE2-4T	Computational Skills	2	-	-	2	2	-	-	2	15	35	-	-	50
BSE2-6T	Basics of Electrical Engineering	2	-	-	2	2	-	-	2	15	35	-	-	50
BSE2-7T	Engineering Mechanics	2	-	-	2	2	-	-	2	15	35	-	-	50
BSE2-8T	Indian Culture & Constitution	2	-	-	2	-	-	-	AUDIT	50	-	-	-	AUDIT
BSE1-5P	Workshop Practices	-	4	-	4	-	2	-	2	-	-	50	50	100
BSE2-2P	Advanced Engineering Materials Lab	-	2	-	2	-	1	-	1	-	-	25	25	50
BSE2-3P	Applied Chemistry Lab	-	3	-	3	-	1.5	-	1.5	-	-	25	25	50
BSE2-4P	Computational Skills Lab	-	2	-	2	-	1	-	1	-	-	25	25	50
	Three weeks Induction Program													
Total		16	11	2T+1A	30	14	5.5	3	22.5	135	315	125	125	700

Guidelines

- Energy and Environment shall be taught by faculty of Chemistry and will come under board of Applied Science and Humanities (only by ChemistryDept)
- Advance Engineering Materials shall be taught by faculty of Physics and will come under board of Applied Science and Humanities (only by PhysicsDept)



Kanind

Dr. Milind Khanapurkar
 Principal
 Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

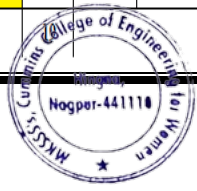


Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Following Are The Schemes of Mechanical Engineering

Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
 Faculty of Science & Technology
 Scheme of Examination and Evaluation
 Bachelor of Technology (Mechanical Engineering) (Choice Based Credit System)
 III Semester B. Tech (Mechanical Engineering)

Sr No	Course Code	Category	Course Title	Teaching Scheme (Hours/Week)			Credits	Examination Scheme								
				L	T	P		Theory				Practical				
								Duration of Exam (Hrs)	Max. Marks College Assessment	Max. Marks University Assessment	Total Marks	Min. Passing Marks	Max. Marks College Assessment	Max. Marks University Assessment	Total Marks	Min. Passing Marks
1	BEME301T	Basic Science course	Applied Mathematics – III	3	-	-	3	3	30	70	100	45	-	-	-	-
2	BEME302T	Professional core courses	Manufacturing Processes	3	-	-	3	3	30	70	100	45	-	-	-	-
3	BEME302P	Professional core courses	Manufacturing Processes Lab	-	-	2	1	-	-	-	-	-	25	25	50	25
4	BEME303T	Professional core courses	Fluid Mechanics	3	-	-	3	3	30	70	100	45	-	-	-	-
5	BEME304T	Professional core courses	Kinematics of Machines	3	-	-	3	3	30	70	100	45	-	-	-	-
6	BEME305P	Professional core courses	Machine Drawing & Solid Modelling	-	1	2	2	-	-	-	-	-	50	50	100	50
7	BEME306T	Professional core courses	Material Science & Engineering	3	-	-	3	3	30	70	100	45	-	-	-	-
8	BEME307P	Project work, seminar and internship in industry or elsewhere	Skill Development (Basics of Computer aided drafting)	-	-	2	1	-	-	-	-	-	50	-	50	25
9	BEME308P	Mandatory Course	Sports / Yoga / NSS/NCC	-	-	2	Audit (0)	College Assessment in Grades O, A, B, C (Evaluation is to be done out of 50 marks, Evaluation guidelines mentioned in the syllabus of concerned course)								
Total				15	1	8	-	-	150	350	500	-	125	75	200	-
Semester Total				24				Marks 700								



Kaishid

Dr. Milind Khanapurkar
 Principal
 Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

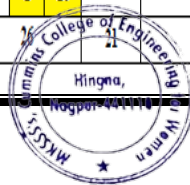
Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
 Faculty of Science & Technology
 Scheme of Examination and Evaluation
 Bachelor of Technology (Mechanical Engineering) (Choice Based Credit System)
 IV Semester B. Tech (Mechanical Engineering)

Sr No	Course Code	Category	Course Title	Teaching Scheme (Hours/Week)			Credits	Examination Scheme								
				L	T	P		Theory				Practical				
								Duration of Exam (Hrs)	Max. Marks College Assessment	Max. Marks University Assessment	Total Marks	Min. Passing Marks	Max. Marks College Assessment	Max. Marks University Assessment	Total Marks	Min. Passing Marks
1	BEME401T	Professional core courses	Machining Processes	3	-	-	3	3	30	70	100	45	-	-	-	-
2	BEME401P	Professional core courses	Machining Processes Lab	-	-	2	1	-	-	-	-	-	25	25	50	25
3	BEME402T	Professional core courses	Hydraulic Machines	3	-	-	3	3	30	70	100	45	-	-	-	-
4	BEME402P	Professional core courses	Fluid Mechanics & Hydraulic Machines Lab	-	-	2	1	-	-	-	-	-	25	25	50	25
5	BEME403T	Professional core courses	Mechanics of Materials	3	-	-	3	3	30	70	100	45	-	-	-	-
6	BEME403P	Professional core courses	Material Testing Lab	-	-	2	1	-	-	-	-	-	25	25	50	25
7	BEME404T	Professional core courses	Engineering Thermodynamics	3	-	-	3	3	30	70	100	45	-	-	-	-
8	BEME405P	Professional core courses	Computer Programming	-	1	2	2	-	-	-	-	-	25	25	50	25
9	BEME406T	Humanities & Social Science	Professional Ethics	3	-	-	3	3	30	70	100	45	-	-	-	-
10	BEME407P	Project work, seminar and internship in industry or elsewhere	Skill Development (Training on Matlab)	-	-	2	1	-	-	-	-	-	50	-	50	25
TOTAL				15	1	10	-	-	150	350	500	-	150	100	250	-
Semester Total				Marks 750												



K. Prasad

Dr. Milind Khanapurkar
 Principal
 Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

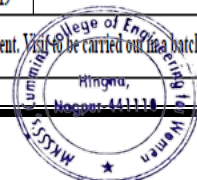


Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
 Faculty of Science & Technology
 Scheme of Examination and Evaluation
 Bachelor of Technology (Mechanical Engineering) (Choice Based Credit System)
 V Semester B. Tech (Mechanical Engineering)

Sr No	Course Code	Category	Course Title	Teaching Scheme (Hours/Week)			Credits	Examination Scheme								
				L	T	P		Theory				Practical				
								Duration of Exam (Hrs)	Max. Marks College Assessment	Max. Marks University Assessment	Total Marks	Min. Passing Marks	Max. Marks College Assessment	Max. Marks University Assessment	Total Marks	Min. Passing Marks
1	BEME501T	Professional core courses	Heat Transfer	3	-	-	3	3	30	70	100	45	-	-	-	-
2	BEME501P	Professional core courses	Heat Transfer Lab	-	-	2	1	-	-	-	-	-	25	25	50	25
3	BEME502T	Professional core courses	Energy Conversion-I	3	-	-	3	3	30	70	100	45	-	-	-	-
4	BEME503T	Professional core courses	Design of Machine Elements	3	1	-	4	3	30	70	100	45	-	-	-	-
5	BEME504T	Humanities, Social Sciences & Management courses	Industrial Economics and Management	3	-	-	3	3	30	70	100	45	-	-	-	-
6	BEME505T	Professional core courses	Mechanical Measurement & Metrology	3	-	-	3	3	30	70	100	45	-	-	-	-
7	BEME505P	Professional core courses	Mechanical Measurement & Metrology Lab	-	-	2	1	-	-	-	-	-	25	25	50	25
8	BEME506P	Project work, seminar and internship in industry or elsewhere	Industrial Visit*	-	-	2	1	-	-	-	-	-	50	-	50	25
9	BEME507P	Mandatory Course	Performing Art	-	-	2	Audit (0)	College Assessment in Grades O, A, B, C (Evaluation is to be done out of 50 marks, Evaluation guidelines mentioned in the syllabus of concerned course)								
TOTAL				15	1	8	-	-	150	350	500	-	100	50	150	-
Semester Total				24			19	Marks 650								

Industrial Visit* Visit to minimum TWO industries must be carried out by every student. Visit to be carried out in a batch of 6 students. Assessment should be based on Visit report and presentation.



Kanjana
 Dr. Mitul Khandapurkar
 Principal
 Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

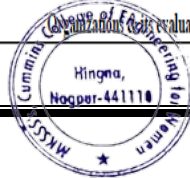


Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
 Faculty of Science & Technology
 Scheme of Examination and Evaluation
 Bachelor of Technology (Mechanical Engineering) (Choice Based Credit System)
 VI Semester B. Tech (Mechanical Engineering)

Sr No	Course Code	Category	Course Title	Teaching Scheme (Hours/Week)			Credits	Examination Scheme								
				L	T	P		Theory				Practical				
								Duration of Exam (Hrs)	Max. Marks College Assessment	Max. Marks University Assessment	Total Marks	Min. Passing Marks	Max. Marks College Assessment	Max. Marks University Assessment	Total Marks	Min. Passing Marks
1	BEME601T	Professional core courses	Automation in Production	3	-	-	3	3	30	70	100	45	-	-	-	-
2	BEME601P	Professional core courses	Automation in Production Lab	-	-	2	1	-	-	-	-	-	25	25	50	25
3	BEME602T	Professional core courses	Energy Conversion-II	3	-	-	3	3	30	70	100	45	-	-	-	-
4	BEME602P	Professional core courses	Energy Conversion Lab	-	-	2	1	-	-	-	-	-	25	25	50	25
5	BEME603T	Professional core courses	Dynamics of Machines	3	-	-	3	3	30	70	100	45	-	-	-	-
6	BEME603P	Professional core courses	Dynamics of Machines Lab	-	-	2	1	-	-	-	-	-	25	25	50	25
7	BEME604T	Professional Elective courses	Elective - I	3	-	-	3	3	30	70	100	45	-	-	-	-
8	BEME605T	Professional Elective courses	Elective - II	3	-	-	3	3	30	70	100	45	-	-	-	-
9	BEME606T	Open Elective Course	Open Elective - I	3	-	-	3	-	30	70	100	45	-	-	-	-
11	BEME607T	Mandatory Course	Environment Science	2	-	-	Audit (0)	College Assessment in Grades O, A, B, C (Evaluation is to be done out of 50 marks. Evaluation guidelines mentioned in the syllabus of concerned course)								
TOTAL				18	0	8	-	-	180	420	600	-	75	75	150	-
Semester Total				26			21	Marks 750								

Summer Internship** Summer Internship should be undertaken after end of 6th Semester for a minimum duration of 4 weeks in Industry/ Research Institute/ Organizations. Evaluation to be done in 7th semester



K. K. K.

Dr. Milind Khanapurkar
 Principal
 Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
 Faculty of Science & Technology
 Scheme of Examination and Evaluation
 Bachelor of Technology (Mechanical Engineering) (Choice Based Credit System)
 VII Semester B. Tech (Mechanical Engineering)

Sr No	Course Code	Category	Course Title	Teaching Scheme (Hours/Week)			Credits	Examination Scheme								
				L	T	P		Theory				Practical				
								Duration of Exam (Hrs)	Max. Marks College Assessment	Max. Marks University Assessment	Total Marks	Min. Passing Marks	Max. Marks College Assessment	Max. Marks University Assessment	Total Marks	Min. Passing Marks
1	BEME701T	Professional Elective courses	Elective - III	3	-	-	3	3	30	70	100	45	-	-	-	-
2	BEME701P	Professional Elective courses	Elective - III Lab	-	-	2	1	-	-	-	-	-	25	25	50	25
3	BEME702T	Professional core courses	Energy Conversion III	3	-	-	3	3	30	70	100	45	-	-	-	-
5	BEME703T	Open Elective Course	Open Elective - II	3	-	-	3	3	30	70	100	45	-	-	-	-
6	BEME704T	Professional core courses	Design of Transmission systems	3	1	-	4	3	30	70	100	45	-	-	-	-
7	BEME705P	Project work, seminar and internship in industry or elsewhere	Summer Internship**	During Summer Vacation after sixth semester			2	-	-	-	-	-	50	-	50	25
8	BEME706P	Project work, seminar and internship in industry or elsewhere	Project Phase I	-	-	6	3	-	-	-	-	-	50	-	50	25
9	BEME707P	Project work, seminar and internship in industry or elsewhere	Employability Enhancement*	-	-	2	1	-	-	-	-	-	50	-	50	25
TOTAL				12	1	10	-	-	120	280	400	-	175	25	200	-
Semester Total				23			20	Marks 600								

Summer Internship**

Summer Internship should be undertaken after end of 6th Semester for a minimum duration of 4 weeks in Industry/ Research Institute/ Organizations & its evaluation to be done in 7th semester

Employability Enhancement*

Students should be given training on Technical aptitude, General aptitude, Group Discussion, Interview Techniques to enhance their chances of employment

Note: A load of 2 hours/week per project guide for the course "Project Phase I"



Krind

Dr. Milind Khanapurkar

Principal

Maharshi Karve Stree Shikshan Sanstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
 Faculty of Science & Technology
 Scheme of Examination and Evaluation
 Bachelor of Technology (Mechanical Engineering) (Choice Based Credit System)
 VIII Semester B. Tech (Mechanical Engineering)

Sr No	Course Code	Category	Course Title	Teaching Scheme (Hours/Week)			Credits	Examination Scheme								
				L	T	P		Theory				Practical				
								Duration of Exam (Hrs)	Max. Marks College Assessment	Max. Marks University Assessment	Total Marks	Min. Passing Marks	Max. Marks College Assessment	Max. Marks University Assessment	Total Marks	Min. Passing Marks
1	BEME801T	Professional core courses	Industrial Engineering	3	-	-	3	3	30	70	100	45	-	-	-	-
2	BEME802T	Professional Elective courses	Elective - IV	3	-	-	3	3	30	70	100	45	-	-	-	-
3	BEME802P	Professional Elective courses	Elective - IV Lab	-	-	2	1	-	-	-	-	-	25	25	50	25
4	BEME803T	Professional Elective courses	Elective - V	3	-	-	3	3	30	70	100	45	-	-	-	-
5	BEME804T	Professional Elective courses	Elective - VI	3	-	-	3	3	30	70	100	45	-	-	-	-
6	BEME805P	Project work, seminar and internship in industry or elsewhere	Project Phase II	-	-	12	6	-	-	-	-	-	100	100	200	100
TOTAL				12	0	14	-	-	120	280	400	-	125	125	250	-
Semester Total				26			19	Marks 650								

Note: A load of 4 hours/week per project guide for the course "Project Phase II"



Kindly

Dr. Milind Khatkepurkar
 Principal

Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

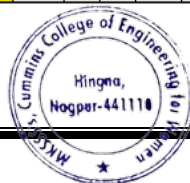


Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Following Are The Schemes of Electronics & Telecommunication Engineering

R.T.M. Nagpur University, Nagpur
 SCHEME OF EXAMINATION
 B.Tech. ELECTRONICS & TELECOMMUNICATION / ELECTRONICS & COMMUNICATION ENGINEERING / ELECTRONICS
 ENGINEERING
 (SEMESTER - III)

Code	Subject	Teaching Scheme				Credit				MARKS				Total Marks
		L	Practical	Tutorial / Activity	Total	L	P	T/A	Total	Theory		Practical		
										Internal	Univ.	Internal	Univ.	
BEETC-301	Applied Maths-III	3	-	-	3	3	-	-	3	30	70	-	-	100
BEETC-302T	Components for Electronic circuit design	3	-	-	3	3	-	-	3	30	70	-	-	100
BEETC-302P	Components for Electronic circuit design Lab	-	2	-	2	-	1	-	1	-	-	25	25	50
BEETC-303T	Digital System Design	3	-	1T	4	3	-	1	4	30	70	-	-	100
BEETC-303P	Digital System Design Lab	-	2	-	2	-	1	-	1	-	-	25	25	50
BEETC-304P	Network Theory	3	-	-	3	3	-	-	3	30	70	-	-	100
BEETC-305T	Signal & System	3	-	-	3	3	-	-	3	30	70	-	-	100
BEETC-306T	Measurement and Instrumentation	3	-	-	3	3	-	-	3	30	70	-	-	100
BEETC-307P	Electronics Workshop I Lab	-	2	-	2	-	1	-	1	-	-	25	25	50
BEETC-308T	Consumer affairs	2	-	-	2							-	-	Audit
	Total	20	6	1T	27	18	3	1	22	180	420	75	75	750



K. K. K.
 Dr. Milind K. Nanapurkar
 Principal

Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

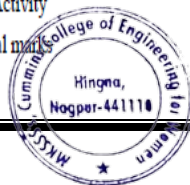


Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

**SCHEME OF EXAMINATION FOR
 B.Tech. ELECTRONICS & TELECOMMUNICATION/ ELECTRONICS & COMMUNICATION ENGINEERING/ ELECTRONICS
 ENGINEERING
 (SEMESTER – IV)**

Code	Subject	Teaching Scheme				Credit				MARKS				
		L	Practical	Tutorial / Activity	Total	L	P	T/A	Total	Theory		Practical		Total Marks
										Internal	University	Internal	Univ.	
BEETC-401T	Microcontrollers & Applications	3	-	1T	4	3	-	1	4	30	70	-	-	100
BEETC-401P	Microcontrollers & Applications Lab	-	2	-	2	-	1	-	1	-	-	25	25	50
BEETC-402T	Analog & Digital Communications	3	-	1T	4	3	-	1	4	30	70	-	-	100
BEETC-403P	Analog and Digital Electronics Lab	-	2	-	2	-	1	-	1	-	-	25	25	50
BEETC-404T	Analog System Design	3	-	1T	4	3	-	1	4	30	70	-	-	100
BEETC-405T	Data structure & Algorithm	3	-	-	3	3	-	-	3	30	70	-	-	100
BEETC-406T	HSC: Numerical Mathematics and Probability Using MATLAB	3	-	-	3	3	-	-	3	30	70	-	-	100
BEETC-407T	Programming for problem solving	2	-	-	2	2	-	-	2	15	35	-	-	50
BEETC-407P	Programming for problem solving Lab	-	4	-	4	-	2	-	2	-	-	25	25	50
BEETC-408I	Internship								1			50	-	50
BEETC-409A	Universal human values	3			3	3			3	30	70			100
Total		20	8	3T	31	20	4	3	28	195	455	125	75	850

- L- Lecture , P-Practical, T- Tutorial , A- Activity
- Audit course marks are not counted in total marks



Kautilya
Dr. Milind Khanolkar
 Principal

Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.

■ Tel. No. : 9657667030 ■ E-mail : office@cumminscollege.edu.in,
 ■ website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

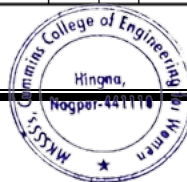
Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

**SCHEME OF EXAMINATION FOR
 B.Tech. ELECTRONICS & TELECOMMUNICATION / ELECTRONICS & COMMUNICATION ENGINEERING
 (SEMESTER - V)**

Code	Subject	Teaching Scheme				Credits				MARKS				
		L	P	T/A	Total	L	P	T/A	Total	Theory		Practical		Total Marks
										Internal	Univ.	Internal	Univ.	
BEETC-501T	Embedded System Design	2	-	1T	3	2	-	1	3	30	70	-	-	100
BEETC-501P	Embedded System Design Lab	-	2	-	2	-	1	-	1	-	-	25	25	50
BEETC-502T	Electromagnetic Waves	3	-	1T	4	3	-	1	4	30	70	-	-	100
BEETC-503T	Digital Signal Processing	3	-	-	3	3	-	-	3	30	70	-	-	100
BEETC-503P	Digital Signal Processing Lab	-	2	-	2	-	1	-	1	-	-	25	25	50
BEETC-504OT	HSC: IEED(Economics)	2	-	1A	3	2	-	1	3	30	70			100
BEETC-505PE	PEC-I	2	-	1T	3	2	-	1	3	30	70	-	-	100
BEETC-506P	Electronic Workshop II	-	2	-	2		1	-	1	-	-	25	25	50
BEETC-507A	Audit Course													AUDIT
	Total	12	6	3T+1A	22	12	3	4	19	150	350	75	75	650



Kindly
 Dr. Milind Khanapurkar

Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

**SCHEME OF EXAMINATION FOR
 B.Tech. ELECTRONICS & TELECOMMUNICATION / ELECTRONICS & COMMUNICATION ENGINEERING
 (SEMESTER - VI)**

Code	Subject	Teaching Scheme				Credit				MARKS				Total Marks
		L	P	T/A	Total	L	P	T/A	Total	Theory		Practical		
										Internal	Univ.	Internal	Univ.	
BEETC-601T	Computer Communication Network	2	-	-	2	2	-	-	2	30	70	-	-	100
BEETC-601P	Computer Communication Network Lab	-	2	-	2	-	1	-	1	-	-	25	25	50
BEETC-602T	Internet of Things (IOT)	2	-	-	2	2	-	-	2	30	70	-	-	100
BEETC-602P	IOT Lab	-	2	-	2	-	1	-	1	-	-	25	25	50
BEETC-603T	Wireless Sensor Network	2	-	-	2	2	-	-	2	30	70	-	-	100
BEETC-603P	Wireless Sensor Network Lab	-	2	-	2	-	1	-	1	-	-	25	25	50
BEETC-604PE	PEC-II	2	-	1T	3	2	-	1	3	30	70	-	-	100
BEETC-605OE	OE-I	2	-	1A	3	2	-	1	3	30	70	-	-	100
BEETC-606T	HSC: Effective Technical Communication	2	-	-	2	-	-	2	2	15	35	-	-	50
BEETC-607I	Mini Project(Internship)	-	-	3A	3	-	-	3	3	-	-	25	25	50
BEETC-608A	Audit Course	-	-	-	-	-	-	-	-	-	-	-	-	AUDIT
Total		12	6	1T+4A	23	10	3	7	20	165	385	100	100	750



Konkard

Dr. Mihir Kishan Purkar
 Principal
 Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



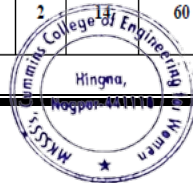
Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

**SCHEME OF EXAMINATION FOR
 B.Tech. ELECTRONICS & TELECOMMUNICATION / ELECTRONICS & COMMUNICATION ENGINEERING
 (SEMESTER - VII)**

Code	Subject	Teaching Scheme				Credit				MARKS				Total Marks
		L	P	T/A	Total	L	P	T/A	Total	Theory		Practical		
										Internal	Univ.	Internal	Univ.	
BEETC-701PE	PEC-III	3	2	1T	6	3	1	1	5	30	70	25	25	150
BEETC-702PE	PEC-IV	3	2	1T	6	3	1	1	5	30	70	25	25	150
BEETC-703PE	PEC-V	3	-		3	3	-		3	30	70	-	-	100
BEETC-704OE	OE-II	2	-	1T	3	2	-	1	3	30	70	-	-	100
BEETC-705I	Seminar/Internship	-	2	-	2	-	1	-	1	-	-	50	-	50
BEETC-706A	IPR	1		1A	2	-	-	-	-	-	-	-	-	AUDIT
Total		12	6	3T+1A	22	11	3	3	17	120	280	100	50	550

**SCHEME OF EXAMINATION FOR
 B.Tech. ELECTRONICS & TELECOMMUNICATION / ELECTRONICS & COMMUNICATION ENGINEERING
 (SEMESTER - VIII)**

Code	Subject	Teaching Scheme				Credit				MARKS				Total Marks
		L	P	T/A	Total	L	P	T/A	Total	Theory		Practical		
										Internal	Univ.	Internal	Univ.	
BEETC-801PE	Program Elective-VI MOOC/NPTEL Course	3	-	-	3	3	-	-	3	30	70	-	-	100
BEETC-802PE	Program Elective-VII MOOC/NPTEL Course	3	-	-	3	3	-	-	3	30	70	-	-	100
BEETC-803P	Project	-	12	-	12	-	6	-	6	-	-	50	50	100
	Seminar	-	-	2A	2	-	-	2	2	-	-	50	-	50
Total		6	12	2A	20	6	6	2	14	60	140	100	50	350



K. N. K.
 Dr. Mihir K. Chhapurkar
 Principal

Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Following Are The Schemes of Computer Engineering

Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
 B.E. Four Year Degree Course
 (Revised Curriculum as per AICTE Model Curriculum)
 Scheme & Syllabus for Computer Engineering

Third Semester:-

S N	Subject	Teaching Scheme			Evaluation Scheme			Credits	Category
		L	T	P	CA	UE	Total		
1	Mathematics – III	4	-	-	30	70	100	4	BSC
2	Digital Circuits and Fundamentals of Microprocessor	3	1	-	30	70	100	4	ESC
3	Object Oriented Programming	3	1	-	30	70	100	4	PCC-CS
4	Theory of Computation	3	-	-	30	70	100	3	PCC-CS
5	Introduction to Computer Networks	3	-	-	30	70	100	3	PCC-CS
6	Universal Human Values	2	-	-	15	35	50	2	HSMC
7	Digital Circuits and Fundamentals of Microprocessor Lab	-	-	2	25	25	50	1	ESC
8	Object Oriented Programming (Lab)	-	-	2	25	25	50	1	PCC-CS
9	Computer Workshop-I(Lab)	-	-	2	25	25	50	1	LC
10	Environmental Science	2	-	-	-	-	-	Audit	HSMC
Total		20	02	06	240	490	700	23	



Kinjal

Dr. Milind Khanapurkar
 Principal

Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY, NAGPUR

FOUR YEAR BACHELOR OF ENGINEERING (B.E.) DEGREE COURSE

SEMESTER: 4th (C.B.C.S.)

