Jagdamba Education Society's

SND College of Engineering & Research Center,

Babhulgaon, Tal.: Yeola, Dist. Nashik (423401)
Approved by AICTE & Govt. of Maharashtra, Affiliated to SPPU, Pune
Email: hodcomputer@sndcoe.ac.in

Department of Computer Engineering

SNDCOERC/Comp/23-24/   Date: 08/11/2023

NOTICE

All faculty are hereby informed that, our department is going to NBA. For that purpose, following staff has been appointed as a coordinator for NBA criteria. So all faculty should complete their task properly.

Sr. No.	Criteria No.	Criteria Description	Coordinator Name	Signature
1	1	Vision, Missioin & PEOs	Dr. Umesh Pawar	
2	2	Program Curicullum & Teaching Learning Process	Prof. Somnath Gade	
3	3	Course Outcomes and Program Outcomes	Prof. Sandhya Aghav	
4	4	Students' Performance	Prof. Ravindra Pandit	
5	5	Faculty Information and Contributions	Prof. Sameena Ansari	
6	6	Facilities and Technical Support	Prof. Ramesh Daund	
7	7	Continuous Improvement	Prof. Priyanka Narode	
8	8	First Year Academics	Prof. Poonam Kanade	
9	9	Student Support Systems	Prof. Prajakta Kurhe	
10	10	Governance, Institutional Support and Financial Resources	Prof. Minakshi Sonawane	

H.O.D   Principal

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

Date: 18-07-2022

Project Lab

Sub: Laboratory Practice-III
Semester: I
List of Course Objectives (CO'S)

Course Objectives:
• Learn effect of data preprocessing on the performance of machine learning algorithms • Develop in depth understanding for implementation of the regression models. • Implement and evaluate supervised and unsupervised machine learning algorithms. • Analyze performance of an algorithm. • Learn how to implement algorithms that follow algorithm design strategies namely divide and conquer, greedy, dynamic programming, backtracking, branch and bound. • Understand and explore the working of Blockchain technology and its applications.

List of Course Outcomes:

Course Outcomes:
After completion of the course, students will be able to CO1: Apply preprocessing techniques on datasets. CO2: Implement and evaluate linear regression and random forest regression models. CO3: Apply and evaluate classification and clustering techniques. CO4: Analyze performance of an algorithm. CO5: Implement an algorithm that follows one of the following algorithm design strategies: divide and conquer, greedy, dynamic programming, backtracking, branch and bound. CO6: Interpret the basic concepts in Blockchain technology and its applications

Date: 18-07-2022

Project Lab

Subject: Laboratory Practice-III (410246)
Semester: I
List of Practical's:

	Course Contents
	Group A: Design and Analysis of Algorithms
	Any 4 assignments and 1 mini project are mandatory.
1.	Write a program to calculate Fibonacci numbers and find its step count.
2.	Implement job sequencing with deadlines using a greedy method.
3.	Write a program to solve a fractional Knapsack problem using a greedy method.
4.	Write a program to solve a 0-1 Knapsack problem using dynamic programming or branch and bound strategy.
5.	Write a program to generate binomial coefficients using dynamic programming.
6.	Design 8-Queens matrix having first Queen placed. Use backtracking to place remaining Queens to generate the final 8-queen's matrix.

7.	**Mini Project** Write a program to implement matrix multiplication. Also implement multithreaded matrix multiplication with either one thread per row or one thread per cell. Analyze and compare their performance. OR Implement merge sort and multithreaded merge sort. Compare time required by both the algorithms. Also analyze the performance of each algorithm for the best case and the worst case. OR Implement the Naive string matching algorithm and Rabin-Karp algorithm for string matching. Observe difference in working of both the algorithms for the same input.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

Date: 18-07-2022

Lab Time Table

Lab: - Project Lab

w.e.f:- 18/07/2022

TIME \ DAY	10:00 TO 11:00	11:00 TO 12:00	12:00 TO 12:45	12:45 TO 01:45	01:45 TO 02:45	02:45 TO 03.00	03.00 TO 04.00	04.00 TO 05.00
MON			L U N C H B R E A K			T E A B R E A K	B4-LP III	
TUE							B4-LP III	
WED							B4-LP III	
THU							B3-LP III	
FRI							Project Work Stage-I	
SAT	Project Work Stage-I							

Lab Incharge
(Prof. A.S.Dalvi)

Time Table I/C
(Prof. P. S. Gursal)

HOD
(Dr. U. B. Pawar)
Department of Computer Engineering
S.N.D. College of Engg & RC,Yeola

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-sndcomp@gmail.com   Ph.No.-02559-225015

DEPARTMENTAL ORGANIZATION CHART

PROJECT LAB

PRINCIPAL
DR. D.M. YADAV

↓

H.O.D.
Dr. U.B.PAWAR

↓

LAB INCHARGE
MR. A.S.DALVI

↓

LAB ASSISTANT
Mr.R.D.TUPLONDHE

↓

LAB PEON
MR. KAHAR V.J

LAB SET-UP

PROJECT LAB

LAB AREA = 75.52 sq.m.
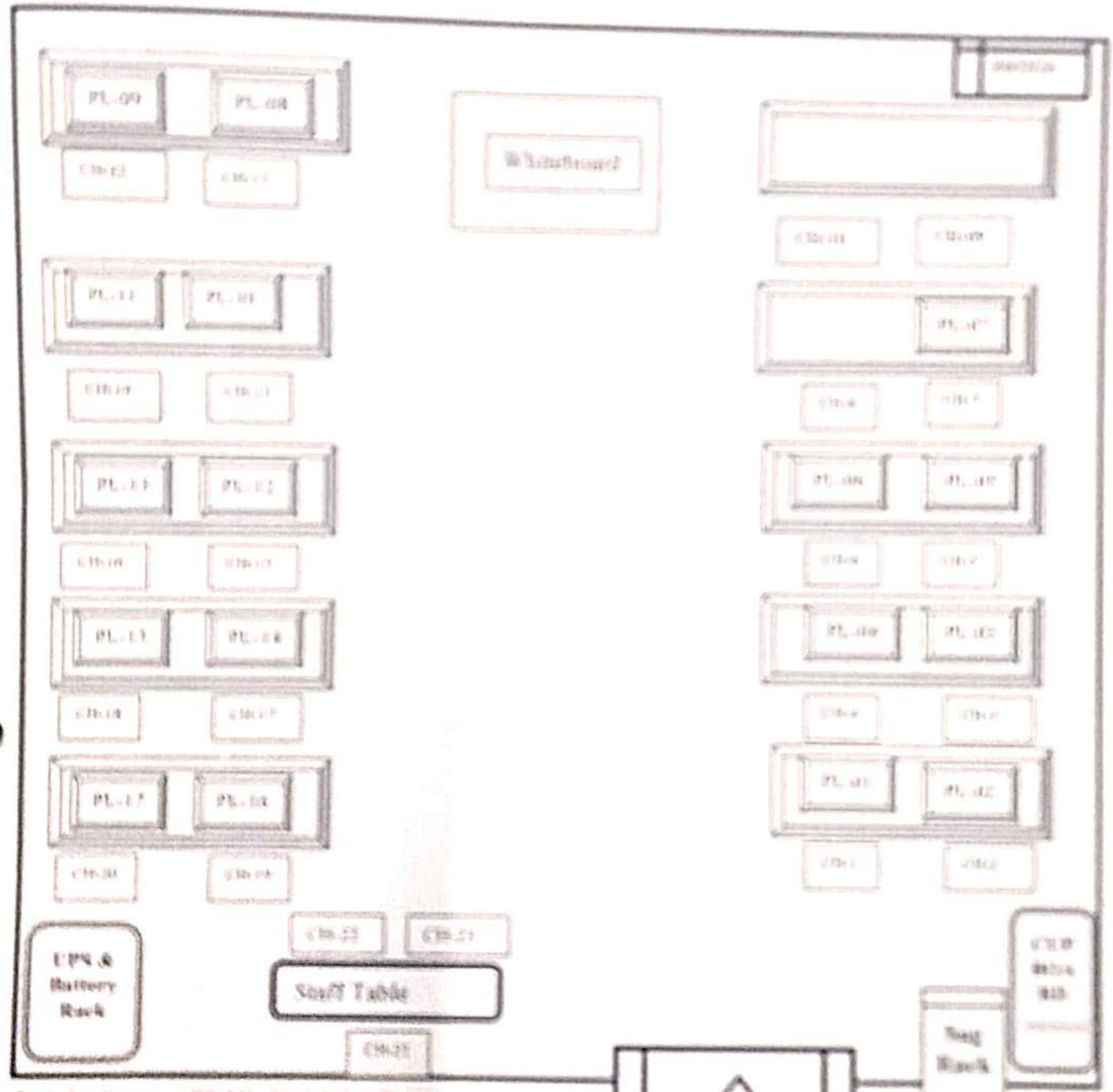
Lab Incharge - PROF. DALVI A.S.

Lab Incharge
Prof. Dalvi A.S.

HOD
Department of Computer Engineering
M.S.K.B. College of Engg. & RC, Yeola

Training and competency requirements

Training	Activities

Associated documents

Signs (Insert associated signage)

Lab Incharge
Prof.Dalvi A.S.

HOD
Department of Computer Engineering
Dr. Pawar J. E.
S.N.D. College of Engg & RC,Yeola

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

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DEPARTMENTAL ORGANIZATION CHART

UNIX LAB

PRINCIPAL
DR. YADAV D. M.

↓

H.O.D.
DR. PAWR U. B.

↓

LAB INCHARGE
Prof :- PANDIT R.B.

↓

LAB ASSISTANT
MR. TUPLONDHE R.D
.

↓

LAB PEON
MR. KAHAR V. J

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.
COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

Date:

Unix Lab

Lab Cost:

Sr. No.	Item Details with Accessories Description	Qty	Rate Per Unit(Rs.)	Total Amount(Rs.)
1	Lenovo Desktop PC-Gen7 B250/i7-7700 3.6G, 4C, 4GB DDR4 RAM, 2400/1TB HDD , 15" Wide TFT With key board & Mouse.	20	33,000	6,60,000
2	Epson LX-300+II Dot Matrix Printer	1	7,400	7,400
3	Cisco SB 24 Port 10/100 unmanage- SF90D -24 Switch	1	3,000	3,000
4	UPS (Sukam) 3.5 KVA 48V DC	1	19,950	19,950
5	Electron Batteries (165 A) 48 V	4	7,000	28,000
Grand Total (Rs.)				7,18,350/-
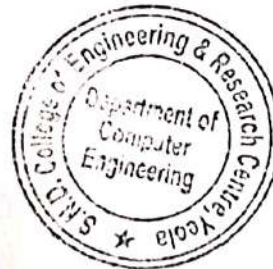
Lab Incharge
Prof :- Pandit R.B.

HOD
Dr. Pawar U. B.

Department of Computer Engineering
S.N.D. College of Engg & R.C, Yeola

S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.
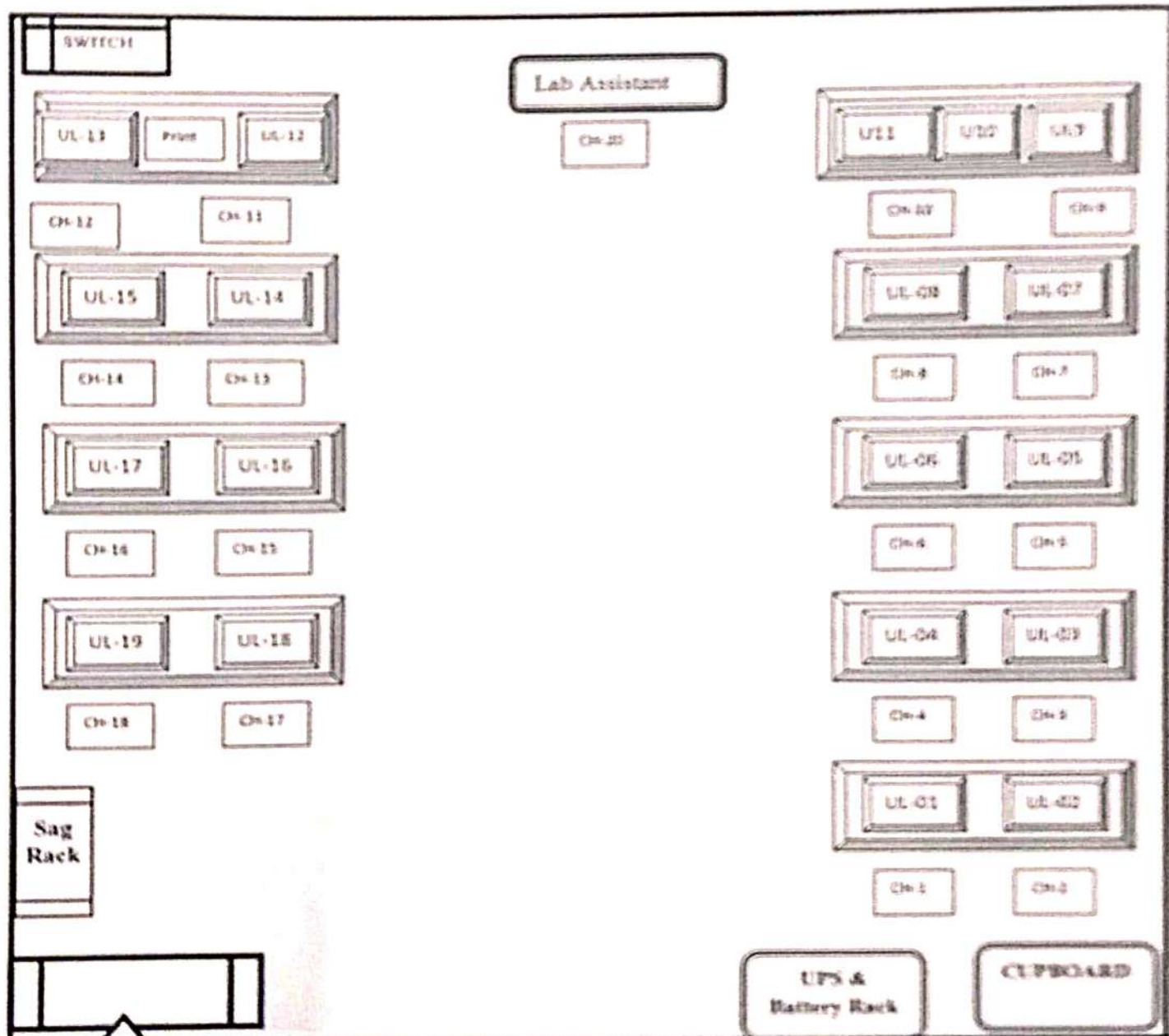
COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225615

LAB FLOORING

UNIX LAB   **LABAREA=74Sq.m.**

Lab Incharge :- Prof :- Pandit R.B.

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

Date:

Unix Lab

Sr. No.	Name of the Laboratories/Workshop	Total Area of Lab/Workshops	Equipments/ Furniture
1	Unix Lab	74 Sq. m	19 Lenovo Gen-i7 Desktop Pc's, 01 Epson LX-300+II Dot matrix Printer, 01 Cisco D-Link Switch(24-port), UPS Sukam with 4 Batteries, 9 Pc Tables, 1 Staff table, 1 Cupboard, 1 Sag Rack, 1 White Board 22 Chairs.

Lab Incharge
Prof :- Pandit R.B.

HOD
Dr. Pawar U. B.

S.N.D College of Engineering & Research Center, Babhulgz, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

Lab :- UNIX Lab

w.e.f:- 18/07/2022

TIME DAY	10:00 TO 11:00	11:00 TO 12:00	12:00 TO 12:45	12:45 TO 01:45	01:45 TO 02:45	02:45 TO 03:00	03:00 TO 04:00	04:00 TO 05:00
MON			L U N C H B R E A K	T2-DBMSL		T E A / B R E A K		
TUE				T1-DBMSL				
WED				T3-DBMSL				
THU				T2-DBMSL				
FRI				T1-DBMSL				
SAT								

Lab In charge
Prof :- R.B PANDIT

Time Table I/C
Prof. P. S. Gursal

HOD
Dr. U. B. Pawar
HOD
Department of Computer Engineering
S.N.D. College of Engg & R.C. Yeola

Date:

Lab Status Report

Name of Laboratory:- Unix Lab
Lab Area:- 74 Sq.m.
Lab Cost:- 7,18,350/-

Sr. No.	Item Details with Accessories Description	Total Qty	Available	Working	Not Working	Transfer/ Remark
01	Lenovo Desktop PC-Gen7 B250/i7-7700 3.6Ghz, 4C, 4GB DDR4 RAM, 2400/1TB HDD , 15" Wide TFT With key board & Mouse	20	19	19	Nil	1. PC Transferred in Principal Cabin
02	Epson LX-300+II Dot Matrix Printer	01	01	01	Nil	Nil
03	Cisco SB-24 Port D-Link Switch 10/100 Unmanaged	01	01	01	Nil	Nil
04	UPS (Sukam) 3.5 KVA 48V DC	01	01	01	Nil	Received from FPL Lab FE
05	Electron Batteries (165 A) 48 V	04	04	04	Nil	Received from FPL Lab FE
06	Chairs	22	22	22	Nil	Nil
07	Cupboard	01	01	01	Nil	Nil
08	Staff Table	01	01	01	Nil	Nil
09	Fan	03	03	03	Nil	Nil
10	Tube light	03	03	03	Nil	Nil
11	White Board	01	01	-	-	-

Lab In-Charge
Prof :- Pandit R.B.