BRANCH: COMPUTER ENGINEERING

Fourth Semester:-

S N	Subject	Teaching Scheme			Evaluation Scheme			Credits	Category
		L	T	P	CA	UE	Total		
1	Discrete Mathematics and Graph Theory	3	1	-	30	70	100	4	PCC-CS
2	Web Technology	3	-	-	30	70	100	3	PCC-CS
3	Operating System	3	-	-	30	70	100	3	PCC-CS
4	Data Structures	3	1	-	30	70	100	4	PCC-CS
5	Computer Architecture and Organization	3	-	-	30	70	100	3	PCC-CS
6	System Programming	3	-	-	30	70	100	3	PCC-CS
7	Web Technology-Lab	-	-	2	25	25	50	1	PCC-CS
8	Operating System- Lab	-	-	2	25	25	50	1	PCC-CS
9	Data Structure-Lab	-	-	2	25	25	50	1	PCC-CS
10	Consumer Affairs	2	-	-	-	-	-	Audit	MC
11	Internship (Min. 4 Weeks)	-	-	2	50	-	50	1	PROJ-CS
Total			02	08	305	495	800	24	



Kailind
 Dr. Milind Khanburkar
 Principal

Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

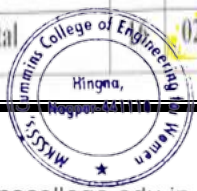


Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
FOUR YEAR B. TECH. COURSE
 (Revised Curriculum as per AICTE Model Curriculum)
Scheme for Computer Engineering

Fifth Semester:-

S. N.	Subject Code	Subject	Teaching Scheme			Evaluation Scheme			Credits	Category
			L	T	P	CA	UE	Total		
1	BTCME501T	Database Management System	3	1	-	30	70	100	4	PCC-CS
2	BTCME501P	Database Management System - Lab	-	-	2	25	25	50	1	PCC-CS
3	BTCME502T	Computer Graphics	3	-	-	30	70	100	3	PCC-CS
4	BTCME502P	Computer Graphics -Lab	-	-	2	25	25	50	1	PCC-CS
5	BTCME503T	Java Programming	3	-	-	30	70	100	3	PCC-CS
6	BTCME503P	Java Programming - Lab	-	-	2	25	25	50	1	PCC-CS
7	BTCME504T	Elective-I	3	-	-	30	70	100	3	PEC-CS
8	BTCME505T	Humanities - II - Effective Technical Communication	2	1	-	15	35	50	3	HSMC
9	BTCME506T	Yoga & Meditation	-	-	2	-	-	-	Audit	MC
Total				02	06	210	390	600	19	



Milind
Dr. Milind Khanapurkar
 Principal

Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
FOUR YEAR B. TECH. COURSE
 (Revised Curriculum as per AICTE Model Curriculum)
Scheme for Computer Engineering

Sixth Semester:-

S. N.	Subject Code	Subject	Teaching Scheme			Evaluation Scheme			Credits	Category
			L	T	P	CA	UE	Total		
1	BTCME601T	Design and Analysis of Algorithms	3	-	-	30	70	100	3	PCC-CS
2	BTCME601P	Design and Analysis of Algorithms- Lab	-	-	2	25	25	50	1	PCC-CS
3	BTCME602T	TCP/IP	3	-	-	30	70	100	3	PCC-CS
4	BTCME602P	TCP/IP-Lab	-	-	2	25	25	50	1	PCC-CS
5	BTCME603T	Elective-II	3	-	-	30	70	100	3	PEC-CS
6	BTCME604T	Elective-III	3	-	-	30	70	100	3	PEC-CS
7	BTCME605T	Open Elective-I	3	-	-	30	70	100	3	OEC-CS
8	BTCME606P	Emerging Technology Lab -II	-	-	2	25	25	50	1	PCC-CS
9	BTCME607P	Mini Project & Internship	-	-	6	25	25	50	3	PROJ-CS
10	BTCME608	Seminar / Presentations on Current trends	-	-	2	50	-	50	Audit	MC
Total			15	00	14	300	450	750	21	



Kanind
Dr. Milind Khanapurkar
 Principal

Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

**Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
 FOUR YEAR B. TECH. COURSE**

(Revised Curriculum as per AICTE Model Curriculum)
B.Tech VII Semester (Computer Engineering) Scheme & Syllabus

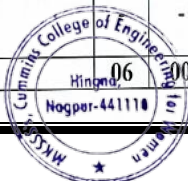
Seventh Semester:-

S. N.	Subject Code	Subject	Teaching Scheme			Evaluation Scheme			Credits	Minimum Passing Marks
			L	T	P	CA	UE	Total		
1	BTCME701T	Cryptography & Network Security	3	1	-	30	70	100	4	45
2	BTCME701P	Cryptography & Network Security-Lab	-	-	2	25	25	50	1	25
3	BTCME702T	Elective – IV	3	-	-	30	70	100	3	45
4	BTCME703T	Elective – V	3	-	-	30	70	100	3	45
5	BTCME704T	Open Elective-II	3	-	-	30	70	100	3	45
6	BTCME705P	Project Work Phase -I	-	-	6	50	50	100	3	50
7	BTCME706P	Report Writing Activity	-	-	2	-	-	-	Audit	Grade
Total			12	01	10	195	355	550	17	

**Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
 FOUR YEAR B. TECH. COURSE (CBCS)**
 (Revised Curriculum as per AICTE Model Curriculum)
B.Tech VIII Semester (Computer Engineering) Scheme & Syllabus

Eighth Semester:-

S. N.	Subject Code	Subject	Teaching Scheme			Evaluation Scheme			Credits	Minimum Passing Marks
			L	T/A	P	CA	UE	Total		
1	BTCME801T	Electives – VI */ MOOCS/NPTEL Course	3	-	-	30	70	100	3	45
2	BTCME802T	Electives –VII */ MOOCS/NPTEL Course	3	-	-	30	70	100	3	45
3	BTCME803P	Project Work**/ Industry Project (Phase- II)	-	-	12	100	100	200	8	100
Total			06	00	12	160	240	400	14	



Handwritten signature: K. Milind

Dr. Milind Khaparkar
 Principal

Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.





Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women

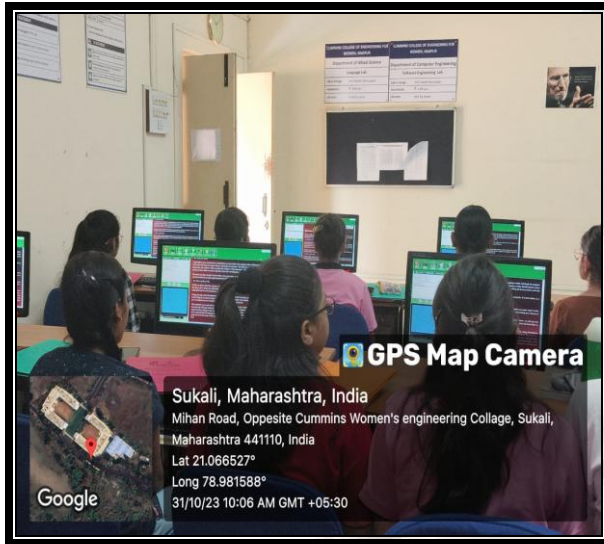
Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Following Are Sample Glimpses of Laboratory Sessions

Computer Engineering



Applied Science



Computer Engineering



Applied Science



Kinind

Dr. Milind Khamapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women

Sharpening Engineering Acumen with a difference
NAAC Accredited

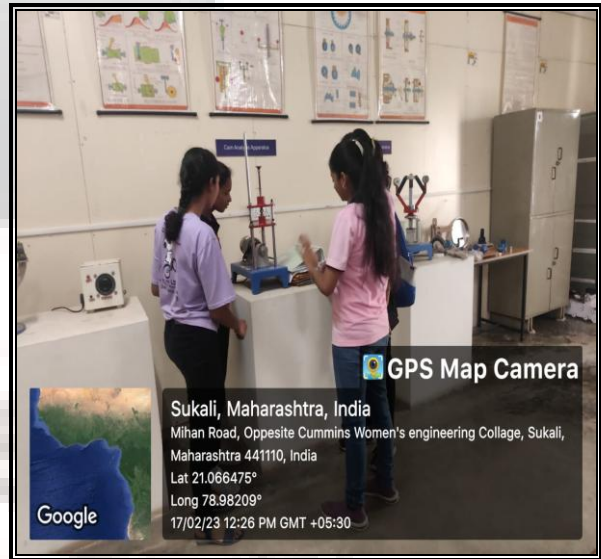


Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Following Are Sample Glimpses of Laboratory Sessions

Electronics & Telecommunication Engg

Mechanical Engineering



Electronics & Telecommunication Engg

Mechanical Engineering



Kinlind
Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110






Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited


Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Following Are Sample Proofs of Tutorial Conducted



Maharshi Karve Stree Shikshan Samstha's
CUMMINS COLLEGE OF ENGINEERING FOR WOMEN
Sharpening Engineering Acumen with a difference



Tutorials Worksheet 2018-19

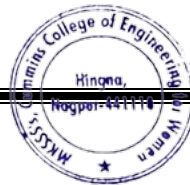
Department: Allied Sciences Sem: II Subject: Applied Maths-II

Topic: Vector Differentiation Completion Date: 16/02/2019

Q1. A particle moves along the curve $x = 2t^2, y = t^2 - 4t, z = 3t - 5$. Find the component of velocity and acceleration at $t=1$ in the direction $i-3j+2k$.

Q2. Find the directional derivative of $\frac{1}{r}$ in the direction of \vec{r} where $\vec{r} = x\vec{i} + y\vec{j} + z\vec{k}$.

Q3. Find the unit vector normal to the surface $x^4 - 3xy + z^2 + 1 = 0$ at the point $(1, 1, 1)$.



Milind

Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a Difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Palak Bonale
Roll No: 1833.

Q.1 a A particle moves along the curve $x = 2t^2$
 $y = t^2 - 4t$, $z = 3t - 5$ where t is the
time. find the components of its velocity
and acceleration at time $t = 1$ in the
direction $i - 3j - 2k$

→ let \vec{r} be the position vector of any
point of $P(x, y, z)$ the given curve
 $\vec{r} = xi + yj + zk = 2t^2i + (t^2 - 4t)j + (3t - 5)k$
for $t = 1 \Rightarrow \vec{v} = \frac{d\vec{r}}{dt} = 4i - 2j + 3k$

$\vec{a} = \frac{d\vec{v}}{dt} = \frac{d^2\vec{r}}{dt^2} = 4i + 2j$, $t = 1 \Rightarrow \vec{n} = \frac{d^2\vec{r}}{dt^2} = 4i + 2j$

Now unit the vector in the direction of
 $i - 3j + 2k$
 $\hat{n} = \frac{i - 3j + 2k}{\sqrt{1 + 9 + 4}} = \frac{i - 3j + 2k}{\sqrt{14}}$

Component of velocity $\vec{v} \cdot \hat{n} = (4i - 2j + 3k) \cdot \frac{i - 3j + 2k}{\sqrt{14}} = \frac{5 + 6 + 0}{\sqrt{14}} = \frac{11}{\sqrt{14}}$

Component of the acceleration $\vec{a} \cdot \hat{n} = (4i + 2j) \cdot \frac{i - 3j + 2k}{\sqrt{14}} = \frac{4 - 6 + 0}{\sqrt{14}} = \frac{-2}{\sqrt{14}}$

Sukli



Kamini

Dr. Milind Khanapurkar
Principal

Cummins College of Engineering for Women
Hingna, Nagpur-441110.





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Tutorials Worksheet 2020-21

Department: Allied Sciences Sem: I Subject: Applied Maths-I

Topic: Partial Differentiation equation Completion Date: 15/01/2021

Que: 1) If $u = \tan^{-1} \left[\frac{x^3 + y^3}{x-y} \right]$ then prove that

$$x^2 \frac{\partial^2 u}{\partial x^2} + 2xy \frac{\partial^2 u}{\partial x \partial y} + y^2 \frac{\partial^2 u}{\partial y^2} = \sin 4u - \sin 2u$$

Que: 2) If $\phi = f(x, y, z)$ and $x = \sqrt{vw}$, $y = \sqrt{wu}$, $z = \sqrt{uv}$ then prove that

$$u \frac{\partial \phi}{\partial u} + v \frac{\partial \phi}{\partial v} + w \frac{\partial \phi}{\partial w} = x \frac{\partial \phi}{\partial x} + y \frac{\partial \phi}{\partial y} + z \frac{\partial \phi}{\partial z}$$

Que: 3) If $u = f\left(\frac{x}{y}, \frac{y}{z}, \frac{z}{x}\right)$ then find value of $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y} + z \frac{\partial u}{\partial z}$



Krunal
Dr. Milind Khanapurkar
Principal

Mouje Sukli, Gupchup, Hingna, Nagpur-441110
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

■ Tel. No. : 9657667030 ■ E-mail : office@cumminscollege.edu.in,
■ website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Date _____

Anushree Zade

Sec A

Q) If $u = \tan^{-1} \left\{ \frac{x^2 + y^2}{x - y} \right\}$ prove that $x^2 \frac{\partial^2 u}{\partial x^2} + 2xy \frac{\partial^2 u}{\partial x \partial y} + y^2 \frac{\partial^2 u}{\partial y^2} = \sin 4u - \sin 2u$

\Rightarrow let $u = \tan^{-1} \left\{ \frac{x^3 + y^3}{x - y} \right\}$
for $u = \frac{x^3 + y^3}{x - y}$

Here z is a homogeneous function of x and y having degree $n = 3 - 1 = 2$
By Euler's theorem

$$x \cdot \frac{\partial f}{\partial x} + y \cdot \frac{\partial f}{\partial y} = n \cdot f$$
$$x \cdot \frac{\partial}{\partial x} (\tan u) + y \cdot \frac{\partial}{\partial y} (\tan u) = 2 \tan u$$
$$x \cdot \sec^2 u \cdot \frac{\partial u}{\partial x} + y \cdot \sec^2 u \cdot \frac{\partial u}{\partial y} = 2 \tan u$$
$$x \cdot \frac{\partial u}{\partial x} + y \cdot \frac{\partial u}{\partial y} = 2 \sin u \cdot \cos u$$
$$x \cdot \frac{\partial u}{\partial x} + y \cdot \frac{\partial u}{\partial y} = \sin 2u \quad \text{--- (1)}$$

Kminda



Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.



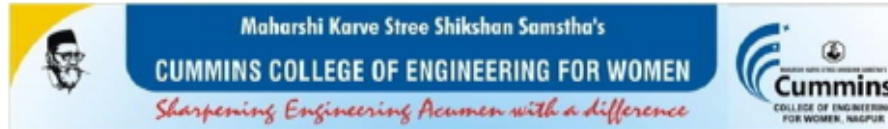


Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Tutorials Worksheet 2021-22

Department: Computer Engineering

Sem: III

Subject: DCFM

Topic: Combinational Logic

Completion Date: 02/09/21

Ques: 1) Design a 4 bit gray code to binary code Converter.

Ques: 2) Design a 4 bit even parity generator combinational logic circuit.

Ques: 3) Design a 4 bit odd parity generator combinational logic circuit.



Milind

Dr. Milind Khajapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

perform the following operations.

a. $(10110110.11)_2 = (?)_{10}$

→ Binary to Decimal

$$1 \times 2^7 + 0 \times 2^6 + 1 \times 2^5 + 1 \times 2^4 + 0 \times 2^3 + 1 \times 2^2 + 1 \times 2^1 + 0 \times 2^0 + 1 \times 2^{-1} + 1 \times 2^{-2}$$
$$= 2^7 + 0 + 2^5 + 2^4 + 0 + 2^2 + 2^1 + 0 + 2^{-1} + 2^{-2}$$
$$= 2^7 + 2^5 + 2^4 + 2^2 + 2^1 + 2^{-1} + 2^{-2}$$
$$= (182.75)_{10}$$

b. $(3287.51)_{10} = (?)_8$

→ Decimal to Octal

Decimal No. ÷ Base 8	Quotient	Remainder
3287 ÷ 8	410	7

⇒ 6327 — ①

Decimal × Base	Result
0.51 × 8	4.08
0.08 × 8	0.64
0.64 × 8	5.12
0.12 × 8	0.96

⇒ (.4050)₈ — ②

Now combining ① & ②:
(6327.4050)₈



Kinjal

Dr. Milind K. Anapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
 NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Q. 12. SOP

a) $f(A, B, C, D) = \sum m(0, 1, 4, 7, 11, 12, 13, 15) + d(3, 6, 10)$

→

AB	CD	$\bar{C}\bar{D}$	$\bar{C}D$	$C\bar{D}$	CD
$\bar{A}\bar{B}$	0	1	1	X	0
$\bar{A}B$	1	0	0	0	X
$A\bar{B}$	1	1	1	1	0
AB	0	0	0	1	X

$CD + \bar{A}\bar{B}\bar{C} + B\bar{C}\bar{D} + AB\bar{C} + \bar{A}BC$

b) POS

b) $f(W, X, Y, Z) = \prod M(1, 3, 4, 8, 10, 12, 13, 15) \cdot d(2, 11)$

→

WX	YZ	$\bar{Y}\bar{Z}$	$\bar{Y}Z$	$Y\bar{Z}$	YZ
$\bar{W}\bar{X}$	0	0	0	0	X
$\bar{W}X$	0	0	0	1	0
$W\bar{X}$	0	0	0	0	0
WX	0	0	X	0	0

$(\bar{W} + \bar{X} + Z)(X + \bar{Y} + \bar{Z})(W + \bar{Y} + \bar{Z})(W + X + Z)(W + \bar{X} + Y)$

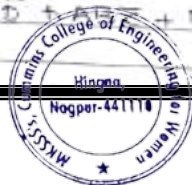
3. d) $F(A, B, C, D) = \sum m(0, 1, 4, 7, 11, 12, 13, 15)$

→

AB	$\bar{C}\bar{D}$	$\bar{C}D$	$C\bar{D}$	CD
$\bar{A}\bar{B}$	1	1	0	0
$\bar{A}B$	1	0	0	1
AB	1	1	1	0
$A\bar{B}$	0	0	0	1

$\bar{A}\bar{B}\bar{C} + B\bar{C}\bar{D} + A\bar{B}C + BED + ACD$

Anjali
02-09-21



Kinjal
 Dr. Minoo Khanapurkar
 Principal

Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Tutorials Worksheet 2021-22

Department: Electronics & Telecommunication Engineering

Sem: III

Subject: DSD

Topic: Number System

Submission Date: 02/09/21

Ques: 1) Write a 4 bit binary table using 8421 coding system.

Ques: 2) Write a 5 bit binary table using 8421 coding system.

Ques: 3) Convert $(453.157)_{10} \rightarrow (?)_8$

Ques: 4) Convert $(1572.151)_D \rightarrow (?)_{16}$

Ques: 5) Convert $(1572.151)_D \rightarrow (?)_7$



K. Milind

Dr. Milind Khaseburkar

Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Q.1 Write a 4-bit binary table using 8421 coding system

→	Decimal System	Binary system (8421)			
		8	4	2	1
	0	0	0	0	0
	1	0	0	0	1
	2	0	0	1	0
	3	0	0	1	1
	4	0	1	0	0
	5	0	1	0	1
	6	0	1	1	0
	7	0	1	1	1
	8	1	0	0	0
	9	1	0	0	1
	10	1	0	1	0
	11	1	0	1	1
	12	1	1	0	0
	13	1	1	0	1
	14	1	1	1	0
	15	1	1	1	1



Kindred
Dr. Milind K. Nanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

EXPERIENTIAL LEARNING

2. Skill Development Programs Are Conducted To Provide Adequate Training That Makes Students To Improve Their Productivity And Make Them Employable

Maharshi Karve Stree Shikshan Samstha (MKSSS), Cummins College Of Engineering For Women, Nagpur Is Committed To “Empowerment Of Women Through Education”. In This View Institute Regularly Organizes Skill Development Program Which Is The Process Of Identification Of The Skills Gap In Youth And Providing Skilling Training & Employment Benefits To Them.