H.O.D
Dr. Pawar U. B.

Subject: Data Structure Laboratory (210247)

Examination Scheme: TW: 25 Marks   PR: 50 Marks

Sr.No.	DSL Assignments List
	GROUP – A
1	In second year computer engineering class, group A student's play cricket, group B students play badminton and group C students play football. Write a Python program using functions to compute following: - **a)** List of students who play both cricket and badminton **b)** List of students who play either cricket or badminton but not both **c)** Number of students who play neither cricket nor badminton **d)** Number of students who play cricket and football but not badminton. (**Note-** While realizing the group, duplicate entries should be avoided, Do not use SET built-in functions)
2	Write a Python program to compute following operations on String: **a)** To display word with the longest length **b)** To determines the frequency of occurrence of particular character in the string **c)** To check whether given string is palindrome or not **d)** To display index of first appearance of the substring **e)** To count the occurrences of each word in a given string
3	Write a python program to compute following computation on matrix: **a)** Addition of two matrices **b)** Subtraction of two matrices **c)** Multiplication of two matrices **d)** Transpose of a matrix
	GROUP – B
4	**a)** Write a python program to store roll numbers of student in array who attended training program in random order. Write function for searching whether particular student attended training program or not, using **Linear search and Sentinel search.** **b)** Write a python program to store roll numbers of student array who attended training program in sorted order. Write function for searching whether particular student attended training program or not, using **Binary search and Fibonacci search**

5	Write a python program to store second year percentage of students in array. Write function for sorting array of floating point numbers in ascending order using **a)** Insertion sort **b)** Shell Sort and display top five scores
6	Write a python program to store first year percentage of students in array. Write function for sorting array of floating point numbers in ascending order using quick sort and display top five scores.

GROUP – C

7	Write C++ program for storing appointment schedule for day. Appointments are booked randomly using linked list. Set start and end time and min and max duration for visit slot. Write functions for **a)** Display free slots **b)** Book appointment **c)** Cancel appointment (check validity, time bounds, availability) **d)** Sort list based on time **e)** Sort list based on time using pointer manipulation
8	Write C++ program for storing binary number using doubly linked lists. Write functions **a)** To compute 1's and 2's complement **b)** Add two binary numbers

GROUP – D

9	D-26 In any language program mostly syntax error occurs due to unbalancingdelimiter such as (),{},[]. Write C++ program using stack to check whether given expression is well parenthesized or not.
10	D-27 Implement C++ program for expression conversion as infix to postfixand its evaluation using stack based on given conditions: 1. Operands and operator, both must be single character. 2. Input Postfix expression must be in a desired format. 3. Only '+', '-', '*' and '/ ' operators are expected.

GROUP – E

11	Queues are frequently used in computer programming, and a typical example is the creation of a job queue by an operating system. If the operating system does not use priorities, then the jobs are processed in the order they enter the system. Write C++ program for simulating job queue. Write functions to add job and delete job from queue.

12	A double-ended queue (deque) is a linear list in which additions and deletions may be made at either end. Obtain a data representation mapping a deque into a one dimensional array. Write C++ program to simulate deque with functions to add and delete elements from either end of the deque.
13	Pizza parlor accepting maximum M orders. Orders are served in first come first served basis. Order once placed cannot be cancelled. Write C++ program to simulate the system using circular queue using array.

Mini-Project

14	Write a mini project using C++/ Python for inventory management system using File Handling concept OR Write a mini project using C++/ Python for Bank management system using File Handling concept OR Write a mini project using C++/ Python for Library management system using File Handling concept

Lab Incharge

Prof. Pandit R.B

HOD
Department of Computer Engineering
S.N.D. College of Engg & RC, Yeola
Prof. Pawar U. B

Jagdamba Education Society's
S..D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email: mp.sndcoe@gmail.com   Ph.No.-02559-225015

Date: 18-07-2022

UNIX Lab

Subject: Database Management Systems (310241)

List of Practical's:

Sr.No	Assignments
Group A : SQL and PL/SQL	
1	ER Modeling and Normalization
2	SQL Queries
3	SQL Queries - all types of Join, Sub-Query and View
4	Unnamed PL/SQL code block: Use of Control structure and Exception handling is mandatory
5	Named PL/SQL Block: PL/SQL Stored Procedure and Stored Function.
6	Cursors (All types: Implicit, Explicit, Cursor FOR Loop, Parameterized Cursor)
7	Database Trigger (All Types: Row level and Statement level triggers, Before and After Triggers).
8	Database Connectivity.
Group B : NoSQL Databases	
1	MongoDB Queries
2	MongoDB - Aggregation and Indexing
3	MongoDB - Map reduces operations
4	Database Connectivity

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COMPUTER ENGINEERING DEPARTMENT

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Ph.No.-02559-225015

Course Objectives

Sr. No.	Objective
01	To develop Database programming skills
02	To develop basic Database administration skills
03	To develop skills to handle NoSQL database
04	To learn, understand and execute process of software application development

Course Outcomes

Sr. No.	Outcomes
01	Design E-R Model for given requirements and convert the same into database tables
02	Design schema in appropriate normal form considering actual requirements
03	Implement SQL queries for given requirements , using different SQL concepts
04	Implement PL/SQL Code block for given requirements
05	Implement NoSQL queries using MongoDB
06	Design and develop application considering actual requirements and using database concepts

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S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-
423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

Date:

Lab Report

Name of Lab: **Multimedia Lab**

Sr. No.	Item Details with Accessories Description	Qty	Rate Per Unit(Rs.)	Total Amount(Rs.)
1	Core I3 Lenovo ThinkCenter Desktop PC with 2GB RAM, graphics card,500GB HDD	17	27,225/-	462,825/-
2	Switch D-Link-24 Port F30H482002646	01	4000/-	4000/-
3	Sukam UPS with 15 tabular Batteries	01	1,46,999/-	1,46,999/-
	Grand Total(Rs.)			6,13,824/-

Lab Incharge

Prof.Gade.S.A.

HOD

Dr Pawar U.B
Department of Computer Engineering
S.N.D College of Engg & RC,Yeola

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-sndcomp@gmail.com

Ph.No.-02559-225015

DEPARTMENTAL ORGANIZATION CHART

Multimedia Lab

PRINCIPAL
DR. YADAV D.M

↓

H.O.D
DR.PAWAR U.B

↓

LAB INCHARGE
PROF: - GADE.S.A

↓

LAB ASSISTANT
MR GUJAR K.

↓

LAB PEON
MR.KAHAR V

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com

Ph.No.-02559-225015

Date:

Equipment List

Name of Laboratory: - Multimedia Lab
Lab Area: - 76.64 Sq. m
Lab Cost: - 6, 13,824/-

Sr. No.	Item Details with Accessories Description	Total Qty	Available	Transfer/ Remark
01	Core I3 Lenovo ThinkCenter Desktop PC with 4GB RAM, graphics card,500GB HDD	18	17	01 PC Transferred to BHMS College on 23/12/2020 (Refer By.Zalte Sir)
02	Switch D-Link-24 Port	01	01	Nil
03	Sukam UPS with 15 tabular Batteries	01	01	Nil

Lab Incharge
Prof.Gade.S.A

HOD
Dr.Pawar U.B
Department of Computer Engineering
S.N.D. College of Engg & RC,Yeola

S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

LAB FLOORING

MULTIMEDIA LAB   **LAB AREA=76.64 Sq.M**
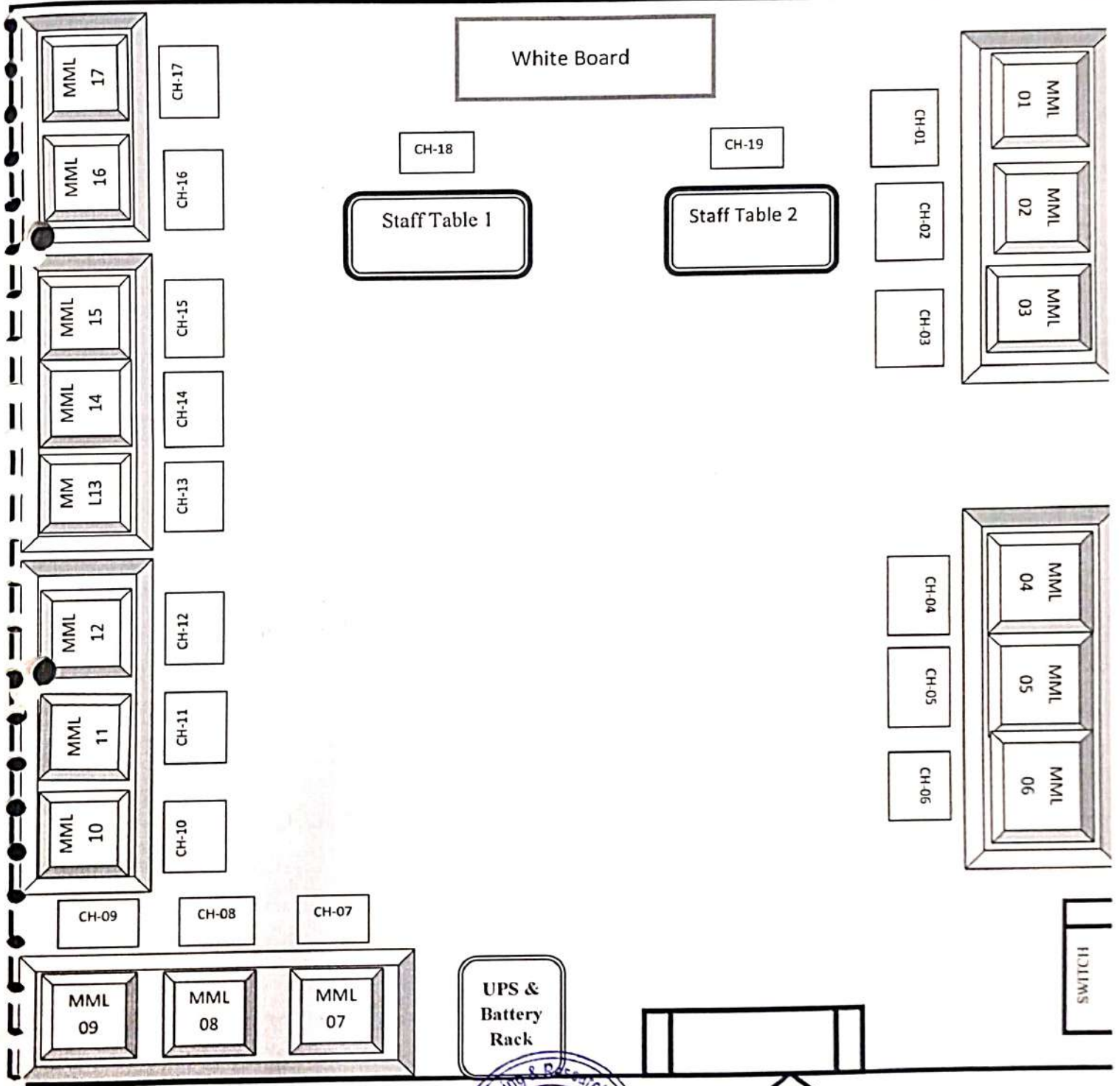
White Board

| MML 17 | CH-17 |
| MML 16 | CH-16 |

CH-18   CH-19

Staff Table 1   Staff Table 2

CH-01	MML 01
CH-02	MML 02
CH-03	MML 03

MML 15	CH-15
MML 14	CH-14
MM L13	CH-13

MML 12	CH-12
MML 11	CH-11
MML 10	CH-10

CH-04	MML 04
CH-05	MML 05
CH-06	MML 06

CH-09   CH-08   CH-07

| MML 09 | MML 08 | MML 07 |

UPS & Battery Rack

SWITCH

ENTRY

Lab Incharge:- Prof:- Gade S. A

Date: 18-07-2021

Content beyond syllabus:

Sr.NO	SOFTWARE LEARNING TOOLS
1	installation Python for Linux: Write a **Python** program to store second year percentage of students in array. Write function for sorting array of floating point numbers in ascending order using a) Insertion sort Shell Sort and display top five scores
2	*Python libraries to save time* Write a **Python** program for department library which has N books, write functions for following: a) Delete the duplicate entries b) Display books in ascending order based on cost of books c) Count number of books with cost more than 500. Copy books in a new list which has cost less than 500.
3	*Paython:* Write a **Python** program to store 12th class percentage of students in array. Write function for sorting array of floating point numbers in ascending order using bucket sort and display top five scores.

Lab Incharge

HOD

Dr. Pawar. U.B

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER Engineering Department

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

Date: 18-07-2022

Multimedia Lab

Subject: Data Structures Laboratory (210246)
Semester: I
List of Practical's:

Sr. No	Experiments/Assignments
Group A:	
1	In second year computer engineering class, group A student's play cricket, group B students play badminton and group C students play football. Write a Python program using functions to compute following: - a) List of students who play both cricket and badminton b) List of students who play either cricket or badminton but not both c) Number of students who play neither cricket nor badminton d) Number of students who play cricket and football but not badminton. (Note- While realizing the group, duplicate entries should be avoided, Do not use SET built-in functions)
2	Write a Python program to store marks scored in subject "Fundamental of Data Structure" by N students in the class. Write functions to compute following: a) The average score of class b) Highest score and lowest score of class c) Count of students who were absent for the test Display mark with highest frequency
3	Write a **Python** program for department library which has N books, write functions for following: a) Delete the duplicate entries b) Display books in ascending order based on cost of books c) Count number of books with cost more than 500. Copy books in a new list which has cost less than 500.
4	Write a **Python** program that computes the net amount of a bank account based a transaction log from console input. The transaction log format is shown as following: D 100 W 200 (Withdrawal is not allowed if balance is going negative. Write functions for withdraw and deposit) D means deposit while W means
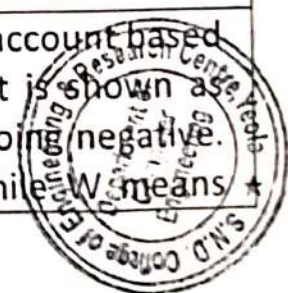
		withdrawal. Suppose the following input is supplied to the program: D 300, D 300 , W 200, D 100 Then, the output should be: 500

5		Write a Python program to compute following operations on String:
		    a) To display word with the longest length
		  b) To determines the frequency of occurrence of particular character in the string
		    c) To check whether given string is palindrome or not
		    d) To display index of first appearance of the substring
		To count the occurrences of each word in a given string

6		It is decided that weekly greetings are to be furnished to wish the students having their birthdays in that week. The consolidated sorted list with desired categorical information is to be provided to the authority. Write a **Python** program to store students PRNs with date and month of birth. Let List_A and List_B be the two list for two SE Computer divisions. Lists are sorted on date and month. Merge these two lists into third list "List_SE_Comp_DOB" resulting in sorted information about Date of Birth of SE Computer students
7		Write a **Python** Program for magic square. A magic square is an n * n matrix of the integers 1 to n2 such that the sum of each row, column, and diagonal is the same. The figure given below is an example of magic square for case n=5. In this example, the common sum is 65.

15	8	1	24	17
16	14	7	5	23
22	20	13	6	4
3	21	19	12	10
9	2	25	18	11

8	Write a **Python** program that determines the location of a saddle point of matrix if one exists. An m x n matrix is said to have a saddle point if some entry a[i][j] is the smallest value in row i and the largest value in j.
9	Write a **Python** program to compute following computation on matrix: a) Addition of two matrices B) Subtraction of two matrices c) Multiplication of two matrices d) Transpose of a matrix
10	Write a **Python** program for sparse matrix realization and operations on it- Transpose, Fast Transpose and addition of two matrices

Sr. No	Experiments/Assignments
Group B:	
11	a) Write a **Python** program to store roll numbers of student in array who attended training program in random order. Write function for searching

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COMPUTER Engineering Department

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Date: 18-07-2022

Multimedia Lab

Sub: Data Structures Laboratory (210246)
Semester: I
List of Course Objectives (CO'S)

Course Objectives:
Introduce basic concepts of Data Structures. 1. To understand basic techniques and strategies of algorithm analysis 2. To understand the memory requirement for various data structures 3. To understand the memory requirement for various data structures like array, linked list, stack, queue etc using concepts of python and C++ programming language.