Following is the Sample Schedules of Skill Development Programs of Computer Engineering



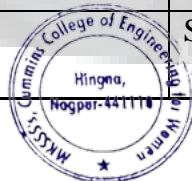
**Department of Computer Engineering
 Skill Development Program in Collaboration with EKVIRA Academy
 (2019-2020)**

Date- 9/12/19 to 13/12/19

1st session- 8.30 AM to 12 PM

2nd Session- 1 PM to 3.50 PM

Semester/Year	Date	Course	Session	Trainer Name
2 nd Year	9/12/2019	Python	Session 1 & 2	Prof. P.Lohe
	10/12/2019	Python	Session 1 & 2	Prof. P.Hepat
	11/12/2019	Python	Session 1 & 2	Prof. P.Lohe
	12/12/2019	Object oriented concept	Session 1 & 2	Prof. S.Sahu
	12/12/2019	Object oriented concept	Session 1 & 2	Prof. S.Sahu
3 rd Year	10/12/19 to	PHP	Session 1 & 2	Prof. A. Borkar
	13/12/19			Prof. S. Khamankar



Khind
 Dr. Milind Khanapurkar
 Principal
 Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441118.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a Difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

4 th Year	10/12/2019	Programming with R	Session 1 & 2	Prof.H.Kharpate
4 th Year	11/12/2019	Programming with R	Session 1 & 2	Prof. S. Deote
	12/12/2019	Programming with R	Session 1 & 2	Prof. S. Kitey
	13/12/19	Programming with R	Session 1 & 2	Prof. H. Kharpate



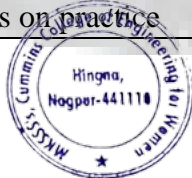
Department of Computer Engineering
Skill Development Program in Collaboration with IBase Technology
(2021-2022)

Date- 10/03/2022 to 16/03/2022

1st session- 8.30 AM to 12 PM

2nd Session- 1 PM to 3.50 PM

Sem	Date	Course Title	Session	Trainer Name
3rd/5th Sem	3/10/2022	Basic of Python	Session 1	Mr.Nakul Deshmukh (iBase Technologies)
		Practice on given python problem by Mr.Nakul Deshmukh	Session 2	S.Khamankar
	3/11/2022	Introduction to web designing	Session 1	S.Khamankar
		Hands on practice		



Kinind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Sem	Date	Course Title	Session	Trainer Name
3rd/5th Sem	3/14/2022	Introduction to Basics of Drupal	Session 1	A.borkar
		HTML concept for web designing	Session 2	P.Gangwani/ S.Khamankar
		Hands on practice		
	3/15/2022	Revisiting fundamentals of C programming	Session1,2	Dr.Aniket Pingley (Director Ekvira Academy)
		Intro Competitive Coding Platforms		
		Working with arrays of numbers (2-3 problems)		
		Working with arrays of characters (2-3 problems)		
		Problems related to Math (2 problems)		
	3/16/2022	Divide and Conquer approach (2-3 problems)	Session1,2	Dr.Aniket Pingley (Director Ekvira Academy)
		Problems related to sorting (2-3 problems)		
		Stacks and Queues Problems in Recursion (1-2 problems)		



Kmkind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110

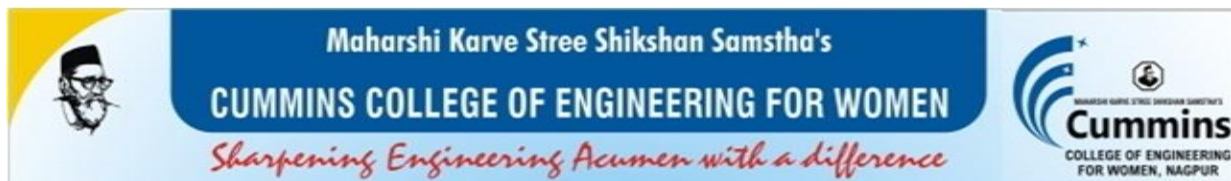




Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Department of Computer Engineering

**Skill Development Schedule in Collaboration With Aron Infotech
Session 2022-23**

Semester: 6th and 8th Sem

Time Duration: 9.00 am to 4.00 pm

Dates: 23rd January to 27th January

Date & Day	Topic	Schedule	Time Slot	Trainer Name
Day 1 (23/1/2023)	Introduction • Database Management System • DDL, DML, TCL, DQL	Session 1	9.00 am – 12.00pm	Ms. Bharti Kungwani (Aron Infotech)
		Break	12:00pm – 01:00pm	
	All About SQL	Session 2	1:00pm – 04:00pm	
Day 2 (24/1/2023)	Creation of Database	Session 1	9.00 am – 12.00 pm	Ms. Bharti Kungwani (Aron Infotech)



Kinlind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Date & Day	Topic	Schedule	Time Slot	Trainer Name
Day 3 (25/1/2023)	Commands on Database Table Advance SQL Commands	Session 1	9.00 am – 12.00pm	Ms. Bharti Kungwani (Aron Infotech)
		Break	12:00pm – 01:00pm	
		Session 2	1:00pm – 04:00pm	
Day 4 (27/1/2023)	<ul style="list-style-type: none">Journal / conference paper writing skillsHow to check indexingSteps to write a good paperHow to publish a paperQuestions and answersFeedback	Session 1	9:00am – 12:00pm	Prof. Supriya Gupta Prof. Pinky Gangwani



Kinind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

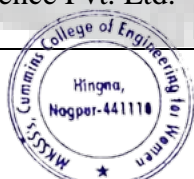
Following is the Sample Schedules of Skill Development Programs Electronics & Telecommunication Engineering



Department of Electronics & Telecommunication Engineering

Skill Development Program (2022-23)

Sr. No.	Name of Skill Development Workshop / Workshop	Beneficiary	Days & Dates
1	Skill Development Workshop on "Algorithm and Data structure in Python from competition point of view"	3rd year & 4th year Student of ETC dept.	One Week, 1 to 6 August, 22
2	Skill Development Workshop	Second Year	One Week, 22 to 26 August, 22
	"MATLAB & Scilab"	Students of ETC dept.	
3	Workshop on "Arduino & Raspberry-Pi"	Third year Student of ETC dept.	2-days, 12-13 October, 22
4	Workshop on "PCB Design & Fabrication" in collaboration with E- Art Technologies Pvt. Ltd.	3rd year & 4th year Student of ETC dept.	3-days, 10, 11, 12 November, 22
5	Workshop on "Data Science & Python" in collaboration with NU Intelligence Pvt. Ltd.	Second Year Students Students (ETC & CE)	1-days, 18th November, 22



K. K. K.
Dr. Mitind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Sr. No.	Name of Skill Development Workshop / Workshop	Beneficiary	Days & Dates
7	Workshop on "RF design with AWR" in collaboration with IETE student chapter ICON Design Automation 15 to 16 October,22 15 to 16 October,22	3rd year & 4th year Student	2-days, 15 to 16 October,22
8	Hackathon: Avishkaar 1.0	Students of ETC, CE & ME branch	2-days,14 to 15 September
9	Workshop on "PCB Design & Fabrication" in collaboration with E- Art Technologies Pvt. Ltd	3rd year & 4th year Student	3-days,10,11,12 November
10	Skill Development Workshop & Mini-Project (Internship) on "Robotics" in collaboration with Admire Tech Vision LLP Engg.	3rd year & 4th year Student	1 week, 23-27 Jan 2023
11	Skill Development Workshop on "MATLAB & Simulink with Handson on Aurdino" in collaboration with mathworks	Second Year Students	1 week, 13-17 Mar 2023
12	One Day Workshop on Energy Audit in Collaboration with Department of Electrical Engineering, YCCE, Nagpur	Third Year ETC students	1-day,01-04-2023



Kamini

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

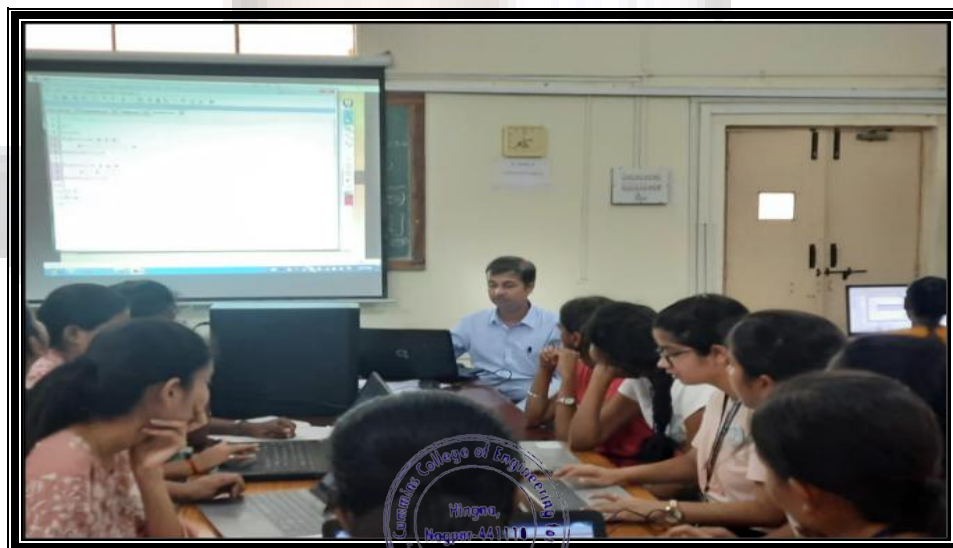
Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Following Are Sample Glimpses of Skill Development Workshop on “MATLAB & Scilab”



Following Are Sample Glimpses of Skill Development Workshop on “PCB Design & Fabrication” in collaboration with E-Art Technologies Pvt. Ltd.



Kinind

Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Following Are Sample Glimpses of Skill Development Workshop on “MATLAB & Simulink with Hands-on on Arduino” in collaboration with MathWorks



Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a Difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Following Are Sample Glimpses of Skill Development Program of **Madhubani Art for Beginners** (By Mrs. Swapna Bhagwat 14Nov2022 & 16Nov2022)



Kirind
Dr. Mihind Kiranapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



**Following Are The Sample Schedules of Skill Development Programs of
Mechanical Engineering**



**Department of Mechanical Engineering
Skill Development Program (2019-2020)**

Date- 1/08/2020 to 07/08/2020

1st session- 8.30 AM to 12 PM

2nd Session- 1 PM to 3.50 PM

Semester/Year	Date	Course	Session	Trainer Name
3rd/5th/7th Sem	8/1/2020	Basic Fundamentals of Industrial Robotics	Session 1,2	Prof. Sudhil Lanjewar
	8/3/2020	Kinematics of Robotics	Session 1,2	Prof. Aditya Kawadaskar
	8/4/2020	Robotics in thermal	Session 1,2	Prof. Prasanna Mahankar
	8/5/2020	Applications of robotics on Manufacturing	Session 1,2	Dr. Shailesh Khekale
	8/6/2020	Application of robotics in automobile	Session 1,2	Prof. Vikram Dandekar
	8/7/2020	Nano robotics	Session 1,2	Prof. Abhijit S Getme



Kinlind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Department of Mechanical Engineering
Skill Development Program (2021-2022)

Date- 20/01/21 to 30/01/2021

1st session- 8.30 AM to 12 PM

2nd Session- 1 PM to 3.50 PM

Semester/Year	Date	Course	Session	Trainer Name
6th and 8th Sem	1/21/2021	2wheeler and 4 wheeler specification	Session 1,2	Prof. Vikram Dandekar
	1/22/2021	3D Printing	Session 1,2	Prof. Sushil Lanjewar
	1/25/2021	Machining Technology	Session 1	Ambarish Pusadkar
		DMAIC Methodology	Session 2	Prof. Sailesh Khekale
	1/27/2021	HVAC Project Management	Session 1	Mr.Ashok Yadav
		Interpretation and Reading of product drawings	Session 2	Mr. Kapil Bhasme
	1/28/2021	Metallurgy for Non Metallurgist	Session 1	Prof. Yogesh Dandekar
		IPR & Patent Process	Session 2	Mr.Jyitiraman



Kin kind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Department of Mechanical Engineering
Skill Development Program (2022-2023)

Date- 23 to 27th January, 2023

1st session- 8.30 AM to 12
PM

2nd Session- 1 PM to 3.50
PM

Semester/ Year	Date	Course	Session	Trainer Name
3rd and 4th Year	Day 1 (23/1/2023)	Inauguration and Introduction to Hands on Practice on Basic Mechanical Engineering Concepts	9.00 am	Dr. M Shukla
		Hands on Mechanical Measurement Devices and Tools	9. 25 am - 12:00 PM	Mr. A Kawadaskar V Dandekar
		Hands on I C Engine (Identification, Firing Order, Valve Timing), To Find out the Power of Petrol engine	8.30- 1.00 PM	P S Mahankar Dr N Bhawe
	Day 2 (24/1/2023)	Hands on Pollution Measurement by Exhaust Gas Analyser	1.00-3.00 PM	Mr. V Chavhan
		Hands on Sensors (Identification, Types, Working, Application and Testing)	8.30 -1.00 PM	Mr. S Lanjewar
	Day 3 (25/1/2023)	Process Planning (Case Studies)	1:00 – 03:00 PM	Dr. M R Shukla
	Day 4 (27/1/2023)	Hands on Materials, Casting, Various Machining Processes	8.30 – 3.00 PM	Dr. S Khakale D. D. Dandekar Principal



Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Students Of Mechanical Engineering Are Learning About Functioning Of “IC Engine-Lathe Machine”



Students Of Mechanical Engineering Are Learning About Functioning Of Different Machines



Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Sanatha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



EXPERIENTIAL LEARNING

3. Students Are Encouraged To Utilize And Test Their Technical Knowledge By Taking Innovative And Social Need Problems And Implementing Through Mega-Projects And Mini-Projects

The project activates students' learning by solving problems and providing solutions by thinking positively. Every project includes a schedule, a realistic plan, and an agreement on the problem and solution. It enables creative thinking and the application of prior knowledge and skills.

Students are free to work on projects in groups. It helps them increase their self-confidence, teach teamwork, and improve leadership, communication, and problem-solving skills.

Cummins College of Engineering for Women ensures that young minds should undergo Project that identify and fulfill the need of society. Some live projects are taken in collaboration with industry and public sectors.



Kinlind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Following Are The Sample Letters Received By Students From Industries And Public Sector For Live Project.



Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



vibha **VIA**

Date: February 13th 2019

To,
Maithili Warkhedkar
Cummins college of
Engineering for Women,
Nagpur.

Sub. : Short listing of approved ideas for NAVIN project.

This is to inform you that your following idea has been shortlisted for incubation at Innovation hub at the Raman Science Centre, Nagpur under the NAVIN project.

You would be happy to know that your idea shall be further mentored with support coming from very esteemed organisations which includes – Vidarbha Industries Association, Raman Science Centre, Vigyan Bharti Mandal, Lemon School of Entrepreneurship & Venture Catalysts.

Dial A Dabba

We also confirm herewith that your nomination is sponsored by Vidarbha Industries Association for the period of one year.

Wishing you success in your endeavour.

Dr. M. K. Tiwari
Vice President
VIBHA – Vidarbha
Mandal

N. Ramdas Tyer
Director
Raman Science Centre
Nagpur

Atul Pande
President
Vidarbha Industries
Association Nagpur

CC to - Institute principal Dr. Bharatbhushan Joshi

CC to - Institute mentor Prof. Sharayu Deote

Ref NO: NAV2N 18-1-024



Kamind
Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



महेश कुमार
मा.रे.वि.इंजी.से.
वरि. मण्डल विद्युत इंजीनियर (परि.)
Mahesh Kumar
I.R.E.E.
Sr. Divl. Electrical Engineer (TRO)

मध्य रेल
Central Railway

मंडल रेल प्रबंधक कार्यालय,
परिचालन विभाग, नागपुर- 44 00 01
Divisional Rly. Manager's Office
Operating Deptt., Nagpur- 44 00 01
Ph: (0712) 2560702 (TeleFax), 2540170 (R)
Mob: 7219612303

No. NGP/TRO/MISC/Training/Engg.Student/MKSS'sCCEW

Dated:08.07.19

Dr. B. P Joshi
Principal,
MKSS's Cummins College of Engineering for Women,
Nagpur

Sub: Live Project Guidance for Engineering Student.

Ref: Your letter No CCoEW/NGP/Project/367/2019 dated 04/07/2019

Sir,

With reference to your letter No CCoEW/NGP/Project/367/2019 dated 04/07/2019, we are pleasure to inform that request of 04 Nos Final Year student, named

1. **Ms. Ketaki Patil**, 2. **Ms. Ritu Kotalwar**, 3. **Ms. Sayali Rathod**, 4. **Ms. Shifani Sheikh** of Computer Engineering department have been considered for the live project on "Prototype of Railway Accident Prevention System" under the guidance of Shri Debjit Sarkar, Chief Loco Inspector/TRO and Shri K. Dhivakar, Chief Crew Controller (running)/NGP from dated 08-07-2019 to till ending as encouraging **Make in India** a national programed of the Government of India designed to innovation, enhance skill development, protect intellectual property and build best in class manufacturing infrastructure in our country.

Further Railway (TRO Department) would not provide any others facility like Computer, Sitting arrangement, Office stationaries, accommodation, training allowance, Dearness allowance etc. during the live project training period. Railway administration will not take any responsibility regarding their personal safety inside or outside the Railway premises during their training period. Also imparting the live project shall not create any obligation of the part of Railway to offer any employment to the trainee on the completion of the said live project period.

They may contact the above said our supervisor for any assistance regarding the Live Project.

Thanking You

Yours Faithfully


[MAHESH KUMAR]
Sr. DEE/TRO/NGP
वरि मंडल विद्युत इंजीनियर
Sr. Divisional Electrical Engineer
टी.आर.एस.(परिचालन) मध्य रेल, नागपुर
TRS (Operating) C. Rly., Nagpur





Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference

NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



AUV TECHNOLOGY

+91 9960390585 +91 7722083585
aavtechnology.ngp@gmail.com
2nd Floor, Gurukrupa Apartment,
Somalwada Square, Nagpur-446025

Date: 23/09/2019

Company conformation letter for the project development

AUV Technology is pleased to Offer you an industry project development Opportunity, Guidance, Assistance, Support throughout for final year project with us at Nagpur (M.H) location.

The topic for the project is "**Product analysis based on brands on amazon.com**" For the students of Cummins College of engineering for women's, Nagpur will directly Report to the Technical Head, Mr. Dany Petkar throughout the tenure.

Congratulations!

We look forward to work with you!

Students Name

BHAGYASHREE DESHPANDE

ADITI HOLKAR

AYESHA JOSHI



Kinjal
Dr. Mitul K. Kinjalpurkar

Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference

NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Following are the Sample Glimpses of Societal Need Projects

Smart Uniform for Coal Mine Workers



Design and Fabrication of Green PEA Depoding Machine



Kinind

Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

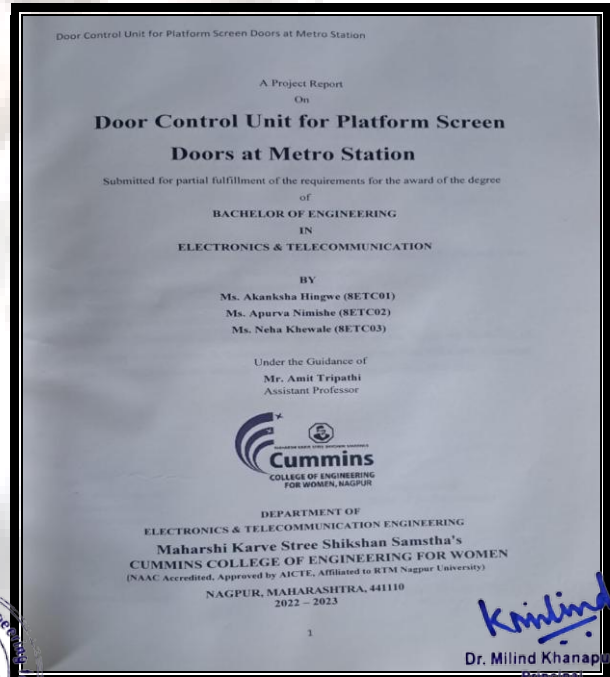
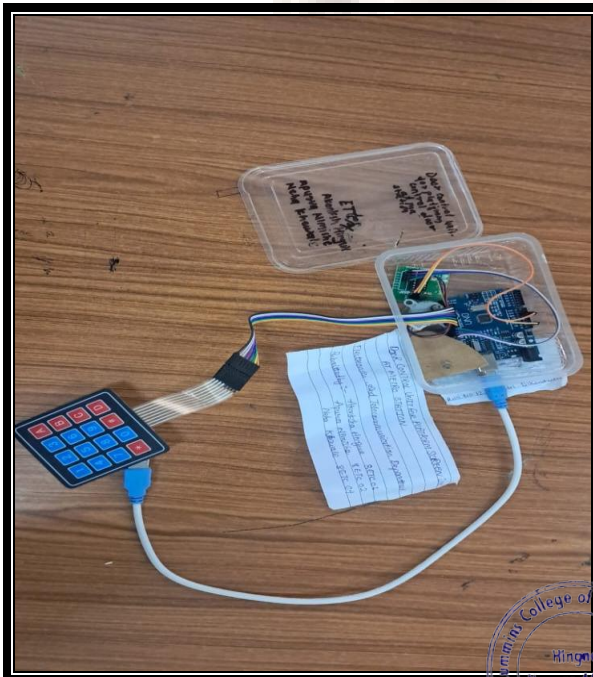
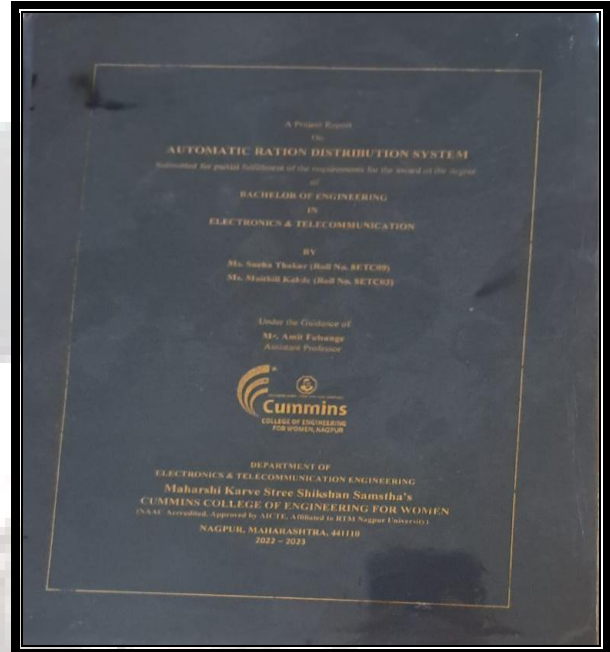
Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



GPS Map Camera
 Sukali, Maharashtra, India
 Minan Road, Opposite Cummins Women's engineering Collage, Sukali,
 Maharashtra 441110, India
 Lat 21.067038°
 Long 78.980956°
 03/11/23 09:04 AM GMT +05:30



Kautilya
 Dr. Milind Khanaparkar

Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110



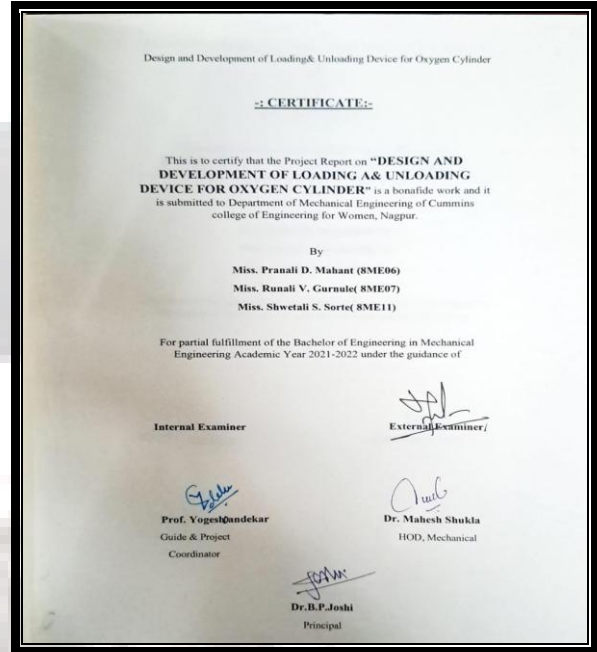


Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Kinind
Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a Difference

NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



“Android Mobile Application for Automatic Cooler Operating”



“Digital Village App”



Km.India

Dr. Millind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

EXPERIENTIAL LEARNING

4. To Go Through Internships To Gain Real Knowledge And Learning Goal-Specific Skills

Internships help students develop, refine and apply communication, leadership, problem-solving and thinking skills. It allows students to reflect on their experiences and express their talents, skills and knowledge.

Cummins College of Engineering always motivate young professional to go under internship and learn, analyse and apply new technological skills.

Following Are the Sample Glimpses of Internship Certificates Earned by Students



Kinjal

Dr. Minna Khamapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110



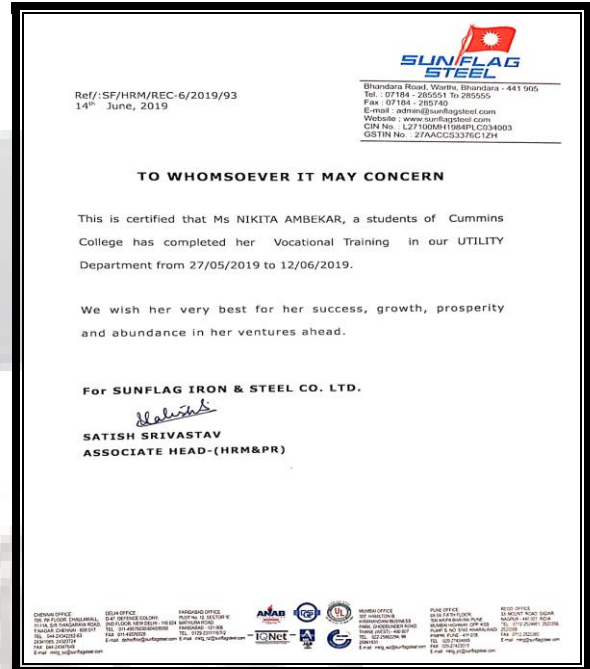


Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Km. Indu
 Dr. Mihir Chandrapurkar
 Principal

Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441116.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



EXPERIENTIAL LEARNING

5. Activities Like Coders Club Are Conducted To Get Through The Coding Problems And Improve Logical Thinking

Students can form groups for the Coders Club activity and are then assigned a problem to solve. In the allotted time, the group collaborated to find a solution to the provided problem.

Following are Sample Glimpses of Coder's Club Activity



Kinind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a Difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Kautilya

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

6. Students Are Motivated To Perform Practicals On Virtual Lab.

We provide remote-access to simulation-based Labs. Students are enthusing to conduct experiments by arousing their curiosity. This would help them in learning basic and advanced concepts through remote experimentation.