List of Course Outcomes:

Course Outcomes:
CO1: Use algorithms on various linear data structure using sequential organization to solve real life problems. CO2: Analyze problems to apply suitable searching and sorting algorithm to various applications. CO3: Analyze problems to use variants of linked list and solve various real life problems. CO4: Designing and implement data structures and algorithms for solving different kinds of problems.

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COMPUTER ENGINEERING DEPARTMENT

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Date: 24-08-2(

Hardware Lab

Sr. No.	Name of the Laboratories/Workshop	Total Area of Lab/Workshops	Equipment's/ Furniture
1	Hardware/Digital Lab	77.26 Sq. m	Lenovo Thinkcenter 3597254 Desktop G2020,500 HDD,Ram 2Gb,2.4 GHZ,Lenovo 18'5" TFT 2580 AF-1, Commercial Cisco-switch 24 PORT.

Lab Incharge
Prof.S.R.Mokle

HOD
Dr. Pawar. U.B
Department of Computer Engineering
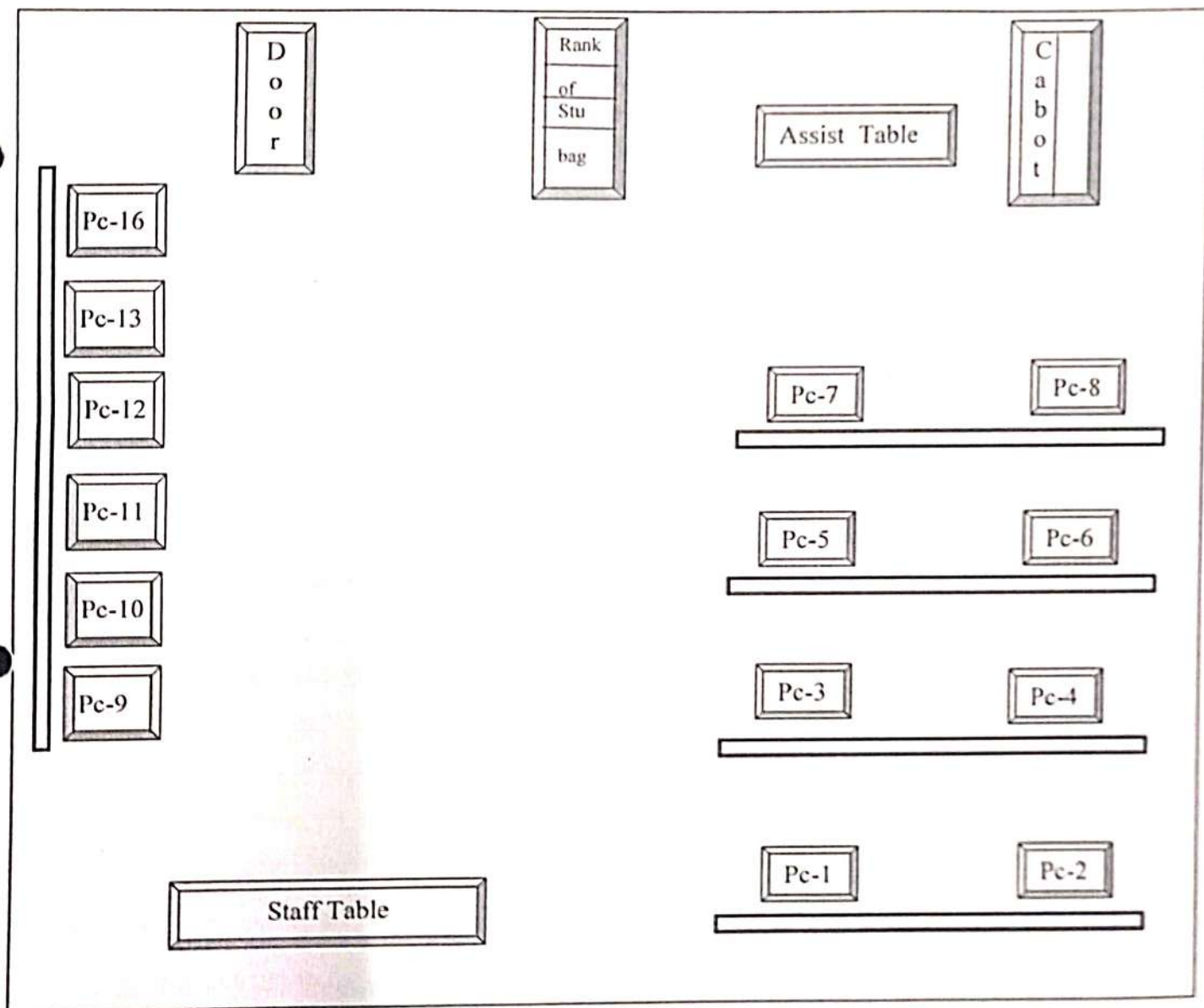S.N.D. College of Engg & R.C.Yeola

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S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

Date: 24-08-2022

Lab Time Table

Lab: - Hardware Lab

Time \ Day	10:00 To 11:00	11:00 To 12:00	12:00 To 12:45	01:45 To 02:45	02:45 To 03:00	03:00 To 04:00	04:00 To 05:00
MON	S3-DELD		L		T		
TUE	S1-DELD		U		E		
WED	S2-DELD		N		A		
THU			C				
FRI			H				
SAT							

Lab Incharge
(Prof. S.R.Mokle)

Time Table I/C
(Prof. P. S. Gursal)

HOD
(Prof. Dr. H. Be Pawar)
S.N.D. College of Engg & RC, Yeola

Jagdamba Education Society's

S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

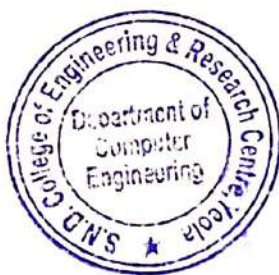Email-comp.sndcoe@gmail.com   Ph.No. 02559-231943

LAB FLOORING

Hardware LAB   LAB AREA = 75.42Sq.m.

Lab Incharge — PROF N.R. Mistic

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com

Ph.No.-02559-225015
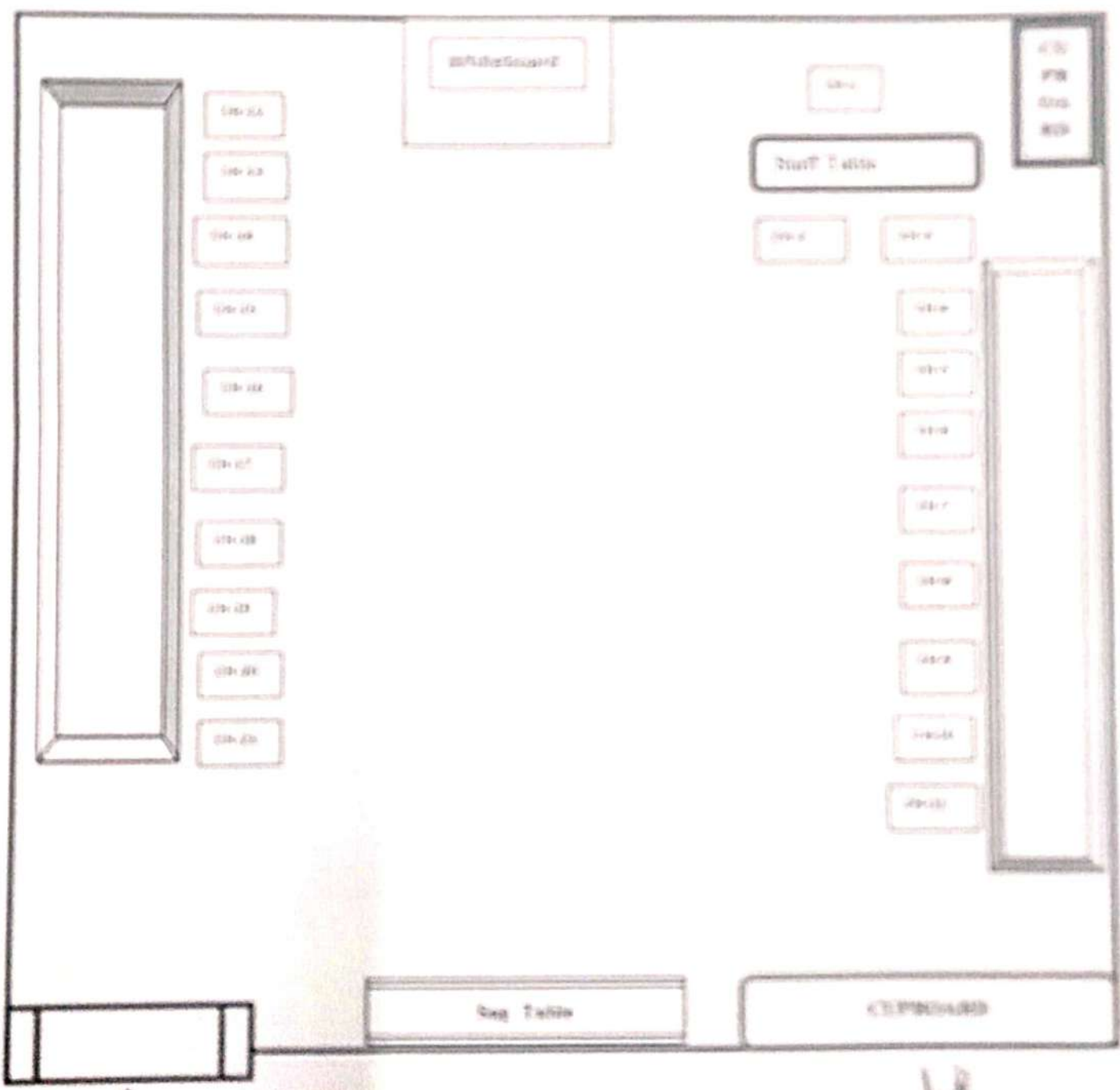
DEPARTMENTAL ORGANIZATION CHART