Following Are The Sample Report Shows The Total Number Of Students And Experiment Performed By Students In 2019-20

Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
For Women**
Sharpening Engineering Acumen with a difference
NAAC Accredited
Mouje Sukli (Gupchup), Hingna, Nagpur-441110
Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

VIRTUAL LAB WORKSHOP REPORT
(10/7/2020)

Name of the college: MKSS's Cummins College of Engineering For Women Nagpur
Affiliated to: Rashtrasant Tukadoji Maharaj (RTM), Nagpur University
A National Level Webinar, Participants from Colleges Across the Nation.

Sl. No.	Semester	Branch	No. of faculty and students who performed Virtual Lab	No. of Virtual Labs	No. of practical / experiments	Total no. of experiments = No. of faculty and students*No. of experiments
1	All Semester	All Branches	2285	4	12	2285 * 12
Grand Total						27,420

Total Number of Virtual Labs Experiments Performed: 27,420

(Signature)
Faculty in-charge

(Signature)
Head of the Institution

Tel. No. : 9657667030
E-mail : office@cumminscollege.edu.in
Website : www.cumminscollege.edu.in

Hingna,
Nagpur-441110

NAAC ACCREDITED
MSRS BUSINESS INCUBATION CENTRE

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering For Women
Sharpening Engineering Acumen with a difference
NAAC Accredited
Mouje Sukli (Gupchup), Hingna, Nagpur-441110
Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University


"शीलं परं भूषणम्"


VIRTUAL LAB WORKSHOP REPORT
(23/7/2020)

Name of the college: MKSS's Cummins College of Engineering For Women Nagpur
Affiliated to: Rashtrasant Tukadoji Maharaj (RTM), Nagpur University
Participants From: Shankarlal Khadewal College, Bhoat Vidyalyaya, New English Jc College (Akola), Gokhale College, Moharidar Vidyalyay, BKV, Akola, Maharashtra

Sl. No.	Semester	Branch	No. of faculty and students who performed Virtual Lab	No. of Virtual Labs	No. of practical / experiments	Total no. of experiments = No. of faculty and students*No. of experiments
1	All Semester	Science (Physics, Chemistry, Maths, Vocational, English), (MSc, BSc, I and II, 10 th)	93	7	16	93*16
Grand Total						1488

Total Number of Virtual Labs Experiments Performed: 1488


 (Signature)
 Faculty in-charge


 (Signature)
 Head of the Institution

Tel. No. : 9657667030
E-mail : office@cumminscollege.edu.in
Website : www.cumminscollege.edu.in

Cummins College of Engineering for Women
Hingna, Nagpur-441110

NAAC ACCREDITED
BUSINESS INCUBATION CENTRE

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
For Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Mouje Sukli (Gupchup), Hingna, Nagpur-441110

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Reshtrasant Tukadoji Maharaj Nagpur University



VIRTUAL LAB WORKSHOP REPORT

(31/7/2020)

Name of the college: MKSSS's Cummins College of Engineering For Women Nagpur

Affiliated to: Rashtrasant Tukadoji Maharaj (RTM), Nagpur University

Participants From: SS Je. College and School, NR Je. College & School, Je. College of Amravati, Maharashtra

Sl. No.	Semester	Branch	No. of faculty and students who performed Virtual Lab	No. of Virtual Labs	No. of practical / experiments	Total no. of experiments = No. of faculty and students*No. of experiments
1	All Semester	Science (Physics, Chemistry, Maths, Vocational, English), (BSc, 11 and 12 th , 10 th)	98	6	15	98*15
Grand Total						1470

Total Number of Virtual Labs Experiments Performed: 1470

(Signature)

Faculty in-charge

(Signature)

Head of the Institution



Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



**Following Are The Sample Report Shows The Total Number Of Students And
 Experiment Performed By Students In 2020-21**

Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 For Women**
Sharpening Engineering Acumen with a difference
NAAC Accredited
 Mouje Sukli (Gupchup), Hingna, Nagpur-441110
 Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Reshtrasant Tukdoji Maharaj Nagpur University

“शीलं परं वृषणम्”

VIRTUAL LAB WORKSHOP REPORT
 (7/8/2020)

Name of the college: MKSSS's Cummins College of Engineering For Women Nagpur
 Affiliated to: Rashtrasant Tukdoji Maharaj (RTM), Nagpur University
 Participants From: SJSC, S.M. Lakhani, GES Highschool, AICTE V Amgaon, smajc, LNPWSC, DB Science, STKM's Dhule, DMBJC, Dhule, RLKV Lakhni

Sl. No.	Semester	Branch	No. of faculty and students who performed Virtual Lab	No. of Virtual Labs	No. of practical / experiments	Total no. of experiments = No. of faculty and students*No. of experiments
1	All Semester	Science (Physics, Chemistry, Maths, Vocational, English), (MSc,BSc, 11 and 12 th , 10 th)	104	6	15	104*15
Grand Total						1560

Total Number of Virtual Labs Experiments Performed: 1560

(Signature) Faculty in-charge

(Signature) Head of the Institution

Dr. Milind Khanapurkar
 Principal

Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.





Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering For Women



Sharpening Engineering Acumen with a difference
NAAC Accredited
Mouje Sukli (Gupchup), Hingna, Nagpur-441110
Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

VIRTUAL LAB WORKSHOP REPORT

(23/8/2020)

Name of the college: MKSSS's Cummins College of Engineering For Women Nagpur

Affiliated to: Rashtrasant Tukadoji Maharaj (RTM), Nagpur University

Participants From: DVS, SLPM, GSV, BHMS, IGV, VHSJSC, LNPWJC, JMP
(Bhandara) LTRVJr.C, MJCSB, NJSC, SJSC, JJCT, LBSJSC, ZPTC, BHADARI
MH-Std

Sl. No.	Semester	Branch	No. of faculty and students who performed Virtual Lab	No. of Virtual Labs	No. of practical / experiments	Total no. of experiments = No. of faculty and students * No. of experiments
1	All Semester	Science (Physics, Chemistry, Maths, Vocational, English), (MSc, BSc, 11 and 12 th , 10 th)	64	6	14	64*14
Grand Total						896

Total Number of Virtual Labs Experiments Performed: 896

(Signature)

Faculty in-charge

(Signature)

Head of the Institution

Tel. No. : 9657667030
E-mail : office@cumminscollege.edu.in,
Website : www.cumminscollege.edu.in



Dr. Minakshi Khanapurkar

Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

■ Tel. No. : 9657667030 ■ E-mail : office@cumminscollege.edu.in,
■ website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University


Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
For Women**
Sharpening Engineering Acumen with a difference
NAAC Accredited
Mouje Sukli (Gupchup), Hingna, Nagpur-441110
Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Reshtrasant Tukdoji Maharaj Nagpur University


VIRTUAL LAB WORKSHOP REPORT
(25/8/2020)

Name of the college: MKSSS's Cummins College of Engineering For Women Nagpur
Affiliated to: Rashtrasant Tukdoji Maharaj (RTM), Nagpur University
Participants From: YJC, BCSW, NSBVW, NEJC, MJCK, MGH, SJGSMP, CWadaha, IMSB, RKJCP, SJHSJEC, Wadaha Maharashtra



Sl. No.	Semester	Branch	No. of faculty and students who performed Virtual Lab	No. of Virtual Labs	No. of practical / experiments	Total no. of experiments = No. of faculty and students*No. of experiments
1	All Semester	Science (Physics, Chemistry, Maths, Vocational, English), (MSc,BSc,1 and 12 th , 10 th)	102	7	17	102*17
Grand Total						1734


Total Number of Virtual Labs Experiments Performed: 1734



(Signature)
Faculty in-charge


(Signature)
Head of the Institution

Tel. No. : 9657667030
E-mail : office@cumminscollege.edu.in,
Website : www.cumminscollege.edu.in




Dr. Milind Hanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

■ Tel. No. : 9657667030 ■ E-mail : office@cumminscollege.edu.in,
■ website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering For Women

Sharpening Engineering Acumen with a difference
NAAC Accredited

Mouje Sukli (Gupchup), Hingna, Nagpur-441110
Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Reshtrasant Tukdoji Maharaj Nagpur University



VIRTUAL LAB WORKSHOP REPORT

(29/8/2020)

Name of the college: MKSSS's Cummins College of Engineering For Women Nagpur

Affiliated to: Rashtrasant Tukadoji Maharaj (RTM), Nagpur University

Participants From: LTMW, AMY, ANC, SPKW, PNMP, ZPHS&JC, SOSY, SDMM, RJSCM, RAKS, SPSY, HVPM, COE, Yashraj & Chandrapur

Sl. No.	Semester	Branch	No. of faculty and students who performed Virtual Lab	No. of Virtual Labs	No. of practical / experiments	Total no. of experiments = No. of faculty and students*No. of experiments
1	All Semester	Science (Physics, Chemistry, Maths, Vocational, English), (MSc,BSc, I and 12 th , 10 th)	335	8	18	335*18
Grand Total						6030

Total Number of Virtual Labs Experiments Performed: 6030

(Signature)

Faculty in-charge

(Signature)

Head of the Institution

Tel. No. : 9657667030
E-mail : office@cumminscollege.edu.in,
Website : www.cumminscollege.edu.in



Dr. Milind K. Anapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

■ Tel. No. : 9657667030 ■ E-mail : office@cumminscollege.edu.in,
■ website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 For Women** "शीलं परं भूषणम्"

Sharpening Engineering Acumen with a difference
NAAC Accredited

Mouje Sukli (Gupchup), Hingna, Nagpur-441110
 Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Reshtrasant Tukdoji Maharaj Nagpur University

VIRTUAL LAB WORKSHOP REPORT
(6/9/2020)

Name of the college: MKSSS's Cummins College of Engineering For Women Nagpur
 Affiliated to: Rashtrasant Tukdoji Maharaj (RTM), Nagpur University
 Participating From: CCEEW, SKPCASCK, DAED, PGD, RTMNU, MAV, SMM, JHSMS, C Nagpur, MVJCK, NMM, SHSRN, RSMJC, HHS, GHRV, VBTC, LTGC, SOS, MRC, TRIPS

Sl. No.	Semester	Branch	No. of faculty and students who performed Virtual Lab	No. of Virtual Labs	No. of practical / experiments	Total no. of experiments = No. of faculty and students*No. of experiments
1	All Semester	Science (Physics, Chemistry, Maths, Vocational, English), (MSc, BSc, I and 12 th , 10 th)	225	7	17	225*17
Grand Total						3825

Total Number of Virtual Labs Experiments Performed: 3825

[Signature]
 (Signature)
 Faculty in-charge

[Signature]
 (Signature)
 Head of the Institution

Tel. No. : 9657667030
 E-mail : office@cumminscollege.edu.in
 Website : www.cumminscollege.edu.in

Dr. Milind Khanapurkar
 Principal
 Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference

NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



PARTICIPATIVE LEARNING

■ Tel. No. : 9657667030 ■ E-mail : office@cumminscollege.edu.in,
■ website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



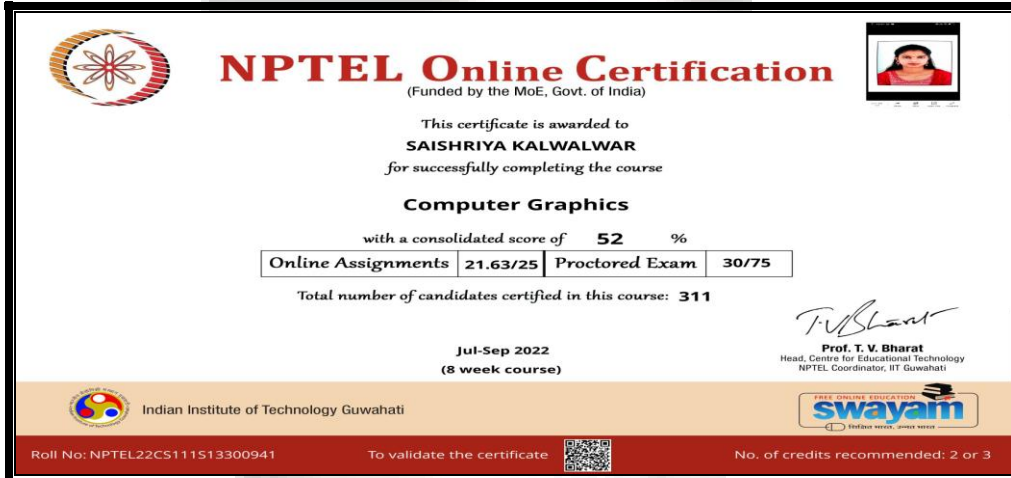
Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

PARTICIPATIVE LEARNING

1. To Take Massive Open Online Courses Provided By Premier Institutions

Besides the conventional modes of teaching such as lectures, videos and reading material, Cummins college of Engineering For Women also provide a platform of the custom eLearning methodologies that encourages self-paced learning.

Following Are The Sample NPTEL Certificates Received By Students



NPTEL Online Certification
 (Funded by the MoE, Govt. of India)

This certificate is awarded to
SAISHRIYA KALWALWAR
 for successfully completing the course

Computer Graphics
 with a consolidated score of **52** %

Online Assignments	21.63/25	Proctored Exam	30/75
--------------------	----------	----------------	-------

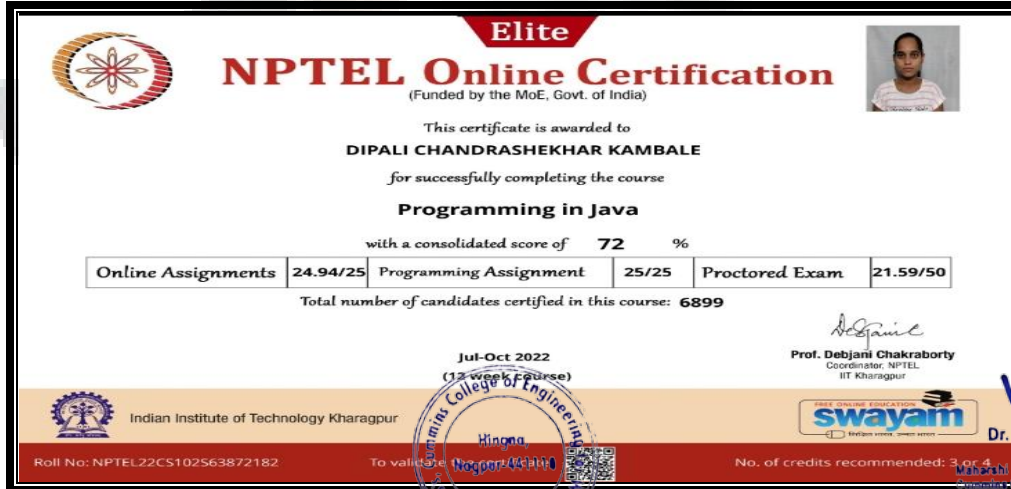
Total number of candidates certified in this course: **311**

Jul-Sep 2022
 (8 week course)

Indian Institute of Technology Guwahati

Prof. T. V. Bharat
 Head, Centre for Educational Technology
 NPTEL Coordinator, IIT Guwahati

Roll No: NPTEL22CS111513300941 To validate the certificate No. of credits recommended: 2 or 3



Elite
NPTEL Online Certification
 (Funded by the MoE, Govt. of India)

This certificate is awarded to
DIPALI CHANDRASHEKHAR KAMBALE
 for successfully completing the course

Programming in Java
 with a consolidated score of **72** %

Online Assignments	24.94/25	Programming Assignment	25/25	Proctored Exam	21.59/50
--------------------	----------	------------------------	-------	----------------	----------

Total number of candidates certified in this course: **6899**

Jul-Oct 2022
 (12 week course)

Indian Institute of Technology Kharagpur

Prof. Debjani Chakraborty
 Coordinator, NPTEL
 IIT Kharagpur

Roll No: NPTEL22CS102563872182 To validate the certificate No. of credits recommended: 3 or 4

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
 website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110



Kautilya
 Dr. Milind Khanapurkar
 Principal
 Maharshi Karve Stree Shikshan Samstha's
 College of Engineering for Women
 Hingna, Nagpur-441110.



Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

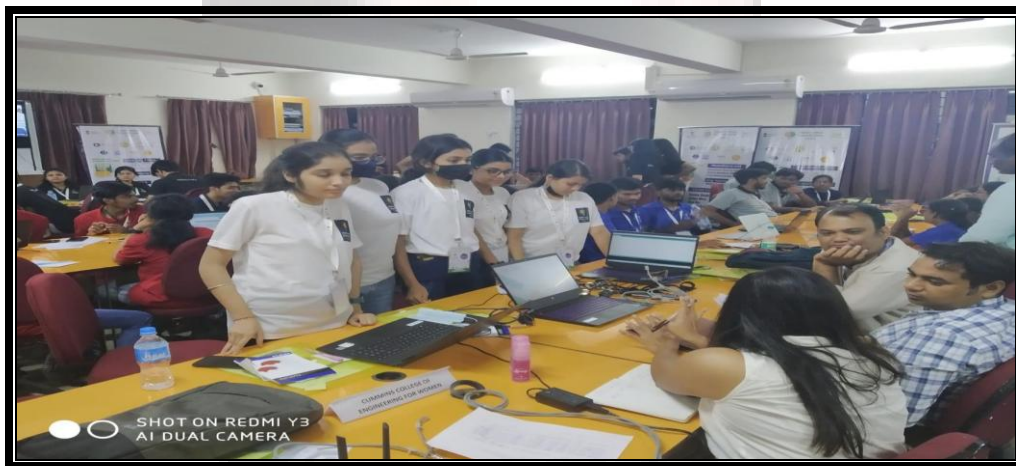


PARTICIPATIVE LEARNING

2. To Work On Problem Statements Offered By Smart India Hackathon

Cummins College of Engineering provides students a platform to solve some of the pressing problems we face in our daily lives, and thus inculcate a culture of product innovation and a mindset of participative learning.

Sample Photos of Students Presenting Their Idea in Smart India Hackathon (Durgapur- West Bengal-2022)



Milind
Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Sample Certificates Received By Students in Smart India Hackathon (Durgapur- West Bengal-2022)



Kaivalya

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

PARTICIPATIVE LEARNING

3. To Participate In Event Like “Unnat Bharat Abhiyan” Offered By Ministry Of Education, Bharat Sarkar



उन्नत भारत अभियान
ग्रामीण विकास एवं प्रौद्योगिकी केंद्र
भारतीय प्रौद्योगिकी संस्थान, दिल्ली
वीजस्वयं, नयी दिल्ली- 110016



UNNAT BHARAT ABHIYAN
INDIAN INSTITUTE OF TECHNOLOGY, DELHI
National Coordinating Institution

Address: V-405, IIT Delhi Main Rd, Block 5, Hauz Khas, New Delhi, 110016
Tel: +91-11-2659 1121/1157, Fax: +91-11-2659 1121
Email: unnatbharatabhiyaniitd@gmail.com

Date: May 30, 2023

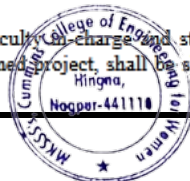
To

Dr. Yogesh Dandekar
Cummins College for Women, Nagpur

Subject: Financial Sanction of Technical Intervention project (No. RP-03525G) under UBA 2.0

Dear Sir

1. This is to intimate you that Technology Intervention proposal under the category of “Technology Development” entitled, “Fabrication of energy efficient cooling chamber for small scale farmers” submitted by you under the *Unnat Bharat Abhiyan 2.0 Program*, Project-No: RP-03525G has been approved by Rural Energy System SEG and funded by the National Coordinating Institute UBA 2.0 (IIT Delhi) against C032332598181 vide dated 17-03-2023.
2. You can use the grant for fulfilling the project objectives under the approved heads as per the proposal, using the established procedure of your institute and as per the UBA guidelines, within 6 months from the date of receiving of funds. Kindly note that the utilization of funds allowed under the head “General Contingency” should not be more than 10% of the total sanctioned fund.
3. *Note: TA/ Honorarium is strictly not permitted in this project.*
4. Any product/service developed under the sanctioned project must have UBA logo on it.
5. Detailed information of faculty in charge and students/volunteers, who will be coordinating/working under the sanctioned project, shall be shared in the project report submitted by your institution.



Kamini
Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

7. Please take care that the position holders/Panchayat officials shall not be benefitted in person. Also, ensure that the project shall not be controversial in terms of beneficiaries. Selection of beneficiaries shall include the Marginalized communities or EWS Category as well.
8. Few videos and images shall be shared to the SEG Coordinator (for updating the status of the project), also the report shall contain good quality pictures of the project site/product/service and feedback from the villagers/beneficiaries.
9. For the projects related to training camps, awareness, rally etc., the in-charge shall share the material/posters/modules to be used in the villages, for the knowledge of SEG Coordinator and further comments, if any.

You are required to submit the completion report/5-6 photographs/3 min videos of the project within two months after the completion of the project to the competent authority of NCI-IIT Delhi, UBA2.0 cell. Without the submission of the completion report, the opportunity for funding of a new project will not be facilitated.

Prof. Vivek Kumar

National SEG Coordinator

Unnat Bharat Abhiyan (UBA 2.0)

National Coordinating Institute

Indian Institute of Technology, Delhi



Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Sample Activities Conducted By Institute Under “Unnat Bharat Abhiyan”

Adopted Village Mandva

Unnat Bharat Abhiyan


Report on Water Conservation Activity at adopted village

Adopted village: Mandva


Mandva village is having a check dam in its surroundings built-up almost 24 years back. The condition was not well and water stored in the water body was not remaining due to the cracks developed in the course of time in the wall.

During the conversation with villagers and an NGO named *Janakalyankari Samiti Nagpur* which is having a good rapport with the institute and the village, it was decided to renovate the dam in year 2021 during Covid pandemic (phase I) and consequent efforts in next year (Phase II) also resulted in the increased water body at the place.

Janakalyankari Samiti Nagpur engaged and deployed the machineries to remove the mud accumulated from several years. Volunteers (students and staff) from Participating Institute, Cummins College of Engineering for Women, Nagpur participated in reconstruction work in both the phases year 2021 and year 2022. Total **depth of digging** is around **3.5 meters** giving **capacity of 24000 cubic meter** for water storage. We are expecting that this year's efforts can result in healthy water body which remains intact with good water level even in scorching heat in the summer of Nagpur region.



Amgaon, Maharashtra, India
Kanholbara-Nagpur Rd, Amgaon, Maharashtra 441110, India
Lat 20.995463°
Long 78.93066°
21/05/22 09:51 AM



Dr. Milind Khanapurkar
Principal





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Workshop on Composting From Kitchen Waste A Green Initiative



REPORT

on

A Workshop on "Composting from kitchen Waste a green initiative"

At Unnat Bharat Abhiyan, Cummins College of Engineering for Women, Nagpur, we always motivate students to work for the community. As a part of awareness developing activity about sustainable growth of the country, Unnat Bharat Abhiyan in collaboration with NSS unit of the institute arranged a workshop on "Composting from Kitchen waste a green initiative". Mrs. Jui Pandharipande, speaker gave thorough input about composting and a task force is formed to run the campaign on compost from kitchen waste at 3 levels viz at individual home, at the hostel mess and at the adopted villages. Principal Dr. Sanjivani Shastri and Mr. Shrikant Gadge, management member graced the occasion. UBA faculty advisor, Yogesh Dandekar organized the workshop with an enthusiastic team of student volunteers. Total 150 students were present and get benefited from the program.



Kinling

Dr. Milind Khanburkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Nagpur-441110

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

PARTICIPATIVE LEARNING

4. Visiting Industry And Having Discussion With Experts On Recent Trends And Problem Statements

Industrial Visits provide students an insight into the real working environment, workstations, plants, assembly lines, machines, systems, and interact with highly trained and experienced personnel. Cummins College of Engineering always participates and takes students to industrial visit to know real working environment and to interact with highly trained personnel.