Hardware LAB

PRINCIPAL
DR.D.M.Yadav

↓

H.O.D.
DR.PAWR U.B

↓

LAB INCHARGE
PROF:S.R.Mokle

↓

LAB ASSISTANT
Mr.Roshan Wagh

↓

LAB PEON
MR. kahar V.P

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

Date: 24-08-2022

Hardware Lab

Subject: Suggested List of Laboratory Experiments/Assignments of(210249) Digital Electronics Laboratory
List of Practical's:

Sr.No	Assignments
Group A:	
1	To Realize Full Adder/ Subtractor using a) Basic Gates and b) Universal Gate
2	Design and implement Code Converters-Binary to Gray and BCD to Excess-3
3	Design and Realization of BCD Adder using 4-bit Binary Adder (IC 7483).
4	Realization of Boolean Expression for suitable combination logic using MUX 74151 /74153, DMUX 74154/74138
5	To Verify the truth table of two bit comparators using logic gates.
6	Design & Implement Parity Generator and checker using EX-OR.
Group B:	
7	Design and Realization: Flip Flop conversion
8	Design of 2 bit and 3 bit Ripple Counter using MS JK flip-flop
9	Design of Synchrous 3 bit Up and Down Counter using MSJK Flip Flop / D Flip Flop
10	Realization of Mod -N counter using (Decade Counter IC 7490)
11	Design and implement Sequence generator (for Prime Number/odd and even) using MS JK flip-flo
12	Design and implement Sequence detector using MS JK flip-flop.
Group C:	
13	Study of Shift Registers (SISO,SIPO, PISO, PIPO)
14	Design of ASM chart using MUX controller Method.

Lab Incharge
(Prof. S.R.Mokle)

Time Table I/C
(Prof. P. S. Gursal)

HOD
Department of Computer Engineering
S.N.D. College of Engg & RC,Yeola

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

Flooring Internet Lab

Door	Rank of Stu bag	Assist Table	Cabot

Pc-16		
Pc-13		Pc-7	Pc-8
Pc-12		
Pc-11		Pc-5	Pc-6
Pc-10		
Pc-9		Pc-3	Pc-4
		Pc-1	Pc-2
Staff Table		

Lab Incharge
Prof. Ansari S.W.

HOD
Dr. Pawar. U.B
Department of Computer Engineering
S.N.D. College of Engg & RC, Yeola

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

Date: 18-07-2022

Internet Lab (Lab Cost)

Lab Cost: 2,88,800/-

Sr. No.	Item Details with Accessories Description	Qty	Rate Per Unit(Rs.)	Total Amount(Rs.)
1	Lenovo Think center M73 DESKTOP INTEL i5 CPU 6th Gen, 8 GB RAM,256 GB SSD, GRAFICE CARD integrated 2 GB, 550 WATTS SMPS,6 USB PORT,RJ 45 1000 MBPS PORT, Power Cable 16" LED SCREEN with VGA & HDMI PORT USB KEYBORD & USB MOUSE	16	17,800	2,84,800
2	24 Port D-Link Switch	01	4,000	4,000
	Grand Total (Rs.)			2,88,800/-

Lab Incharge
Prof. Ansari S.W.

HOD
Dr. Pawar U.B
Department of Computer Engineering
S.N.D. College of Engg & RC,Yeola

Jagdamba Education Society's

S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

Date: 18-07-2022

Lab Time Table

Lab: -Internet Lab

w.e.f:- 18/07/2022

TIME \ DAY	10:00 TO 11:00	11:00 TO 12:00	12:00 TO 12:45	12:45 TO 01:45	01:45 TO 02:45	02:45 TO 03.00	03.00 TO 04.00	04.00 TO 05.00
MON			L	T3-CNS		T		
TUE			U N	T2-CNS		E A		
WED			C H	T1-CNS				
THU			B R			B R E		
FRI			E A			A K		
SAT			K					

Lab Incharge
(Prof. W. S. Ansari)

Time Table I/C
(Prof. P. S. Gursal)

HOD
(Prof. U. B. Pawar)
Department of Computer Engineering
S.N.D. College of Engg & RC,Yeola

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

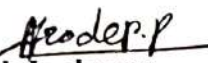Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

Date: 18-07-2022

Internet Lab(Area Details)

Sr. No.	Name of the Laboratories/Workshop	Total Area of Lab/Workshops	Equipment's/ Furniture
1	Internet Lab	86.78 Sq. m	16 Lenovo INTEL i5 CPU 6th Gen Desktop Pc's, 01 Cisco D-Link Switch(24-port), 8 Pc Tables 1 Staff table, 1 Staff Chair, 1 Cupboard, 1 Sag Rack, 1 White Board 19 Chairs.

Lab Incharge
Prof. Ansari S.W

HOD
Dr. Pawar. U.B
Department of Computer Engineering
S.N.D. College of Engg & RC,Yeola

Subject: CG LAB

Class: - SE

Subject In charge –Miss: Sameena W.Ansari

Academic Year: 2022-23

Laboratory Plan

Teaching scheme: 2019(Course)
Lectures / Week: 04

Examination Scheme:
Termwork: 25M
Practical: 50M

Sr. No	List of the Practical to be Performed	Equipment Required PC's/Software	Remark
1.	Write C++ program to draw the line styles using DDA and Bresenham's algorithm (solid, dotted, dashed, dash dot and thick). Inherit pixel class and Use Constructors.	**Window:** 64-bit Linux **Tool:** Turbo C++, G++/GCC	C
2.	Write C++ program to draw a Circle using DDA and Bresenham's algorithm. Inherit pixel class and Use function overloading.	**Window:** 64-bit Linux **Tool:** Turbo C++, G++/GCC	
3.	a) Write C++ program to draw the following pattern. Use DDA and Bresenham's Line drawing algorithm b) Write C++ program to draw the following pattern. Use DDA and Bresenham's drawing algorithm	**Window:** 64-bit Linux **Tool:** Turbo C++, G++/GCC	
4.	Write C++ program to draw a 4X4 chessboard. Use DDA and Bresenham's drawing algorithm to draw lines. Use Seed fill algorithm to fill black squares of the board	**Window:** 64-bit Linux **Tool:** Turbo C++, G++/GCC	
5.	Write C++ program to draw a concave polygon and fill it with desired color using scan fill algorithm.	**Window:** 64-bit Linux **Tool:** Turbo C++, G++/GCC	
6.	Write C++ program to implement Cohen Southerland line clipping algorithm.	**Window:** 64-bit Linux **Tool:** Turbo C++, G++/GCC	
7.	a) Write C++ program to draw 2-D object and perform following basic transformations, Scaling b) Translation c) Rotation. Use operator overloading.	**Window:** 64-bit Linux **Tool:** Turbo C++, G++/GCC	
8.	a) Write C++ program to generate snowflake using concept of fractals using basic concepts of Object oriented programming. using concept of fractals (use constructor).	**Window:** 64-bit Linux **Tool:** Turbo C++, G++/GCC	