Sample Glimpses of Students Visited Industry



Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Sample Glimpses of Students Visited Industry



Kindred

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

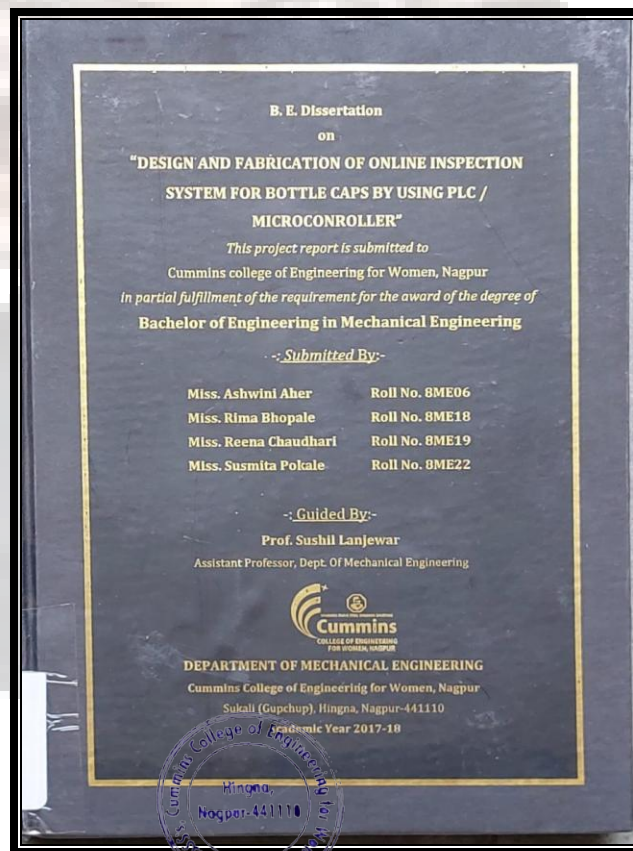


PARTICIPATIVE LEARNING

5. Students Work Together In Project, Coding Activity And Mind Mapping Shows Participative Learning

Project-based learning helps students develop teamwork and problem-solving skills, along with the ability to communicate effectively with others. Students gain analytical skills, problem-solving abilities, communication skills, teamwork skills, and creative thinking as they work on projects. These abilities are crucial not only for academic performance but also for future career success.

Sample Project Thesis & Certificate of Students Shows Participative Learning



Kavind
Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110



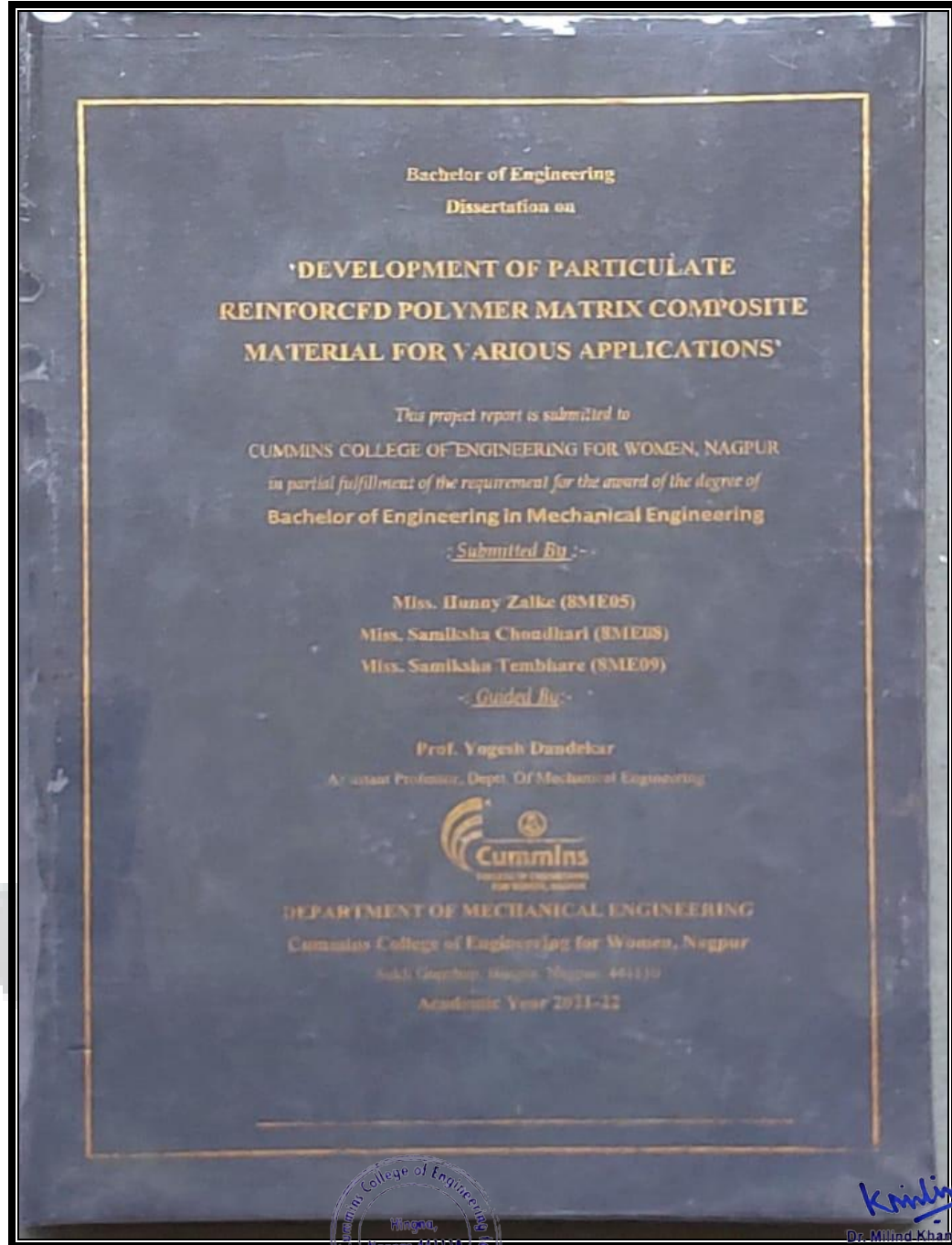


Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



K. M. Khair
Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

-: CERTIFICATE:-

This is to certify that the Project Report on 'Color Based Pattern lock for Theft Security' is a bonafide work and it is submitted to Department of Computer Engineering of *Cummins college of Engineering for Women, Nagpur.*

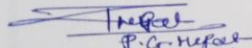
By

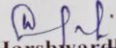
Miss.Namrata S Shambhakar(8CE23)


Miss.Saroj S Sontakke(8CE35)


Miss.Sneha P Vitonde(8CE42)


For partial fulfillment of the Bachelor of Engineering in Computer Engineering academic year 2018-2019 under the guidance of


Prof. Pratik Hepat
Guide


Prof. Harshwardhan Kharpate
Project Coordinator


Prof. Sharyu Deote
HOD, Computer Engineering


Dr. B. P. Joshi
Principal


External Examiner




Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

CERTIFICATE

This is to certify that the Project Report on 'WILDLIFE SANCTUARY NAVIGATOR' is a bonafide work and it is submitted to Department of Computer Engineering of *Cummins college of Engineering for Women, Nagpur.*

Miss. Falguni Gulve

Miss. Tanmayee Jichkar

Miss. Swaroop D. Sakharkar

Miss. Sakshi Dhone

For partial fulfilment of the Bachelor of Engineering in Computer Engineering
academic year 2022-23 under the guidance of

Prof. Abhilasha Borkar

Guide

Prof. Supriya Gupta

Project-coordinator

External Examiner

Dr. S. Shashtri

Principal
OFFICIATING PRINCIPAL
MAHARSHI KARVE STREE SHIKSHAN SAMSTHA'S
CUMMINS COLLEGE OF ENGINEERING FOR WOMEN
HINGNA, NAGPUR-441110

Prof. Sharayu Deote

Head of Department
Department of Computer Engineering
Cummins College of Engg. For Women
Tal.: Hingna Dist.: Nagpur-441110

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Sample Project List (Electronics & Telecommunication Engineering) Shows Participative Learning

Maharshi Karve Stree Shikshan Samstha's Educating Women for 118 years CUMMINS COLLEGE OF ENGINEERING FOR WOMEN <i>Sharpening Engineering Acumen with a difference</i>			
DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION			
List of Final year project synopsis for session 2018-19			
Date:- 19/04/2018			
Sr. No.	Name of Students	Guide	Project Title
Group 1	Kirti Morey	Dr. B. P. Joshi	Design of detection of underground metal objects using GPR technique
	Pratiksha Gaidhane		
	Nikita Nikumb		
Group 2	Shreya Vakil	Prof. A. U. Tinguria	Smart speaking systems for Mute people
	Sakshi Deshmukh		
	Chenali Katre		
Group 3	Mohini Kolhe	Prof. Sandhya Waghmare	Study of On-Divv system using MATLAB simulation & Implement using DSP Processor TMS320C6713
	Ashwini Pendam		
	Gauri Gourshettiwar		
Group 4	Aishwarya Thawari	Prof. Abhishek Baseshankar	Smart Face recognition system
	Koena Dutta		
	Priti Sonare		
Group 5	Jayashri Dadmal	Prof. Jaya Gadge	Raspberry Pi based text reader for blind
	Karishma Bawankar		
	Rajani Bisen		
Group 6	Mayuri Raut	Prof. Pallavi Ganorkar	Mobile Charger with coin insertion mechanism
	Nikita Balpande		
	Diksha Orakey		
	Dipali Wankhade		
Group 7	Mona Pawar	Prof. Atul Jambhulkar/ Prof. Rucha Khandalkar	Smart Home Automation System
	Nikita Mhaiskar		
	Trupti Charde		
Group 8	Shreya Thaknaik	Prof. Amit Fulsunge	Design & Implimentation of ASIC for general purpose LED matrix display
	Shraddha Dawane		
	Renuka Velukar		

Project Coordinator



Head
Department of E & TC
Cummins College of Engg. For Women

Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Maharshi Karve Stree Shikshan Samstha's
Educating Women for 116 years
CUMMINS COLLEGE OF ENGINEERING FOR WOMEN
Sharpening Engineering Acumen with a difference

CCDEW/ETC/19-20
DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION

Sr. No.	Name of Students	Guide
Group 1	Purva Hedao	Dr. B.P. Joshi
	Shruti Mahant	
	Akshata Kamdi	
Group 2	Shrenika Bachuwar	Prof. A. U. Tinguria
	Manishakumari Jha	
	Aishwarya Gardalwar	
Group 3	Komal Kurve	Prof. Sandhya Waghmare
	Priya Jengathe	
	Trupti Charde	
Group 4	Minjee Majumdar	Prof. Abhishek Baseshankar
	Sayali Dahake	
	Subudhyee Ramteke	
Group 5	Qudsiya Firdos	Prof. Jaya Gadge
	Palvi Borkar	
	Radhika Deshmukh	
Group 6	Utkarsha Kosre	Prof. Pallavi Ganorkar
	Priyanka Parate	
	Bhagyashree Lokhande	
Group 7	Pooja Sharma	Prof. Rucha Khandalkar
	Anchal Jemti	
	Dipali Wankhade	
Group 8	Neha Rautray	Prof. Amit Fulsunge
	Nikita Ambadare	
	Priti Sonare	

for PMS
Project Coordinator,
Cummins College of Engineering for Women,
Nagpur-441110

HOD

Dr. Milind Khanapurkar
Principal

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Group No.	Group Name	Guide	Project Title
1	Ankita Shewale	Prof. Jaya Raut	Driving License Controlled Smart Vehicle System
	Aishwarya Sarade		
	Apoorva Sonule		
2	Radhika Deshpande	Prof. Pallavi Tanksale	Assistive Monitoring Device for specially Disabled Individuals
	Vaibhavi Varma		
	Aditi Joshi		
3	Chaitali Jerpotwar	Prof. Sabyasachi Bhattacharya	Automatic Attendance System based on Facial Recognition
	Varada Puranik		
	Vinita Waxar		
4	Samiksha Kshirsagar	Dr. Kanchan Wagh, Prof. Amit G Fulsunge	Wireless Sensor Network
	Mayuri Umare		
	Shital Bhalerao		
5	Shivani Pusadkar	Vaijayanti Panshe, Prof. Saroj Sabu	Temperature Based Automatic Door System
	Ketki Nilajkar		
	Ishwari Halmare		
6	Ashwini Mate	Prof. Anand Deshkar, Prof. Amit G.Fulsunge	TV Remote Home Automation using Arduino
	Kalyani Joshi		
	Ketki Borkar		


Project Incharge
ETC Dept.




HOD
ETC Dept.


Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Maharshi Karve Stree Shikshan Samstha's
Educating Women for 110 years
CUMMINS COLLEGE OF ENGINEERING FOR WOMEN
Sharpening Engineering Acumen with a difference



Department of Electronics and Telecommunication Engineering
Session 2022-2023 (Odd Semester)
Final Year Project Progress Seminar

Date : 28/09/2022

Group No.	Group Name	Project Title	Name of Guide
1	Sneha Thakur	Automatic Ration Distribution System	Prof. Amit Fulsunge
	Maithili Kakde		
2	Akansa Hingwe	Indigenous Development of Door Control Unit(DCU) for Automatic operation of Platform Screen Doors at Metro Stations	Prof. Amit Tripathi
	Neha Khewale		
	Apurva Nimishe		
3	Shreha Mishra	Design and Fabrication of Microstrip Patch Antenna for 5G applications	Prof. Anand Deshkar
	Trupti Dipakwar		
	Pallavi Gajghate		
4	Vishakha Talmale	Smart Uniform for Coal Mine Workers	Dr. Kanchan Wagh
	Pooja Reshimwale		
	Sejal Dahake		

Project COOrdinator

HOD

Head
Department of E & TC
Cummins College of Engg. For Women



Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

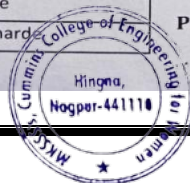
Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Sample Project List (Computer Engineering) Shows Participative Learning

Group No	NAME	Guide	Topic
1	Sayali Rathod	Prof. SD	Train Accident Prevention System
	Ritu Kotalwar		
	Ketaki Patil		
	Shifani Sheikh		
2	Mrunal Kakirwar	Prof. ATB	Indoor Navigation System
	Prachi Nagpure		
	Meenakshi Kharwade		
3	Sakshi Patil	Prof. VR	Social Media Sentiment analysis using ML
	Sneha Bhojar		
	Vanita Amdapure		
4	Vaishnavi Virmalwar	Prof. SCS	Smart Public Distribution System
	Pradnya Pillewan		
	Neha Nagpure		
	Jayshree Deshmukh		
5	Maithili Warkhedkar	Prof. HK	Automated Cooling System
	Janhavi Dande		
	Vaishnavi Moharil		
6	Piyanshu Karankote	Prof. SWK	Single Booth Voting System
	Maliha Sayyad		
	Shreya Shingade		
	Shreya Dubey		
7	Nikita Gaurav	Prof. SAK	CIRCULATE ME
	Gunjan Chauhan		
	Shriya Thakre		
8	Anushakti Bag	Prof. SAK	Wi-Fi calling without SIM and internet
	Yogita Patil		
	Khushbu Bitle		
	Pranjali Ghongade		
9	Shradha Ghatule	Prof. SWK	Smart and Secure Helmet for Coal mine Workers
	Bhavika Bende		
	Aishwarya Chard		



Kinjal
Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference

NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



11	Bhagyashree Dehankar	Prof. SCS	Smart trolley using RFID
	Roshani Dhotre		
	Sakshi Bhagat		
12	Dnyaneshwari Gadhawe	Prof. PH	Searching and Finding Lost phone
	Bhagyashree Deshpande		
	Ayesha Joshi		
13	Aditi Holkar	Prof. ATB	IOT Based Traffic Light configure, monitor and Control system
	Sakshi Mishra		
	Pranjali Khangar		
14	Shrushti Kolhe	Prof. PAL	ViralPost Analyser
	Vedanti Manjule		
	Ruchika Mahajan		
	Sanskriti Godbole		

Sampna
Project Coordinator

Sakshi
HOD
Head
Department of Computer Engineering
Cummins College of Engg. For Women
Tal.: Hingna Dist.: Nagpur-441110



Milind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women

Sharpening Engineering Acumen with a difference
NAAC Accredited



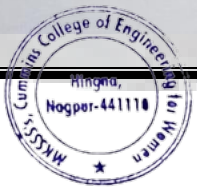
Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Maharshi Karve Stree Shikshan Samstha's
CUMMINS COLLEGE OF ENGINEERING FOR WOMEN, NAGPUR
DEPARTMENT OF COMPUTER ENGINEERING
SESSION (2021-22)
Project Title with Theme

Title of project	Theme	Name of guide	Name of 1st group member	Name of 2nd group member	Name of 3rd group member	Name of 4th group member
YouDemy	Smart Automation	Prof. S. Khamankar	Mahee Jaiswal	Kalyani Kolhe		
Smart City Application	Smart Automation	Prof. S. Khamankar	Akanksha Sontakke	Shradha kutemate	Yashshavi mishra	
Self assessment s/w	Smart Automation	Prof. S. Sahu	Sejal.H.Shahare	Samruddhi wasu	Perna Babhulkar	
The Vasi Mart	Smart Automation	Prof. S. Sahu	Shubhangi	Manasi Bobde	Ruchika Bhaganagarkar	
Real estate price prediction system	Smart Automation	Prof. H. Kharpatte	Rasika Bakre	Tarvi Kate		
Handwritten equation solver	Smart Education	Prof. H. Kharpatte	Asmita Ghosh	Vanshika		
Teacher evaluation system	Smart Education	Prof. S.Kitey	Ashlesha Hedau	Sejal s shahare	Rajuta Rode	
Greenstone(digital library)	Smart Education	Prof. S.Kitey	Diksha Sitawar	Vaishnavi Raut	Himani Parihar	Janhavi Bhanare
Sign language recognition	Smart Education	Prof. H. Kharpatte	Manasi Malge	Vidhi Deshmukh		
A centralize system in college to upload documents of teachers	Smart Education	Prof. A. Borkar	Taruna Dasariya	Ravina Gondane	Ashwini Muneshwar	
Study of Gun diode and plot VI characteristics using Vlab	Smart Education	Prof. H. Kharpatte	Avanti Joshi	Shreya Chalisgaokar	Tithi bhasme	
Application of chit fund system with crypto payments	Blockchain and Cryptography	Prof. S.Kitey	Nupur Jain	Megha Bisane		
Mobile security through cryptography	Cryptography	Prof. S.Khamankar	Ananya Gupta	Janhavi Peshkar	Mrunmayee Deshpande	
Animal species classifier	Miscellaneous	Prof. S. Deote	Anushri lawhale	Nupur bag	Chaitali Ichade	
Crime analyzer	Miscellaneous	Prof. S. Sahu	Prajakta Matey	Sanskruiti bachechuwar	Gouri Kalbande	
Website to upload home made remedies to cure disease	MedTech	Prof. S. Deote	Nidhi Gabhane	Pratiksha Dhobale	Poonam ghorpade	
IoT pulse portable and wearable pulse oximeter	MedTech	Prof. A. Borkar	Aarya Khanapurkar	Anagha Deshpande	Pratiksha Mahale	
Virtual assistance for medical devices	MedTech	Prof. S. Deote	Karishma mishra	Shruti pimpalgaokar	shweta deshmukh	
Advanced COVID Safety vision	MedTech	Prof. S. Deote	Vanshika Bongade	Shreya Dhakhle	Kajal Sahare	
COVID-19 Dashboard	MedTech	Prof. A. Borkar	Aditi A Ambekar	Vedanti Warhadpande		
Online doctor appointment booking system	MedTech	Prof. A. Borkar	Vaishnavi khode	rupal kadam	shruti shrivas	

Prof. Supriya Bani
Project Co-ordinator

Prof. Sharada Deote
Head(CPE)
Head
Department of Computer Engineering
Cummins College of Engg. For Women
Tal.: Hingna Dist.: Nagpur-441110



Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a Difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Maharshi Karve Stree Shikshan Samstha's Educating Women for CUMMINS COLLEGE OF ENGINEERING FOR WOMEN <i>Sharpening Engineering Acumen with a Difference</i>					
Department of Computer Engineering Mega Project 2022-23 <u>Project Title with Theme</u>					
Group No.	Names of Group Members	Guide Alloted	Problem Statement	Area	Theme
G1	Sharmishtha Nasery	Prof. Supriya Gupta	Twitter Sentiment Analysis using Python	Machine Learning	Smart Automation
	Apurva Abale				
	Nirmitee Awachat				
	Sakshi Choudhary				
	Saylee Sorte				
G2	Dhanashri Dahake	Prof. S. Sahu	Application for Mapping of trekking routes	Application Devp	Smart Automation
	Shweta Dhapke				
	Shreya Malve				
G3	Rashmi Kumari	Prof. S. Khamankar	Metro Train Ticket Booking App	Application Devp	Smart Automation
	Nikita Sonewane				
	Pragati Patle				
G4	Bhagyashree Ghodke	Prof. H. Kharpatе	Artikart	Application Devp	Smart Automation
	Ruchita Dehankar				
	Vaishnavi Bhujade				
	Pooja Dewlekar				
G9	Aparna Singh	Prof. Pinky Gangwani	Voice controlled news application using alan AI	Artificial Intelligence	Smart Automation
	Aditi Bhalerao				
	Mugdha Goupale				
G14	Nikita Chaple	Prof. H. Kharpatе	Web based online review management system	Machine Learning	Smart Automation
	Arti Chaple				
G15	Darshna Kadoo	Prof. H. Kharpatе	Attendance system with feedback for CCOEW	Application Devp	Smart Automation
	Antara Patil				
	Bhumika Phalke				
G19	Neha Parween	Prof. S. Sahu	To develop An Android App for AICTE	Application Devp	Smart Automation
	Karishma Sayyed				
	Harshika Lende				
	Isha Kawale				
G20	Asmita Pawar	Prof. S. Khamankar	Geotagging of all educational institute with virtual tour	Application Devp	Smart Automation
	Kshitija Kalbande				
	Shraddha Kamble				
	Vedaanti Badwaik				
G5	Anushta Sharma	Prof. Pinky Gangwani	Android App-Farmer's Complete Guide	Application Devp	Agriculture, FoodTech & Rural Development
	Rithika Nethi				
	Neha Singh				
	Radhika Purohit				
G13	Khushi Bhushan	Prof. Abhilasha Borkar	Potato diseases detection using AI-ML	Artificial Intelligence	Agriculture, FoodTech & Rural Development
	Harsha kumar				
	Grusha Dadiyal				
G17	Sakshi Bhagwat	Prof. S. Deote	Agriculer aap (Crops and Water prediction base soil texture)	Sensor Network	Agriculture, FoodTech & Rural Development
	Sakshi Kumbhare				
	Shreya Ashtikar				
	vaishnavi patel				
G6	Srimoyee Dutta	Prof. S. Sahu	Medi- Price Assistant	Application Devp	MedTech/BioTech / HealthTech
	Amruta Kashikar				
	Aditi Bhardwaj				
	Vaishali Pathania				
G7	Aayushi Pandit	Prof. Supriya Gupta	Android application voice assistant for visually impact people	Application Devp	MedTech/BioTech / HealthTech
	Divya Wandhare				
	Bhargavi Chendke				
	Harshal Jodangade				



K. Milind
Dr. Milind Khanapurkar
 Principal

Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.

■ Tel. No. : 9657667030 ■ E-mail : office@cumminscollege.edu.in,
 ■ website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Group No.	Names of Group Members	Guide Alloted	Problem Statement	Area	Theme
G8	Tanmayee Jichkar	Prof. Abhilasha Borkar	Wild life sanctuary	Application Devp	Tourism
	Falguni Gulve				
	Swaroop Sarkharkar				
	Sakshi Dhone				
G11	Sakshi Shende	Prof. S. Deote	Tourism Management	Web App	Tourism
	Shraddha Khuraswar				
	Shraddha Puttariya				
G10	Srushti Vaidya	Prof. Pinky Gangwani	Car Price Prediction	Prediction Analysis	Miscellaneous
	Siddhanti Pampattiwar				
	Divya katkar				
	Renuka Vanamala				
G12	Shreya Telang	Prof. S. Deote	facial and speech emotion recognition using Machine Learning	Machine Learning	Miscellaneous
	samruddhi Virkhare				
	Sidra Sheikh				
	Jahnvi Meshram				
G16	Janvi Patil	Prof S. Khamankar	Help on Wheels	Application Devp	Smart Vehicles
	Sonal Singh				
	Swarali Dharmadhikari				
	Riddhi Patankar				
G18	Jyoti gokhale	Prof. Abhilasha Borkar	Parking Management system	Application Devp	Smart Vehicles
	Sonali Jadhav				
	Dhanshree Wankhede				

Supriya
Prof. Supriya Bani
Project Coordinator

Deote
Prof. Sharayu Deote
Head(CE)



KmLind
Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Sample Project List (Mechanical Engineering) Shows Participative Learning

Maharshi Karve Stree Shikshan Samstha's
Educating Women for 150 years
CUMMINS COLLEGE OF ENGINEERING FOR WOMEN
Sharpening Engineering Acumen with a difference

Cummins
COLLEGE OF ENGINEERING
FOR WOMEN, NAGPUR

Department of Mechanical Engineering
PROJECT DETAILS (2018-19)

Sr. No	Students Name	Guide Name	Title of the Project
1	Kajal Sharnagat	Dr. Shailesh Khekale <i>SK</i>	Design and Development of Bricquette Making Machine
	Mamta Rathod		
	Shruti Padole		
2	Monali Bawankar	Prof. Sushil Lanjewar <i>SL</i>	Fabrication of Cotton Wick Making Machin
	Monali Thakre		
	Uma Kore		
3	Alfiza Khan	Prof. Aditya Kawadaskar <i>AK</i>	Development of Round Bottle Labelling Machine
	Pratiksha Panchabai		
	Roshani Mondol		
	Shubhangi Dhade		
4	Achal Bhagat	Prof. Prasanna Mahankar <i>PM</i>	Design and Development of Small Size Home Composting Machine
	Pooja Wankhede		
	Poonam Shete		
	Rutuja Menghare		

G. J. J.
Project Coordinator

Chell
Head of Department
(Dr. M. R. SHURAB)

Milind
Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110



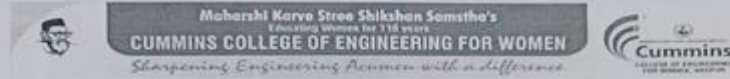


Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Department of Mechanical Engineering
PROJECT DETAILS (2021-22)

Sr. No	Students Name	Guide Name	Title of the Project
1	Pranali Mahant	Prof. Yogesh Dandekar	Design and Development of Loading & Unloading Device for Oxygen Cylinder
	Runali Gurnule		
	Shwetali Sorle		
2	Aakanksha Deshpande	Prof. Prasanna Mahankar	Failure Analysis of Seals Using Ansys
	Anikta Singh		
	Apurva Sharma		
3	Hunny Zalke	Prof. Yogesh Dandekar	Development of Particulate Reinforced Polymer Matrix Composite Material for Various Applications
	Samiksha Choudhari		
	Samiksha Tembhare		
4	Dipti Gawande	Dr. Shailesh Khekale	Optimization of performance of Center Lathe Machine for Turning Operation
	Shivani Tete		
	Twinkle Fating		

Project Coordinator

Head of Department
(Dr. M. R. SHINDA)
16/08/2022



Principal

Dr. Minna Vinayaparkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110



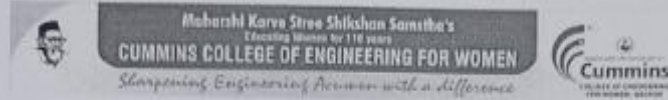


Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Department of Mechanical Engineering
PROJECT DETAILS (2022-23)

Sr. No	Students Name	Title of the Project	Guide Name	Sign of Guide
1	Soundarya Moon	Design and Development of Automated Decoction (Kashaya) Making Machine	Prof. Sushil Lanjewar	
	Swati Rahangdale			
	Tejal Bele			
2	Divyani Joshi	Design and Development of An Evaporative Cooler Mist Nozzle	Dr. Mahesh Shukla	
	Ishu Tembhare			
	Tejasvini Chavhan			
3	Amanjeet Kaur	Testing of Mechanical Properties of Flyash Reinforced Polymer Matrix Composite Material for Various Applications	Prof. Yogesh Dandekar	
	Shruti Dhole			
	Trushna Suryawanshi			
4	Suhani Ambekar	Design and Fabrication of Fixture Forlathe	Dr. Shailesh Khokale	
	Jessica Sontakke			
	Urvashi Shende			
5	Radhika Naitam	Design and Analysis of A Machine for Dental Suction Applications	Dr. Nikhil Bhawe	
	Tanaya Khond			
	Yukta Kuhike			
6	Sejal Singanjude	Fabrication of Punching Machine for Aluminium Sheet	Prof. Aditya Kawadaskar	
	Vaishnavi Ugale			
	Sayali Bhongade			
7	Tannu Kanojiya	Testing of Thermally Aged PU Material and Investigating its Properties	Prof. Prasanna Mahankar	
	Kaiyani kadwe			

Project Coordinator

HoD
M.R. SHUKLA

02/08/2022

Dr. Milind Khanapurkar
Principal



Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

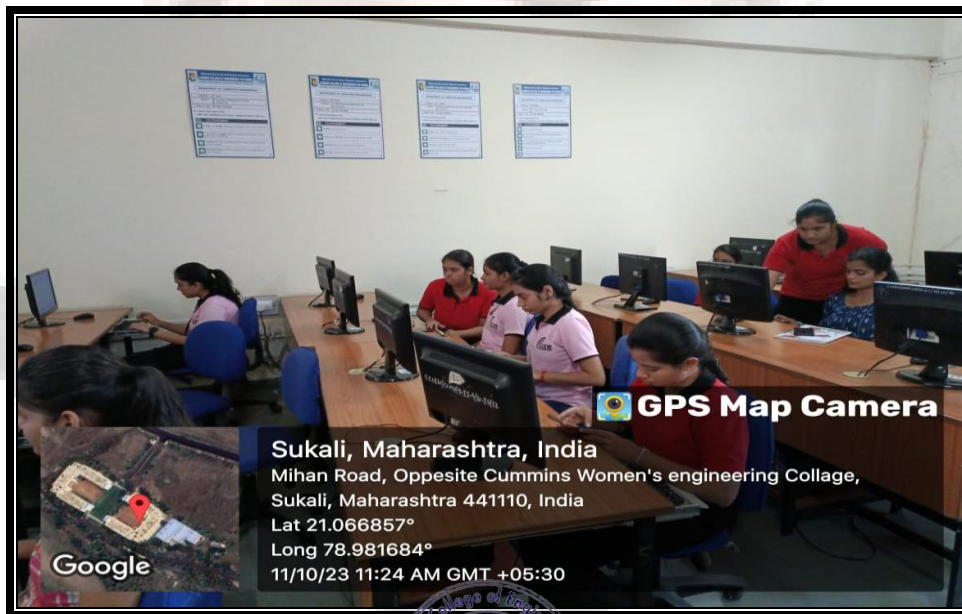
Sharpening Engineering Acumen with a difference

NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Sample Glimpses of Coding Activity Shows Participative Learning



Kind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference

NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



PROBLEM SOLVING METHODOLOGIES

■ Tel. No. : 9657667030 ■ E-mail : office@cumminscollege.edu.in,
■ website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

PROBLEM SOLVING METHODOLOGIES

Problem Solving Methodology in TLP at Cummins College of Engineering For Women, Nagpur is of Prime Importance. Problem Solving Methodology are Imparted With Students With Various Means.

Following are Some Problem Solving Methodologies Adapted at Institute.

1. Role Play Which Allow Students To Act Out A Situation And Reflect On Their Behaviors And Those Of Others

Here students are participated in classroom activity to learn by performing tasks or activities.

Following Sample Glimpses Shows Students Actively Participated To Understand The Concept Of Bubble Sort and Insertion Sort



Kavind
Dr. Minakshi Kharwar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

PROBLEM SOLVING METHODOLOGIES

2. Group Discussion and Brain Storming

Following Are the Sample Glimpses of Group Discussion Conducted By
Subject Teachers



K. Milind

Dr. Milind K. Manapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

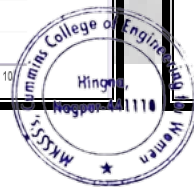
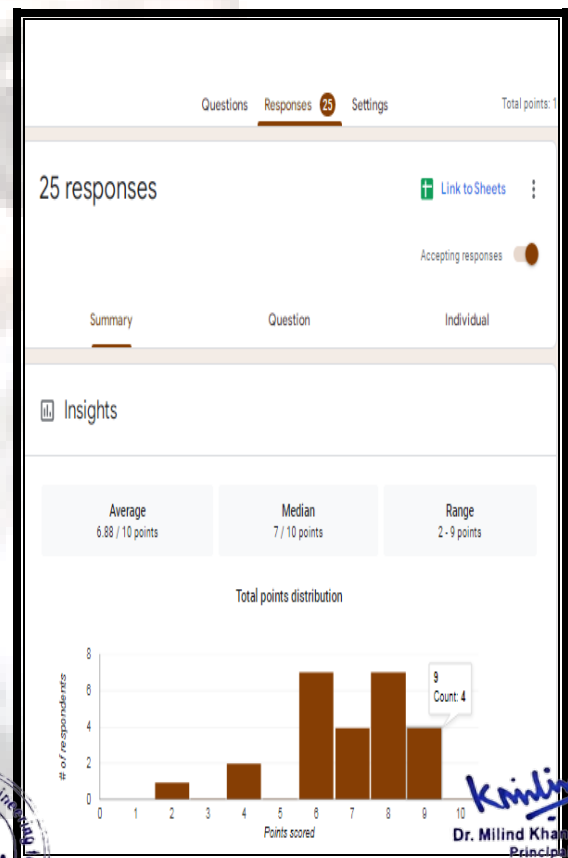
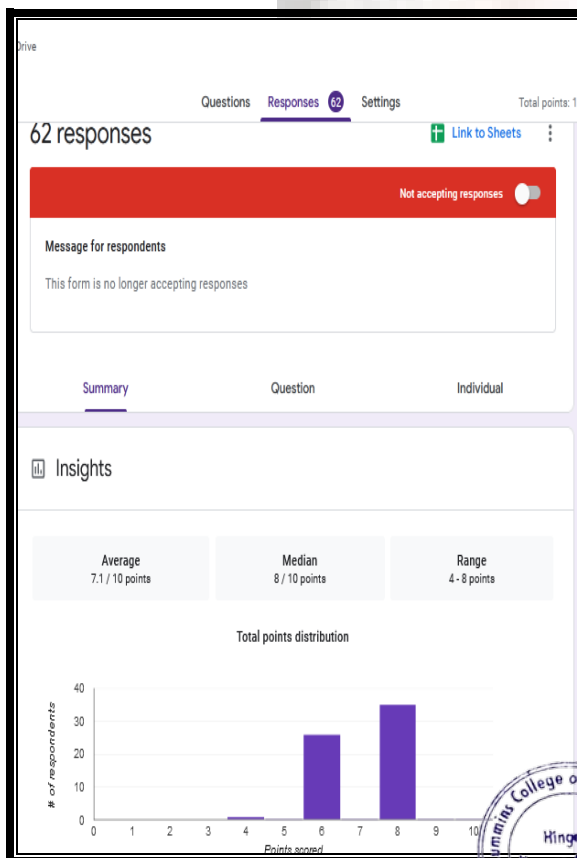


PROBLEM SOLVING METHODOLOGIES

3. Quizzes Are Conducted By Subject Teachers

Subject teachers at Cummins College of Engineering for Women, Nagpur conduct quizzes to help reinforce learning over the long term and to recall knowledge they've already acquired. Quizzing will continue to evolve as we work to improve student learning. Despite the availability of technologies, the content must come first. Examining involves more than simply general knowledge; it also involves making connections, interpreting hidden meanings, and drawing conclusions. It emphasizes rational thinking.

Following Are the Sample Quizzes Conducted By Subject Teachers



Kindred
Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a Difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University


PROBLEM SOLVING METHODOLOGIES

4. Solving Problems in Tutorials Hours


Students Are Able To Practice And Solve Problems In Tutorial Hours As Per Scheme.

Following Are Sample photos of Tutorial given and solved by students.

Sample Photos of Tutorial Solved By Allied Science Students




Maharshi Karve Stree Shikshan Samstha's
CUMMINS COLLEGE OF ENGINEERING FOR WOMEN
Sharpening Engineering Acumen with a Difference



1st Sem B. E. (Allied Science)
Tutorial
Engineering Graphics

1. A line PQ 100 mm long, is inclined at 30° to the H.P. and at 45° to the V.P. Its mid-point is in the V.P. and 20 mm above the H.P. Draw its projections, if its end P is in the third quadrant and Q in the first quadrant.
2. A Line AB 70 mm long is inclined at an angle 30° to the H.P. Its end A is 10 mm above the H.P. and 15 mm in front of the VP, front view length of the line is 50 mm. Draw the projections of line AB
3. The projectors of ends of a line AB are 60 mm apart. End A is 50 mm above the H.P. and 25 mm in front of V.P. while the end B is 20 mm above HP and 75 mm in front of V.P. Draw its projections and find its inclinations with H.P. and V.P.



Kanind
Dr. Mand Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.



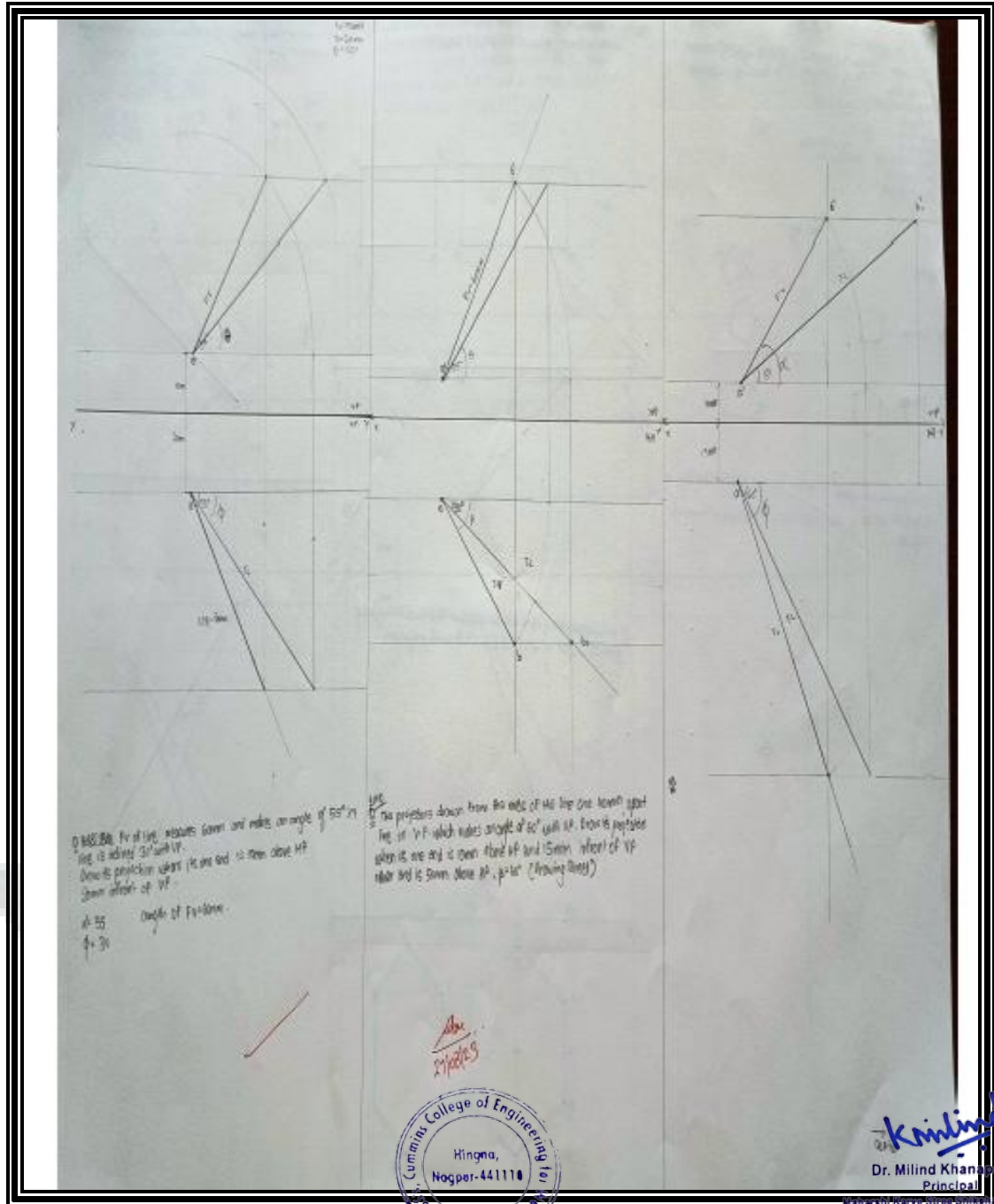


Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Dr. Milind Khanapurkar
Principal

Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Tutorials Worksheet 2018-19

Department: Allied Sciences Sem: II Subject: Applied Maths-II

Topic: Vector Differentiation Completion Date: 16/02/2019

Q1. A particle moves along the curve $x = 2t^2$, $y = t^2 - 4t$, $z = 3t - 5$. Find the component of velocity and acceleration at $t=1$ in the direction $i-3j+2k$.

Q2. Find the directional derivative of $\frac{1}{r}$ in the direction of \vec{r} where $\vec{r} = x\vec{i} + y\vec{j} + z\vec{k}$.

Q3. Find the unit vector normal to the surface $x^4 - 3xy + z^2 + 1 = 0$ at the point $(1, 1, 1)$.



K. Milind
Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a Difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Palak Bonele
Roll No: 1B33.

Q.1 a A particle moves along the curve $x = 2t^2$
 $y = t^2 - 4t$, $z = 3t - 5$ where t is the
time. find the components of its velocity
and acceleration at time $t = 1$ in the
direction $i - 3j + 2k$

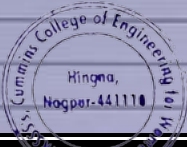
→ Let \vec{r} be the position vector of any
point of $P(x, y, z)$ the given curve
 $\vec{r} = xi + yj + zk = 2t^2i + (t^2 - 4t)j + (3t - 5)k$
for $t = 1 \Rightarrow \vec{v} = \frac{d\vec{r}}{dt} = 4i - 2j + 3k$
 $\vec{a} = \frac{d\vec{v}}{dt} = \frac{d^2\vec{r}}{dt^2} = 4i + 2j$, $t = 1 \Rightarrow \vec{a} = \frac{d^2\vec{r}}{dt^2} = 4i + 2j$

Now unit the vector in the direction of
 $i - 3j + 2k$
 $\hat{n} = \frac{i - 3j + 2k}{\sqrt{1 + 9 + 4}} = \frac{i - 3j + 2k}{\sqrt{14}}$

Component of velocity $\vec{v} \cdot \hat{n} = (4i - 2j + 3k) \cdot \frac{i - 3j + 2k}{\sqrt{14}} = \frac{5 + 6 + 0}{\sqrt{14}} = \frac{11}{\sqrt{14}}$

Component of the acceleration $\vec{a} \cdot \hat{n} = (4i + 2j) \cdot \frac{i - 3j + 2k}{\sqrt{14}} = \frac{4 - 6 + 0}{\sqrt{14}} = \frac{-2}{\sqrt{14}}$

Sukli



Kamini
Dr. Milind Khanolkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.



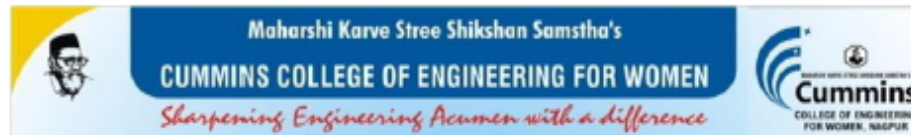


Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Tutorials Worksheet 2020-21

Department: Allied Sciences Sem: I Subject: Applied Maths-I

Topic: Partial Differentiation equation Completion Date: 15/01/2021

Que: 1) If $u = \tan^{-1} \left[\frac{x^3 + y^3}{x - y} \right]$ then prove that

$$x^2 \frac{\partial^2 u}{\partial x^2} + 2xy \frac{\partial^2 u}{\partial x \partial y} + y^2 \frac{\partial^2 u}{\partial y^2} = \sin 4u - \sin 2u$$

Que: 2) If $\phi = f(x, y, z)$ and $x = \sqrt{vw}$, $y = \sqrt{wu}$, $z = \sqrt{uv}$ then prove that

$$u \frac{\partial \phi}{\partial u} + v \frac{\partial \phi}{\partial v} + w \frac{\partial \phi}{\partial w} = x \frac{\partial \phi}{\partial x} + y \frac{\partial \phi}{\partial y} + z \frac{\partial \phi}{\partial z}$$

Que: 3) If $u = f\left(\frac{x}{y}, \frac{y}{z}, \frac{z}{x}\right)$ then find value of $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y} + z \frac{\partial u}{\partial z}$



Kinling

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a Difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Date: / /

Anushree Zade

Sec A

1) If $u = \tan^{-1} \left\{ \frac{x^2 + y^2}{x - y} \right\}$ prove that $x^2 \delta^2 u + 2xy \delta^2 u + y^2 \delta^2 u = \sin 4u - \sin 2u$

\Rightarrow let $u = \tan^{-1} \left\{ \frac{x^2 + y^2}{x - y} \right\}$
 $\tan u = \frac{x^2 + y^2}{x - y}$

Here z is a homogeneous function of x and y having degree $n = 3 - 1 = 2$
By Euler's theorem

$$x \cdot \frac{\partial}{\partial x} + y \cdot \frac{\partial}{\partial y} = n \cdot P$$
$$x \cdot \frac{\partial}{\partial x} (\tan u) + y \cdot \frac{\partial}{\partial y} (\tan u) = 2 \tan u$$
$$x \cdot \sec^2 u \cdot \frac{\partial u}{\partial x} + y \cdot \sec^2 u \cdot \frac{\partial u}{\partial y} = 2 \tan u$$
$$x \cdot \frac{\partial u}{\partial x} + y \cdot \frac{\partial u}{\partial y} = 2 \sin u \cdot \cos u$$
$$x \cdot \frac{\partial u}{\partial x} + y \cdot \frac{\partial u}{\partial y} = \sin 2u \quad \text{--- (1)}$$

Kavindia
Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



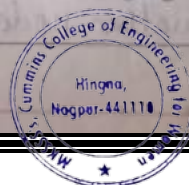
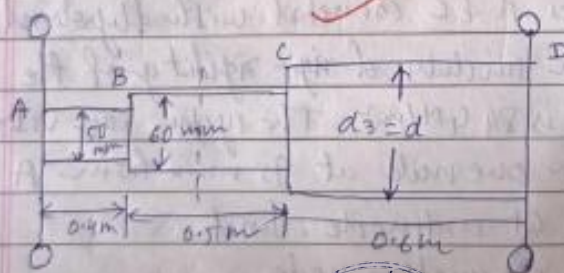
Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

i) A steel shaft ABCD 1.5 m long has flywheel at its ends A and D. The mass of the flywheel A is 600 kg and a radius of gyration of 0.6 m. The mass of the flywheel D is 800 kg and has a radius of gyration of 0.4 m. The connecting shaft has a diameter of 50 mm for the portion AB which is 0.4 m long; and has a diameter of 60 mm for the portion BC which is 0.5 m long; and has a diameter of d mm for the portion CD which is 0.6 m long. Determine:

- 1) The dia. ' d ' of the portion CD so that the node of the system will be at the centre of the length BC; and
- 2) the natural frequency of the torsional vibrations. The modulus of rigidity for the shaft material is 80 GN/m².