9.	a) Write C++ program to generate snowflake using concept of fractals using basic concepts of Object oriented programming.	**Window:** 64-bit Linux **Tool:** Turbo C++, G++/GCC	
10	Write C++ program to simulate any one of or similar scene-	**Window:** 64-bit Linux **Tool:** Turbo C++, G++/GCC	
11	a) Design and simulate any data structure like stack, queue, and trees visualization using graphics. Simulation should include all operations performed on designed data structure. Implement the same using OpenGL.	**Window:** 64-bit Linux **Tool:** Turbo C++, G++/GCC	

Subject in charge

Head of Department
Department of Computer Engineering
S.N.D. College of Engg & RC, Yeola

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-sndcomp@gmail.com   Ph.No.-02559-225015

> ### DEPARTMENTAL ORGANIZATION CHART

> ### Microprocessor Lab
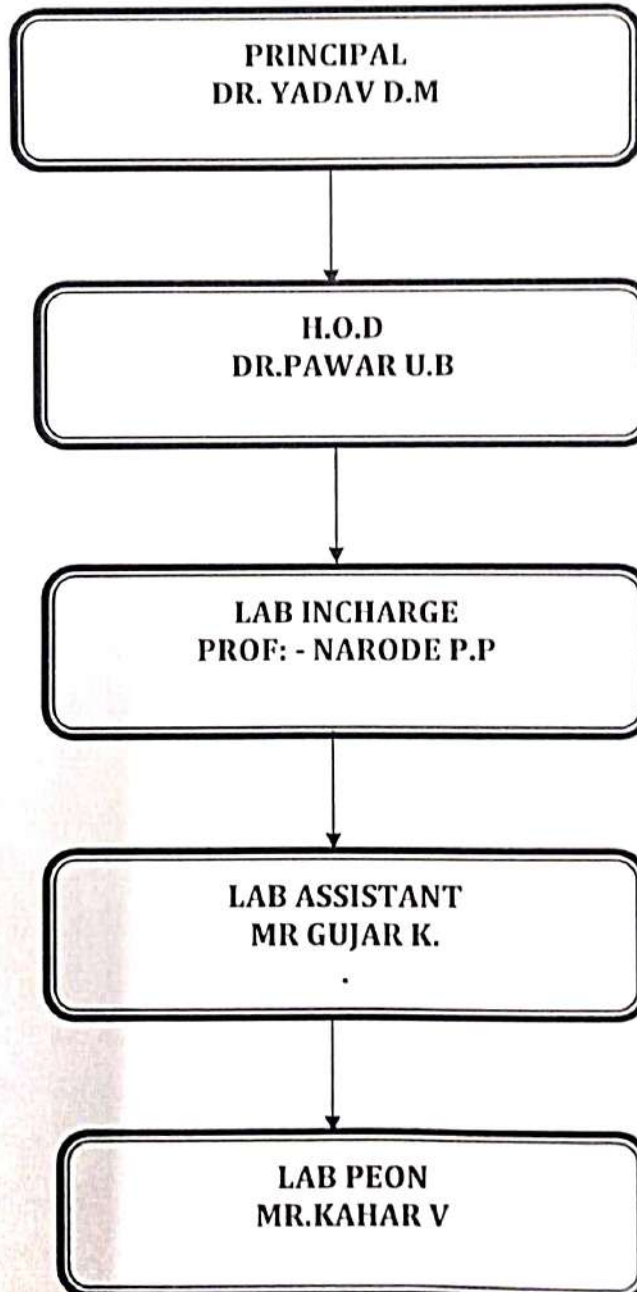
```
PRINCIPAL
DR. YADAV D.M
        |
        v
H.O.D
DR.PAWAR U.B
        |
        v
LAB INCHARGE
PROF: - NARODE P.P
        |
        v
LAB ASSISTANT
MR GUJAR K.
        |
        v
LAB PEON
MR.KAHAR V
```

Date: 18-07-2022

Lab Time Table

Lab: - Microprocessor Lab

w.e.f:- 18/07/2022

TIME \ DAY	10:00 TO 11:00	11:00 TO 12:00	12:00 TO 12:45	12:45 TO 01:45	01:45 TO 02:45	02:45 TO 03.00	03.00 TO 04.00	04.00 TO 05.00
MON			L U N C H B R E A K			T E A B R E A K	B2-LP II	
TUE							B1-LP II	
WED							B2-LP II	
THU							B1-LP II	
FRI								
SAT								

Lab Incharge
(Prof. P.P.Narode)

Time Table I/C
(Prof. P. S. Gursal)

HOD
(Prof.U. B. Pawar)
Department of Computer Engineering
S.N.D. College of Engg & R.C. Yeola

LAB SET-UP

MPL LAB   **LABAREA=76.64 Sq.m.**
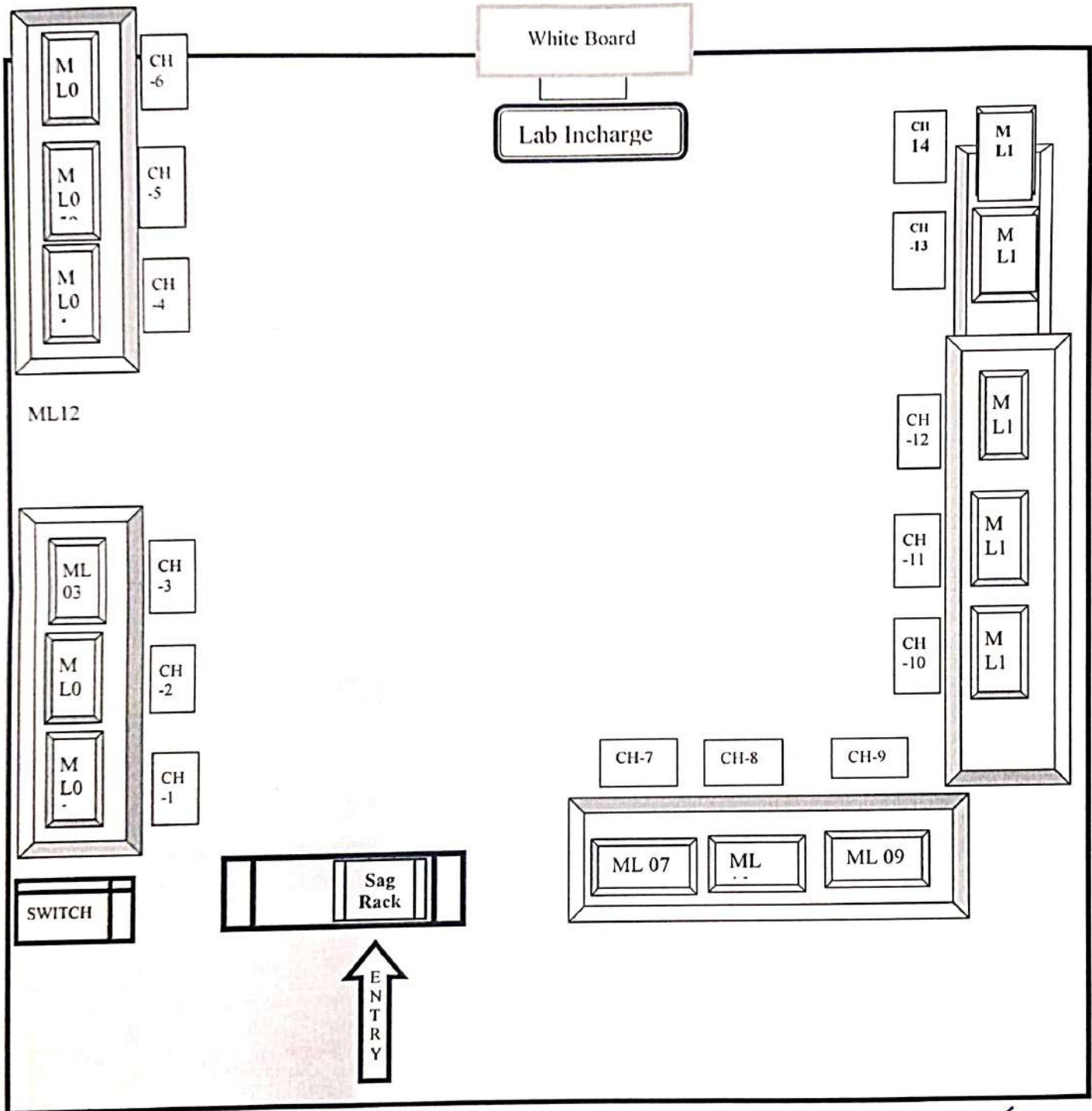
M L0	CH-6		
M L0	CH-5		White Board
M L0	CH-4		Lab Incharge