⇒ Given: $L = 1.5\text{ m}$, $m_A = 600\text{ kg}$; $k_A = 0.6\text{ m}$; $m_D = 800\text{ kg}$;
 $d_1 = 50\text{ mm} = 0.05\text{ m}$; $l_1 = 0.4\text{ m}$; $d_2 = 60\text{ mm} = 0.06\text{ m}$;
 $l_2 = 0.5\text{ m}$; $d_3 = d$; $l_3 = 0.6\text{ m}$; $C = 80\text{ GN/m}^2$

$C = 80 \times 10^9\text{ N/m}^2$



Kinld

Dr. Milind Khanapurekar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a Difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

$= 34.42 \text{ m or } 20.88 \text{ m}$
 $l_A = 0.025 \text{ m} \quad l = 0.86 \text{ m or } 0.52 \text{ m}$
polar moment of Inertia of equivalent shaft
 $J = \frac{\pi}{32} (d_1)^4 = \frac{\pi}{32} (0.025)^4 = 0.614 \times 10^{-6} \text{ m}^4$
 $f_{n1} = \frac{1}{2\pi} \sqrt{\frac{C \cdot J}{l_A \cdot I_A}} = \frac{1}{2\pi} \sqrt{\frac{80 \times 10^9 \times 0.614 \times 10^{-6}}{0.86 \times 800}} \text{ Hz}$
 $= 1.345 \text{ Hz} \quad l_A = 0.86 \text{ m}$
Torsional vibrations for two node
 $f_{n2} = \frac{1}{2\pi} \sqrt{\frac{C \cdot J}{l_A \cdot I_A}} = \frac{1}{2\pi} \sqrt{\frac{80 \times 10^9 \times 0.614 \times 10^{-6}}{0.52 \times 800}} \text{ Hz}$
 $= 1.73 \text{ Hz} \quad l_A = 0.52 \text{ m}$
1 (b) $l_c = 20.88 \text{ m}$
Corresponding value of l_c in an original system is the propeller
 $= 20.88 \left(\frac{d_2}{d_1}\right)^4 = 20.88 \left(\frac{0.025}{0.05}\right)^4 = 1.3 \text{ m}$
one node occurs at a distance of $l_A = 0.52 \text{ m}$ from the engine and the other node at a distance of $l_c = 1.3 \text{ m}$ from the propeller.



Kinind
Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.



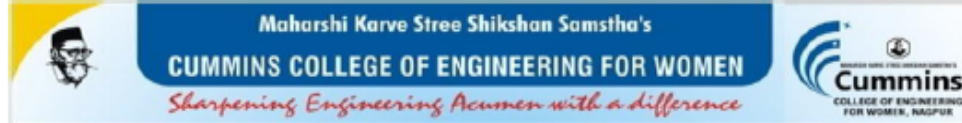


Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Department of Mechanical Engg.

Tutorials Worksheet 2021-22

Sem: 6th

Subject: EC-2

Topic: Energy conversion

Completion Date: 07/02/2022

- Q1. What is Humidity or Specific Humidity or Relative Humidity.
- Q2. What is Due point Temperature.
- Q3. What is wet Bulb temperature.



Kinling

Dr. Milind Khanolkar
Principal
Maharshi Karve Stree Shikshan Samstha's
College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Tutorial

① Humidity OR specific Humidity or Humidity Ratio

It is the ratio of the mass of water vapour (w.v) to the mass of dry air (d.a) in a given volume of the mixture.

It is denoted by ω

$$\omega = \frac{m_v}{m_a} = \frac{V/v_v}{V/v_a} = \frac{v_a}{v_v}$$

In terms of pressure

$$\omega = 0.622 \frac{P_v}{P_a} \text{ kg w.v / kg d.a}$$

The unit of ω is kg of w.v / kg of d.a

If multiplied by 1000

$$\omega = 622 \frac{P_v}{P_a} \text{ g w.v / kg d.a}$$


Kamini

By: **Mahesh Khannapurkar**
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

We know that $P = P_a + P_v$

$\omega = 0.622 \frac{P_v}{P - P_v}$

② Absolute Humidity ω It is the amount of (or mass of) water vapour present in 1m^3 of dry air. It is expressed in g/m^3 of dry air (S.I.)

③ Relative Humidity ϕ It is the ratio of the mass of water vapour (m_v) in a certain volume of moist air at a given temperature to the mass of water vapour $m_{v,s}$ in the same volume of saturated air at the same temperature.

It is denoted by ϕ or 'RH'



Kinlind

Dr. Milind Khaparkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Department of Mechanical Engg.

Tutorials Worksheet 2019-20

Sem: 6th

Subject: OR

Topic: Introduction to Operation Research

Completion Date: 19/01/2020

- Q1. Define Operation Research.
- Q2. What are characteristics of OR ?
- Q3. What is Scope of OR in Management ?
- Q4. What are various phases in Problem solving give details.
- Q5. What is the role of OR in decision making ?
- Q6. What are the applications of OR.
- Q7. What is model? What are the different types of model used in OR ?



K. Milind

Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110



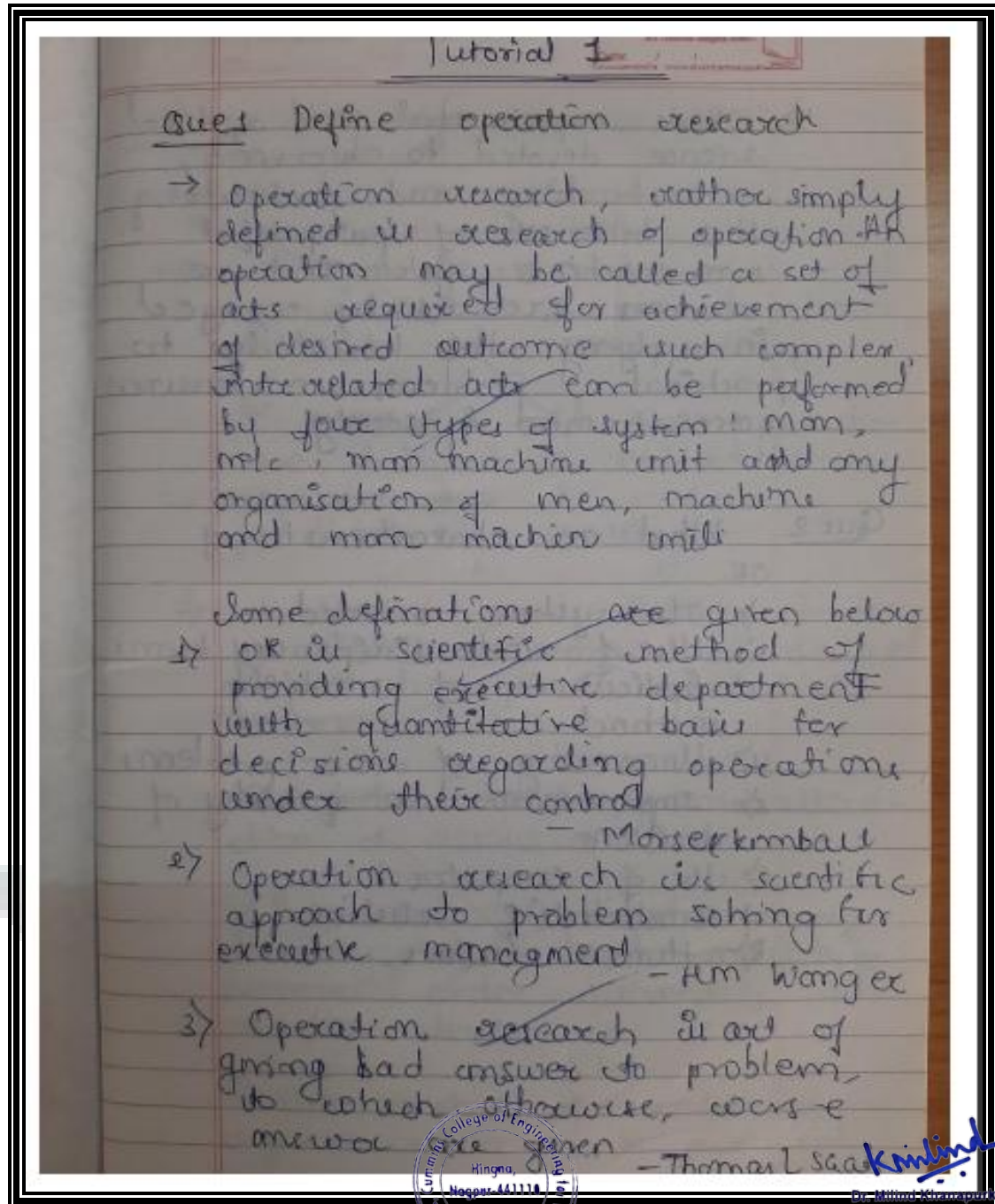


Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



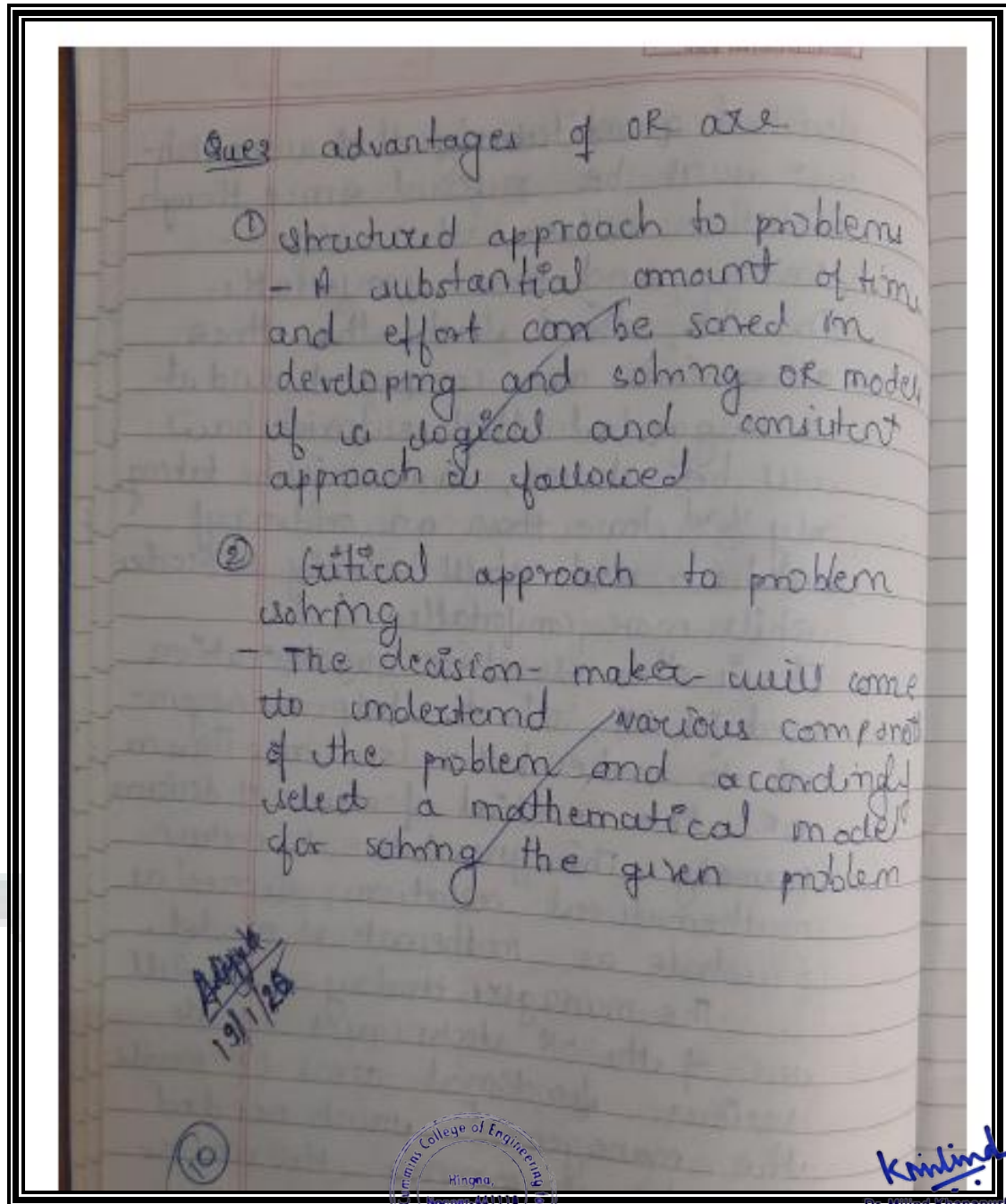


Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Kimlind

Dr. Anil Chinnappa
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110






Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited




Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Sample Photos of Tutorial Solved By Computer Engineering Students



Maharshi Karve Stree Shikshan Samstha's
CUMMINS COLLEGE OF ENGINEERING FOR WOMEN
Sharpening Engineering Acumen with a difference



Tutorials Worksheet 2022-23


Department: Computer Engineering Sem: III Subject: DCFM


Topic: Number System & KMAP Completion Date: 05/09/22

Ques: 1) Perform the following operations.
(a) $(10110110.11)_2 = (?)_{10}$ (b) $(3287.51)_{10} = (?)_8$

Ques: 2) Simplify the given function using K-map
a) $f(A,B,C,D) = \sum m(0,1,4,7,11,12,13,15) + d(3,6,10)$
b) $f(W,X,Y,Z) = \pi M(1,3,4,8,10,12,13,15).d(2,11)$

Ques: 3) Simplify the given function using K-map
 $F(A,B,C,D) = \sum m(0,1,4,7,11,12,13,15)$





Dr. Milind Khanapurkar

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.





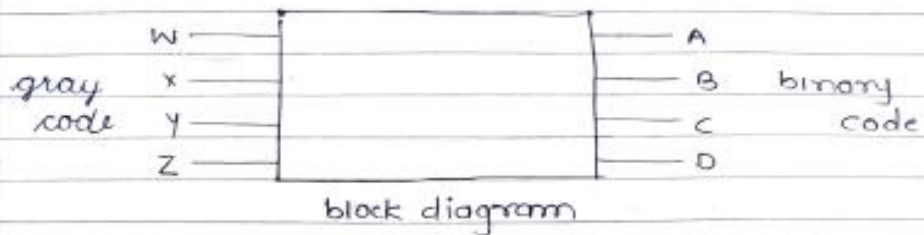
Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Que 1] Design a 4 bit gray code to binary code converter.



Truth Table :-

I/P				O/P			
W	X	Y	Z	A	B	C	D
0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1
0	0	1	1	0	0	1	0
0	0	1	0	0	0	1	1
0	1	1	0	0	1	0	0
0	1	1	1	0	1	0	1
0	1	0	1	0	1	1	0
0	1	0	0	0	1	1	1
1	1	0	0	1	0	0	0
1	1	0	1	1	0	0	1
1	1	1	0	1	0	1	1
1	1	1	1	1	0	1	0
1	0	1	0	1	1	0	0
1	0	1	1	1	1	0	1
1	0	0	0	1	1	1	0
1	0	0	1	1	1	1	1



Kamini
Dr. Milind Khanolkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

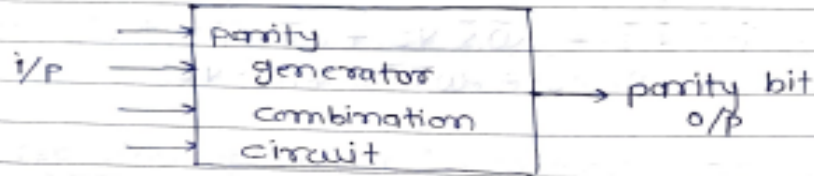
Sharpening Engineering Acumen with a difference
 NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

$$F = \bar{W} \times \bar{Y} \bar{Z} + \bar{W} \bar{x} y z + \bar{W} x y z + W x \bar{Y} z + W x y z + W x y \bar{z} + W \bar{x} \bar{Y} \bar{z} + W \bar{x} y z$$

Design a 4-bit odd parity generator.



Truth table :-

i/p				o/p
W	x	y	z	
0	0	0	0	1
0	0	0	1	0
0	0	1	0	0
0	0	1	1	1
0	1	0	0	0
0	1	0	1	1
0	1	1	0	1
0	1	1	1	0
1	0	0	0	1
1	0	0	1	1
1	0	1	0	0
1	0	1	1	0
1	1	0	0	0
1	1	0	1	0
1	1	1	0	0
1	1	1	1	0



Asipda
 65-09-22
Kamini

Dr. Milind Khanapurkar
 Principal

Cummins College of Engineering for Women
 Hingna, Nagpur-441110.



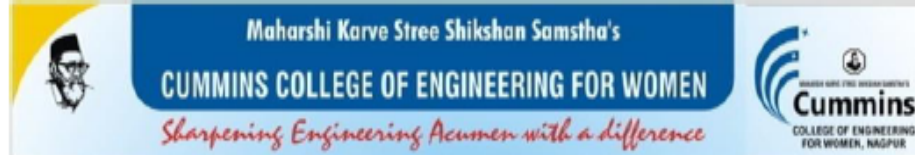


Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Tutorials Worksheet 2021-22

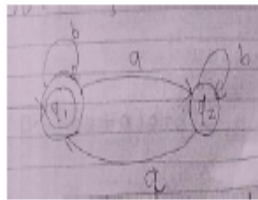
Department: Computer Engineering Sem: V Subject: Theory of Computation

Topic: Regular Grammar Completion Date: 09/11/2021

Que: 1) Convert Given RE to FA.

$$R=10+(0+11)0^*1$$

Que: 2) Convert Given FA to RE.



Que: 3) Convert RG to FA.

$$\{S \rightarrow aS | aA, A \rightarrow bS | aB, B \rightarrow bS | a\}.$$



K. Milind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Name: Swaroop D. Sakhankar ... SCE66

RE to FA


$P = 10 + (0+11)0^*1$

Step I

Step II

Step III: Result

[Handwritten signature]



Khind
Dr. Milind Khanaparkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a Difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Transition table for NFA

q	a	b
→S	AS, A	S
AA	∅	B
B	C	∅
C	∅	∅

Now we have to convert NFA to DFA

S	a	b
→S	[SA]	S
[SA]	[SA]	[SB]
[SB]	[SA, C]	[S]
[SA, C]	[SA]	[SB]

aba → accepted
 bba aadba → accepted
 abbababa → Rejected.



Kindly
 Dr. Milind Khairapurkar
 Principal

Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.



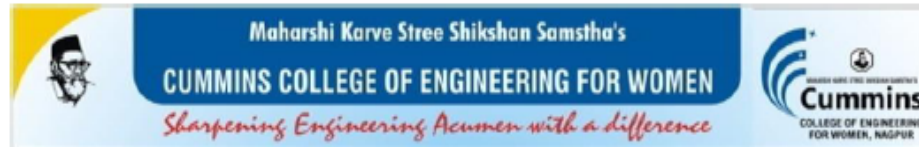


Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Tutorials Worksheet 2021-22

Department: Computer Engineering Sem: V Subject: Java Programming

Topic: Basic Java Programming Completion Date: 18/01/2022

Que: 1) Write a Program in Java to Perform the arithmetic operations.

Que: 2) Write a Program in Java to count the number of digits in each number.

Que: 3) Write a Program in Java to find the largest number of a given three numbers.



Kinind
Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Name: *Agashvi Pandit*
Roll No: *500-01*
Sub: *Java Programming*

```
1 import java.util.Scanner;
2
3 class Main {
4     public static void main(String[] args) {
5
6         char operator;
7         int number1, number2, result;
8
9         // create an object of Scanner class
10        Scanner input = new Scanner(System.in);
11
12        // ask users to enter operator
13        System.out.println("Choose an operator (+, -, *, or /):");
14        operator = input.next().charAt(0);
15
16        // ask users to enter numbers
17        System.out.println("Enter first number:");
18        number1 = input.nextInt();
19
20        System.out.println("Enter second number:");
21        number2 = input.nextInt();
22
23        switch (operator) {
24
25            // perform addition between numbers
26            case '+':
27                result = number1 + number2;
28                System.out.println(number1 + " + " + number2 + " = " + result);
29                break;
30        }
31    }
32 }
```



Kinind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

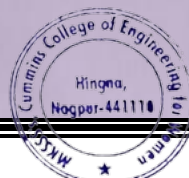
Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

```
Enter an operator: *, -, +, or /
Enter first number
0
Enter second number
5
0.0 * 5.0 = 0.0

...Program finished with exit code 0
Press ENTER to exit console.
```



K. Milind

Dr. Milind Khansurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





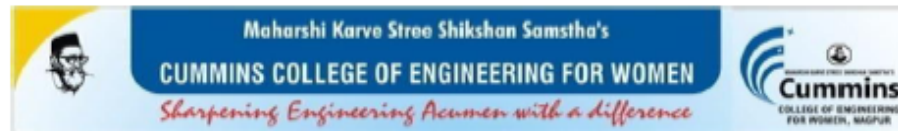
Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



**Sample Photos of Tutorial Solved By Electronics & Telecommunication
Engineering Students**



Tutorials Worksheet 2021-22

Department: Electronics & Telecommunication Engineering

Sem: III

Subject: DSD

Topic: Number System

Submission Date: 02/09/21

Ques: 1) Write a 4 bit binary table using 8421 coding system.

Ques: 2) Write a 5 bit binary table using 8421 coding system.

Ques: 3) Convert $(453.157)_{10} \rightarrow (?)_8$

Ques: 4) Convert $(1572.151)_D \rightarrow (?)_{16}$

Ques: 5) Convert $(1572.151)_D \rightarrow (?)_7$



Kautilya
Dr. Milind Khanapurekar
Principal

Mouje Sukli, Gupchup, Hingna, Nagpur-441110
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

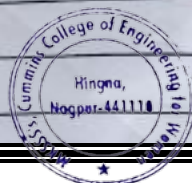
Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Q.1 write a 4-bit binary table using 8421 coding system

→	Decimal System	Binary system (8421)			
		8	4	2	1
	0	0	0	0	0
	1	0	0	0	1
	2	0	0	1	0
	3	0	0	1	1
	4	0	1	0	0
	5	0	1	0	1
	6	0	1	1	0
	7	0	1	1	1
	8	1	0	0	0
	9	1	0	0	1
	10	1	0	1	0
	11	1	0	1	1
	12	1	1	0	0
	13	1	1	0	1
	14	1	1	1	0
	15	1	1	1	1



knitind

Dr. Milind Kherapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.





Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women

Sharpening Engineering Acumen with a Difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Q.4 Decimal to Hexadecimal Conversion
(1572.151)₁₀ = (?)₁₆

Decimal No.	÷	Base	Quotient	Remainder
1572	÷	16	98	4
98	÷	16	6	2
6	÷	16	0	6

Q.5 Decimal to any Number Conversion
(159.75)₁₀ → (?)₇

Decimal No.	×	Base	Result
0.151	×	16	2.416
0.416	×	16	6.656
0.656	×	16	10.496
0.496	×	16	7.936

(1572.151)₁₀ → (624.26A)₁₆

Q.5. Decimal to any No.
(59.75)₁₀ → (?)₇

Decimal No.	÷	Base	Quotient	Remainder
59	÷	7	8	3
8	÷	7	1	1
1	÷	7	0	1

Decimal No.	×	Base	Result
0.75	×	7	5.25
0.25	×	7	1.75
0.75	×	7	5.25

02-09-21



Dr. Milind K. Kulkarni
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Tutorials Worksheet 2021-22

Department: Electronics & Telecommunication Engineering

Sem: 7th

Subject: Data Compression & Encryption

Submission Date: 10/12/21

Ques: 1) Explain Strengths & weaknesses of DES.

Ques: 2) What are weaknesses of Cipher key & weak Keys.

Ques: 3) What is the disadvantage of using weak key.



Kinind
Dr. Milind Khairapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Q1) Strength of DES

1. Use of 56-Bit Keys :

With a key length of 56 bits, there are 2^{56} possible keys, so, a Brute-force attack appears impractical. Assuming that, on an average, half of the possible keys has to be searched a single machine performing one DES encryption per microsecond would take more than thousand years to break the cipher.

2. Nature of the DES Algorithm:

Cryptanalysis is possible by exploiting the characteristics of the DES Algorithm, focus of concern has been on the S-Boxes that are used in each iteration. Because the design criteria for these S-Boxes and for the entire algorithm were not made public, there is a suspicion that the boxes were constructed in such a way that cryptanalysis is possible for an opponent who knows the weaknesses in the S-Boxes.

3. Timing Attacks:

A timing attack is one in which information about the key or the plaintext is obtained by observing how long it takes a given implementation to perform decryption on various ciphertexts. A timing attack exploits the fact that an encryption or decryption algorithm often takes slightly different amount of time on different inputs.



Kinjal
Dr. Kinjal S. Napurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
 for Women**

Sharpening Engineering Acumen with a difference
 NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
 Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

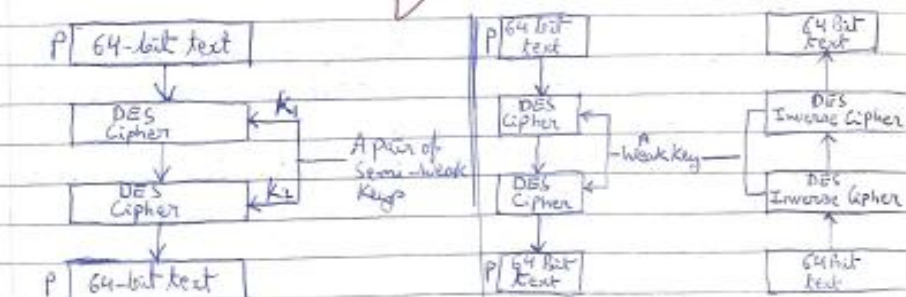
iii. Semi Weak Keys:

There are six key pairs that are called semi-weak keys. A semi-weak key creates only two different round keys and each of them is repeated eight times. In addition, the round keys created from each pair are the same with different orders.

There are eight equal round keys in each semi-weak key. Round Key 1 in the first set is the same as round key 16 in the second set. Round Key 2 in the first set is the same as round key 15 in the second set and so on. This means that the keys are inverse of each other.

Semi-weak key pair table-2

First Key in the Pair	Second Key in the Pair
01FE 01FE 01FE 01FE	FE01 FE01 FE01 FE01
1FE0 1FE0 0E11 0E11	E01F E01F F10E F10E
01E0 01E1 01F1 01F1	E001 E001 F101 F101
1FFE 1FFE 0EFE 0EFE	FE1F FE1F FE0E FE0E
011E 011E 010E 010E	1F01 1F01 0E01 0E01
E0FE E0FE F1FE F1FE	FE00 FE00 FEF1 FEF1



Ex: A pair of Semi-Weak Keys in Encryption and Decryption

Ex: Double Encryption and Decryption with a weak key



Kamini

Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
 Cummins College of Engineering for Women
 Hingna, Nagpur-441110.





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

ICT Tools, Smart Boards And Online Learning Resources Are Provided To Make Teaching Learning Process Effective

Cummins College of Engineering for Women, Nagpur always strives hard to make teaching learning process live and effective. Smart boards, ICT tools are installed, Online learning resources are provided; teachers used online tools like Google Meet and Google Classroom to make teaching and learning process Experiential, Participative and Problem Solving.

Faculties used online platform like Google Meet and Google Classroom to impart subject and technical knowledge in students.

Following is the Sample list of links of Google Classroom and Google Meet

Cummins College of Engineering For Women, Nagpur

Information of Online Classes Conducted

Faculty Name	Subject Name	Link for Google meet
Dr S Shastri	Applied Physics	https://meet.google.com/cds-uzdc-fed
		https://meet.google.com/cdz-bsda-qcr
		https://meet.google.com/vph-marz-sek
		https://meet.google.com/zbs-znvn-wee
		https://meet.google.com/egc-fbuk-cgu
		https://meet.google.com/eby-hcsw-unn
		https://meet.google.com/igt-pxst-qfi
Dr. A Gedam	Energy and Environment	https://meet.google.com/urr-sqsf-vbk
		meet.google.com/zxz-hrps-xaf
		meet.google.com/abg-ojkd-kmm
		meet.google.com/pxf-jeaj-ozz
Prof. P Gorantiwar	Applied Maths-I & II	https://meet.google.com/dxd-ueav-ydb
	Applied Maths-III (CE)	https://meet.google.com/rpk-izds-gpy
	Applied Maths-III (E & TC)	https://meet.google.com/mma-sjvo-hqx



Kamind

Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference

NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Cummins College of Engineering For Women, Nagpur

Information of Online Classes Conducted

Faculty Name	Subject Name	Link for Google meet
Prof. P Gorantiwar	Applied Maths-I & II	https://meet.google.com/dxd-ueav-ydb
	Applied Maths-III (CE)	https://meet.google.com/rpk-izds-gpy
	Applied Maths-III (E & TC)	https://meet.google.com/mma-sjvo-hqx
Prof. S Uttarwar	Discrete Mathematics and Graph Theory	https://meet.google.com/yui-ozau-dpz
	Discrete Mathematics and Graph Theory	https://drive.google.com/file/d/1pglMEEJ_BM_X59HNeHqi4rLrkuV-W5j3H/view?usp=drive_link
	Applied Mathematics I,II	https://drive.google.com/file/d/1pBFJo6bNtJ6tu1yO9RbZ1UVGkeo8U7rE/view?usp=drive_link
	Applied Mathematics I,II	https://drive.google.com/file/d/1fHIWtxwIG8EkvOqZ3XPCqQH2vx9hJQmk/view?usp=drive_link
	Applied Mathematics I,II	https://drive.google.com/drive/folders/1OgEqIuJAG91aB459h3HgiE2f_gVwvA1vylqJvXFjIRS/SITwt4lieCdtMsAemEHhYinKQAUjP?usp=drive_link
	Applied Mathematics III	https://meet.google.com/ziu-wxtf-ehc
	Applied Mathematics I,II	https://meet.google.com/yui-rmiy-mtr
Dr. S Bompilwar	Applied Physics	https://classroom.google.com/c/MTA4NTYwMjkzOTY4?cjc=6g246gb
	Applied Physics	https://meet.google.com/dvu-osek-uyo
	Applied Physics	https://classroom.google.com/c/NDU2Mzg4NzMONDc4?cjc=4ergrez
Prof. Sharayu Deote	DBMS	https://meet.google.com/ofk-yiwp-bwj
	IANS	https://meet.google.com/kit-gtnn-jce



Kinind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

IT Infrastructure and E-Learning Facilities Built For Students

Following is the details of Internet, hardware and data center facility built at institute

Currently college is having **700 MBPS Internet Bandwidth** with contention ratio **1:1**.

Hardware Facility:

Sr. No.	ICT facility	Quantity
1	Projectors	23
2	Cybernetics Smart Boards	4
3	Senses Smart Boards	2
4	Servers	4
5	Wifi Access Points/Routers	23
6	CCTV cameras	53
7	LED TV (Monitoring)	5
8	Online Conference System	2
9	Computers	317
10	Printers	21
11	Xerox Machine	2
12	Scanners	3
13	Barcode Scanners	2
14	Speakers	10
15	Headphones	36
16	UPS	8
17	CISCO SG350 Layer-2 24 port switches	22



Kind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Details of Data Center:

Sr. No.	Data Center Facility	Quantity
1	Fortigate 200f Firewall	1
2	Aruba 6300 M Layer 3 Switch	1
3	Aruba 1960 1G 4 port SFP port switch	1
4	Servers <ul style="list-style-type: none">HPE DL380 (G10) for StorageHPE Easystore 1460 NAS Server	2
5	Storage	45 TB

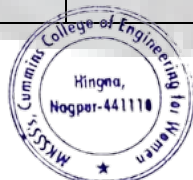
Details of E-Learning Resources Provide:

Summary of subscriptions for e-journals

Name of Databases	2022-23	2021-22	2020-21	2019-20	2018-19
J-Gate Journal of Engineering & Technology	Yes	Yes	Yes	Yes	Yes

Summary of subscriptions for e-ShodhSindhu

Details	2022-23	2021-22	2020-21	2019-20	2018-19
e-ShodhSindhu	Yes	Yes	Yes	Yes	Yes



Kanind
Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Summary of subscriptions for Shodhganga Membership

Details	2022-23	2021-22	2020-21	2019-20	2018-19
	Yes	Yes	Yes	Yes	Yes
Shodhganga Membership	Only available for Universities. The institute is affiliated to RTMNU, Nagpur and the university is having the membership				

Summary of subscriptions for Local and / or Remote access to library resources

Details	2022-23	2021-22	2020-21	2019-20	2018-19
SLIM 21 Software & Open Source KOHA Software	SLIM	SLIM	SLIM	SLIM	KOHA



K. Milind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

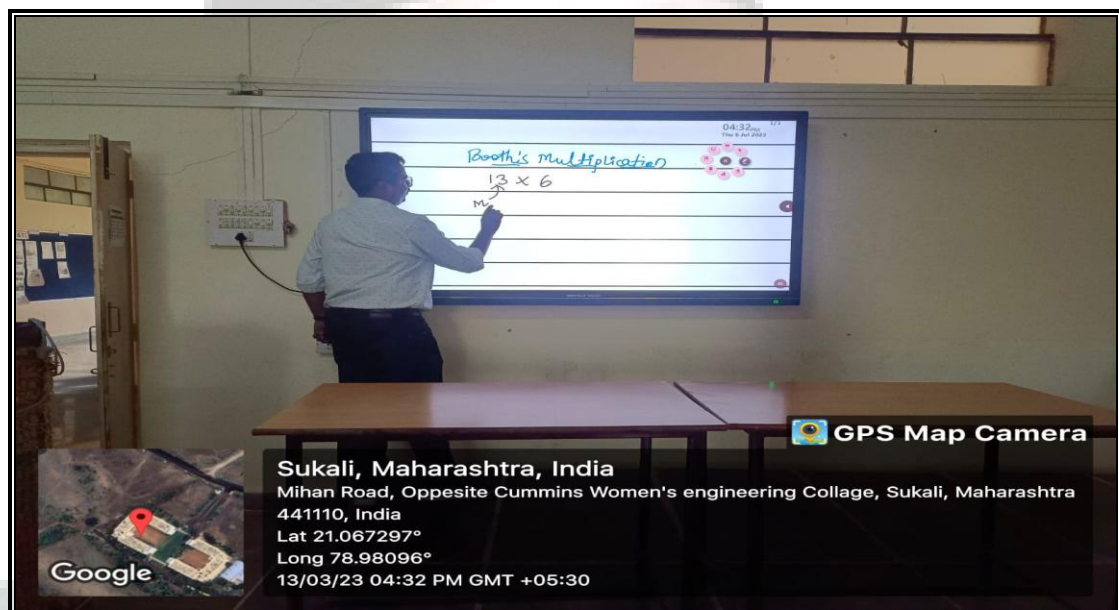


Smart Boards Along With Wifi Are Installed In All Departments

Here at Cummins College of Engineering for Women, Nagpur, Smart Boards are installed at the all department which improves the learning experience while making teachers' lecture delivery better. They allow teachers and students to learn collaboratively, share files, access online resources and use educational software.

Sample Glimpses of Smart Boards Installed and Used in Classroom Teaching

Smart Board Installed in Electronics & Telecommunication Classroom



Kinlind

Dr. Milind Khanapurkar
Principal

Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women

Sharpening Engineering Acumen with a difference
NAAC Accredited

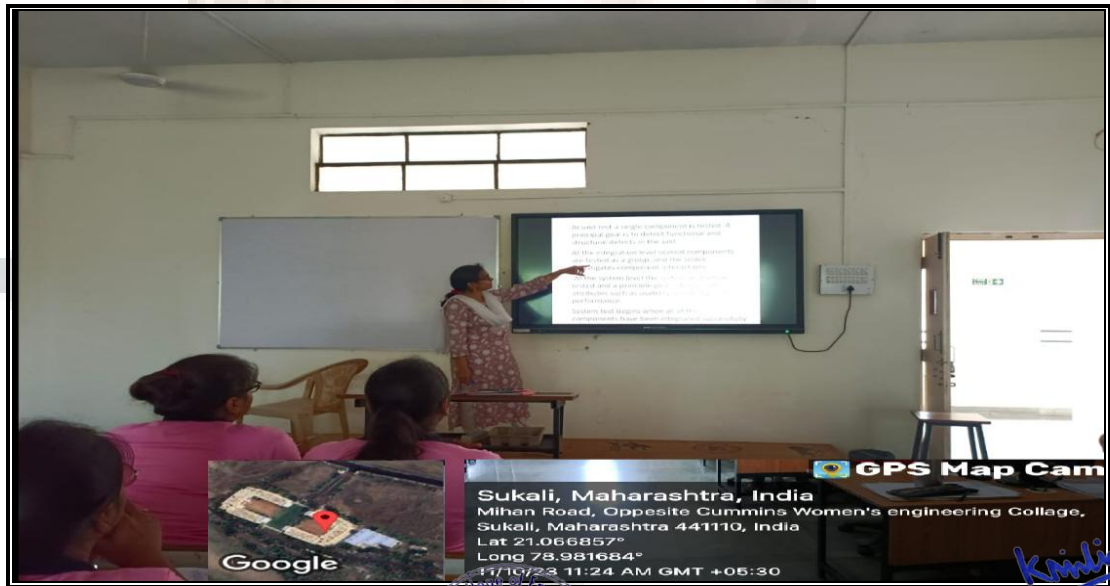


Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Sukali, Maharashtra, India
Mihan Road, Opposite Cummins Women's engineering Collage,
Sukali, Maharashtra 441110, India
Lat 21.066857°
Long 78.981684°

Smart Board Installed in Computer Engineering Classroom



Sukali, Maharashtra, India
Mihan Road, Opposite Cummins Women's engineering Collage,
Sukali, Maharashtra 441110, India
Lat 21.066857°
Long 78.981684°
11/10/23 11:24 AM GMT +05:30



Kinkind

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

All The Classrooms Are Enabled With ICT Tools

Faculties used ICT tools, Google Classroom, Google Meet and Online tools for better delivery of knowledge. ICT has become an essential tool in offering students a comprehensive education at all times, enabling them to develop all their digital skills and abilities, thus enriching the teaching-learning process with dynamic and innovative methodologies.

Following Are Sample Glimpses of ICT Enabled Classroom and Laboratory



Kindred

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women

Sharpening Engineering Acumen with a Difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



GPS Map Camera

Sukali, Maharashtra, India
Mihan Road, Opposite Cummins Women's engineering Collage, Sukali, Maharashtra 441110, India
Lat 21.067232°
Long 78.981211°
19/08/23 09:46 AM GMT +05:30

Google



GPS Map Camera

Sukali, Maharashtra, India
3X8M+C5, Sukali, Maharashtra 441108, India
Lat 21.066705°
Long 78.98149°
10/10/23 10:06 AM GMT +05:30

Google



GPS Map Camera

Sukali, Maharashtra, India
Mihan Road, Opposite Cummins Women's engineering Collage, Sukali, Maharashtra 441110, India
Lat 21.066501°
Long 78.981518°
10/10/23 09:56 AM GMT +05:30

Google



GPS Map Camera

Sukali, Maharashtra, India
3X8M+C5, Sukali, Maharashtra 441108, India
Lat 21.066704°
Long 78.98149°
10/10/23 03:28 PM GMT +05:30

Google



Kinshuk

Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110





Maharshi Karve Stree Shikshan Samstha's
**Cummins College of Engineering
for Women**

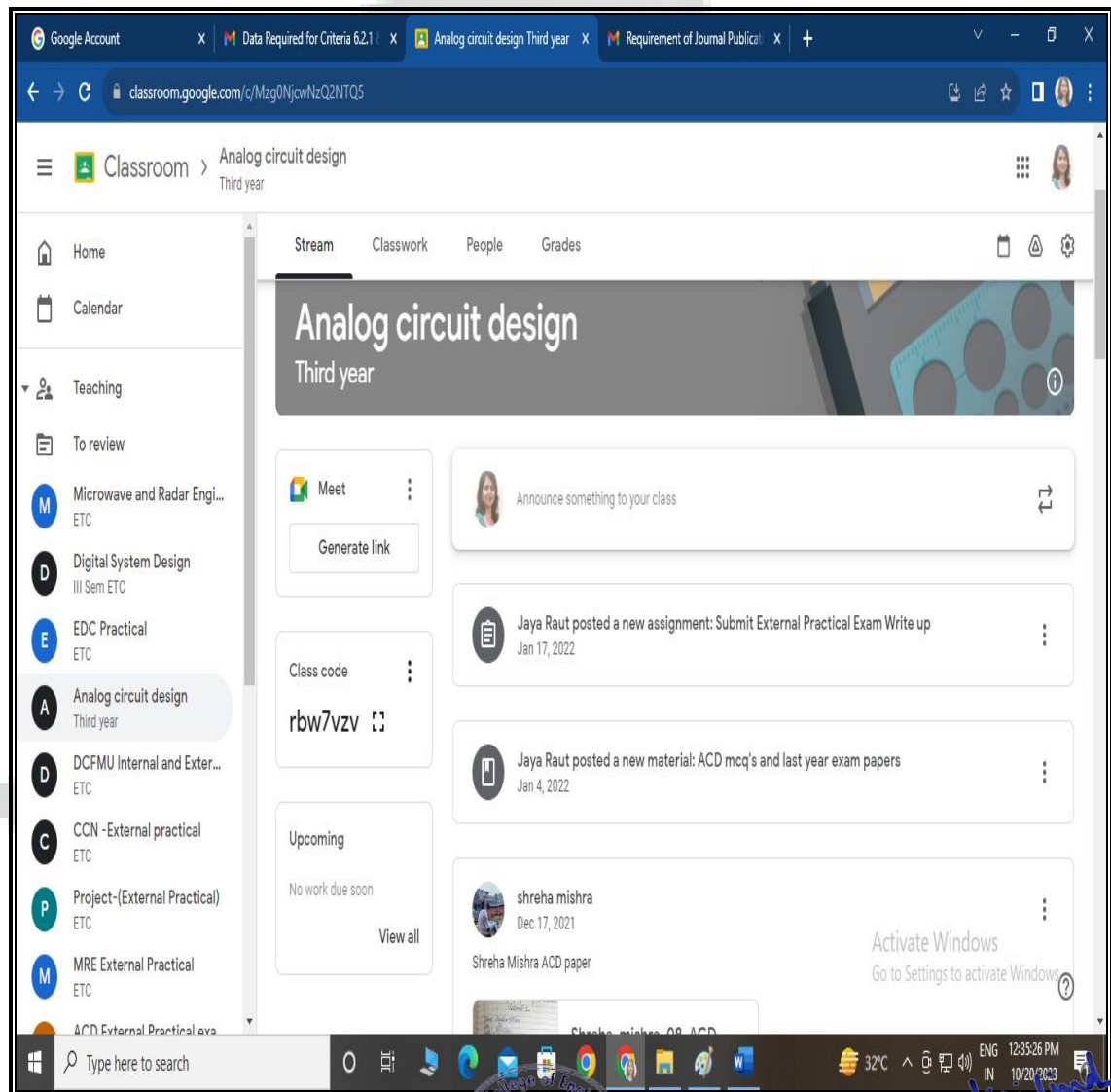
Sharpening Engineering Acumen with a difference
NAAC Accredited

Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Use of Google Classroom and Google Meet

Following Are Sample Screenshots of Learning Through Google Classroom and Google Meet



Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in

Mouje Sukli (Gupchup), Hingna, Nagpur-441110



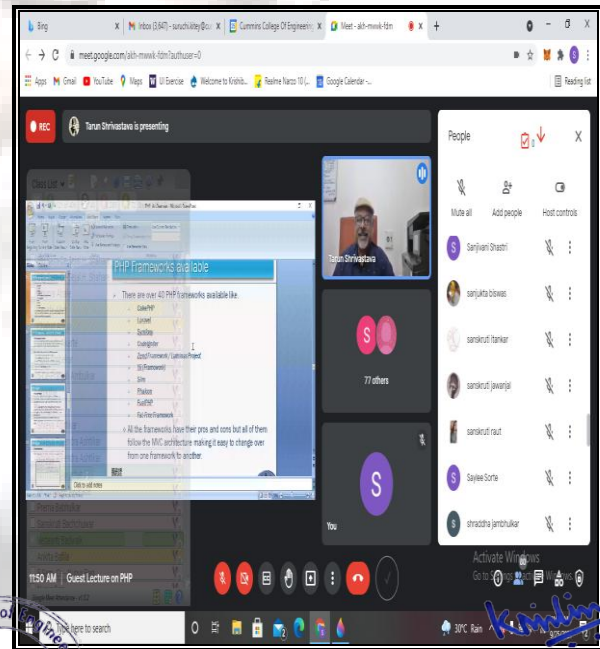
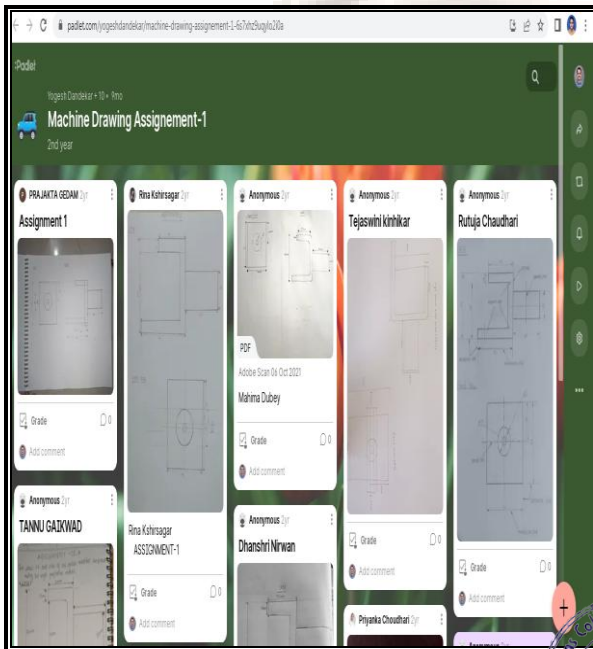
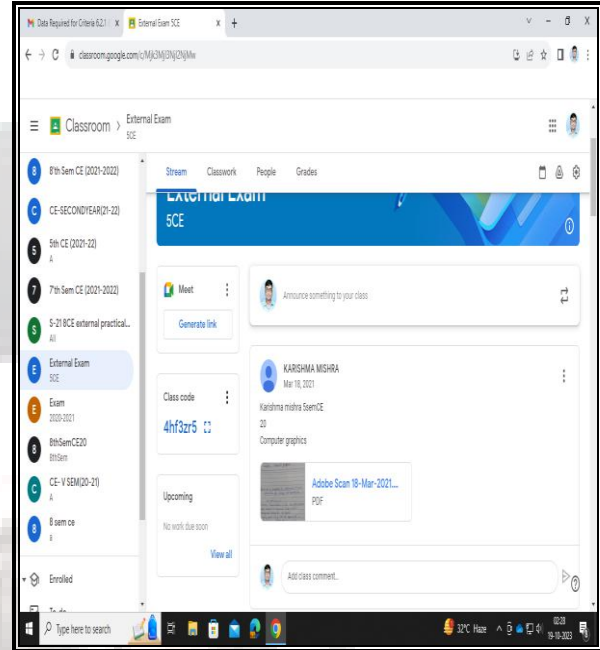
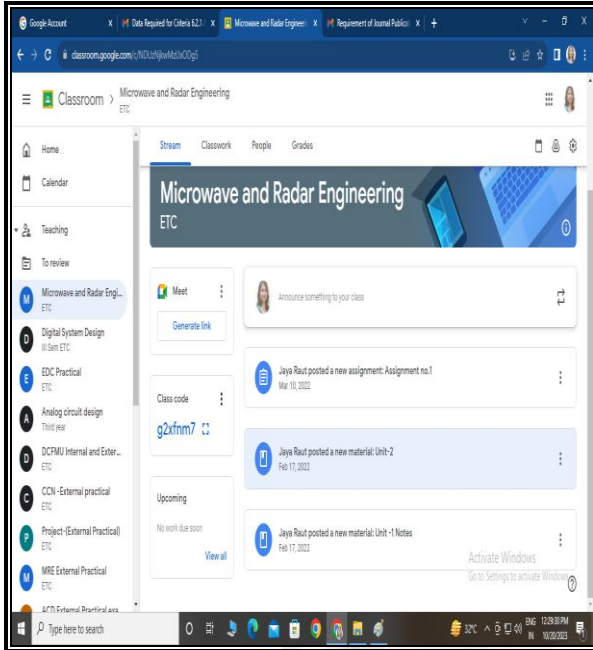


Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women

Sharpening Engineering Acumen with a difference
NAAC Accredited



Approved by AICTE, New Delhi & DTE, Mumbai
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University



Dr. Milind Khanapurkar
Principal
Maharshi Karve Stree Shikshan Samstha's
Cummins College of Engineering for Women
Hingna, Nagpur-441110.

Tel. No. : 9657667030 E-mail : office@cumminscollege.edu.in,
website : www.cumminscollege.edu.in
Mouje Sukli (Gupchup), Hingna, Nagpur-441110