ML12

ML 03	CH-3
M L0	CH-2
M L0	CH-1

CH-14   ML1
CH-13   ML1

CH-12   ML1
CH-11   ML1
CH-10   ML1

CH-7   CH-8   CH-9

ML 07   ML   ML 09

SWITCH

Sag Rack

ENTRY

Lab Incharge
Prof. P.P.Narode

HOD
Dr. Pawar. U.B
Department of Computer Engineering
S.N.D. College of Engg & RC, Yeola

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

Date: 18-07-2022

Microprocessor Lab

Subject: Cyber Security and Digital Forensics (410244)

Semester: I

List of Practical's:

Sr.No	Assignments
Group 1:	
1	Write a program for Tracking Emails & Investigating Email Crimes. i.e. Write a program to analyze e–mail header
2	Implement a program to generate & verify CAPTCHA image
3	A person on a nearby road is trying to enter into a WiFi network by trying to crack the Password to use the IP Printer resource; write a program detect such attempt and prohibit the access. Develop the necessary scenario by Using an IEEE 802.11, configure a Wi-Fi adapter and Access Point.
4	Write a computer forensic application program for Recovering permanent Deleted Files and Deleted Partitions.
5	Write a program for Log Capturing and Event Correlation.
6	Configure and demonstrate use of vulnerability assessment tool like Wireshark or SNORT
7	Study of Honeypot
Group 2:	
8	Mini–project: Perform the following steps: • Go to the National Child Exploitation Coordination Centre (NCECC) Web site at http:// www.ncecc.ca • Click on the Reporting child exploitation link. • c. Read "How to Report Internet Pornography or Internet Luring Related to Children."
9	Mini- Project: Perform the following steps: • Go to http://www.usdoj.gov/criminal/cybercrime/cyberstalking.htm. • b. Read the 1999 report on cyber stalking.

Date: 18-07-2022

Microprocessor Lab

Subject: Software Testing and Quality Assurance (410245)

Semester: I

List of Practical's:

Sr. No	Assignments
Group 1:	
1	Write TEST Scenario for Gmail Login Page
2	TEST Scenario for Gmail Login Page
3	Write Test cases in excel sheet for Social Media application or website
4	Create Defect Report for Any application or web application
5	Installation of Selenium grid and selenium Webdriver & java eclips 5. e (automation tools).
6	Software requirement specification for any project or problem statement
Group 2:	
7	Mini Project :Software Testing and Quality Assurance Mini Project Dynamic webside of covid19 information using HTML, CSS, JAVASCRIPT And PHP, MySQL database used to store user account, comment, and registration form details. Regular Expression testcases for testing purpose
8	Mini Project :Create a small application by selecting relevant system environment / platform and programming languages. Narrate concise Test Plan consisting features to be tested and bug taxonomy. Prepare Test Cases inclusive of Test Procedures for identified Test Scenarios. Perform selective Black-box and White-box testing covering Unit and Integration test by using Faculty of Engineering Savitribai Phule Pune University Syllabus for Fourth Year of Computer Engineering `#63/128 suitable Testing tools. Prepare Test Reports based on Test Pass/Fail Criteria and judge the acceptance of application develope
9	Mini Project : Create a small web-based application by selecting relevant system environment / platform and programming languages. Narrate concise Test Plan consisting features to be tested and bug taxonomy. Narrate scripts in order to perform regression tests. Identify the bugs using Selenium WebDriver and IDE and generate test reports encompassing exploratory testing.

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S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.
COMPUTER ENGINEERING DEPARTMENT

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Date: 18-07-2022

Microprocessor Lab

Sub: Software Testing and Quality Assurance
Semester: I
List of Course Objectives (CO'S)

Course Objectives:
Introduce basic concepts of software testing.

1. Understand the best way to increase the effectiveness, test coverage, and execution speed in software testing.
2. Understand white box, block box, object oriented, web based and cloud testing.
3. Understand the importance of software quality and assurance software systems development.
4. Know in details automation testing and tools used for automation testing.
5. To learn and understand the combination of practices and tools that are designed to help QA professionals test more efficiently.

List of Course Outcomes:

Course Outcomes:
CO1: Describe fundamental concepts in software testing such as manual testing, automation testing and software quality assurance.
CO2: Design and Develop project test plan, design test cases, test data, and conduct test operations.
CO3: Apply recent automation tool for various software testing for testing software.
CO4: Apply different approaches of quality management, assurance, and quality standard to software system.
CO5: Apply and analyze effectiveness Software Quality Tools.
CO6: Apply tools necessary for efficient testing framework.

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S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com

Ph.No.-02559-225015

DEPARTMENTAL ORGANIZATION CHART

SL- I LAB

PRINCIPAL
DR.D.M.Yadav

↓

H.O.D.
DR.PAWR U.B

↓

LAB INCHARGE
PROF:- Kurhe P.V..

↓

LAB ASSISTANT
Mr.Roshan

↓

LAB PEON
MR. Kahar

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com

Ph.No.-02559-225015

Date: 18/8/22

SL I Lab

Lab Cost:

Sr. No.	Item Details with Accessories Description	Qty	Rate Per Unit(Rs.)	Total Amount(Rs.)
1	Lenovo Desktop,Dual Core 3rd ,Generation H61 Motherboard,500 HDD,2GB DDR-3 Ram,2.4 GHZ,Lenovo 18'5 HD Led Screen,USB Keyboard & Mouse, ATX POWER Supply	18	33,000	5,94,000
2	D Link-24 Port 10/100 Switch	1	4050	4050
3	Epson LX-300+,Dot Matrix Printer	2	6250	12500
4	Epson LX-300+,Dot Matrix Printer	1	7400	7400
5	Agasti UPS 7.5 KVA with 17 Batteries	1	2,97,000	2,97,000
	Grand Total (Rs.)			6,47,650

Lab Incharge
Prof.Kurhe P.V.

HOD
Dr. Pawar U.B
Department of Computer Engineering
S.N.D. College of Engg & RC,Yeola

Date: 25-08-2022

Software Lab I

Subject:LP 1(310248)
Semester :1
List of course objectives(co's):

Sr.No	List of Course Objectives:
1	To learn system programming tools
	To learn modern operating system

Sr.No	List of Course Outcomes:
1	On completion of the course, learners will be able to
2	Systems Programming and Operating System
3	CO1: Implement language translators
4	CO2: Use tools like LEX and YACC
5	CO3: Implement internals and functionalities of Operating Syste

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

Date: 18/8/22

Lab Status Report

Name of Laboratory:- SL I Lab
Lab Area:- 77.26 Sq.m.
Lab Cost:- 6,47,650/-

Sr. No.	Item Details with Accessories Description	Total Qty	Available	Working	Not Working	Transfer/ Remark
01	Lenovo Desktop,Dual Core 3 rd ,Generation H61,Motherboard,500 HDD,2gb DDR-3 Ram,2.4 GHZ,Lenovo 18'5'HD Led Screen,USB Keyboard & Mouse, ATX Power Supply	20	18	18	Nil	Nil
02	D-Link -24 Port 10/100 Switch	01	01	01	Nil	Nil
03	Epson LX-300+,Dot Matrix Printer	00	00	00	Nil	Nil
04	Epson LX-300+,Dot Matrix Printer	00	00	00	Nil	Nil
05	Agasti UPS 7.5 KVA with 17 Batteries	01	01	01	Nil	Nil
06	Chairs	20	20	20	Nil	Nil
07	Cupboard	00	00	00	Nil	Nil
08	Staff Table	01	01	01	Nil	Nil
09	Fan	02	02	02	Nil	Nil
10	Tube light	04	04	04	Nil	Nil
11	White Board	01	01	-	-	-

Lab In-Charge
Prof. Kurhe P.V.

H.O.D
Dr.P HOD U.B.s
Department of Computer Engineering
S.N.D. College of Engg & RC,Yeola

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

Date: 18/8/22

SL I Lab

Sr. No.	Name of the Laboratories/Workshop	Total Area of Lab/Workshops	Equipments/ Furniture
1	SL I Lab	77.26 Sq.m	18 Pc,Lenovo,D-Link 24 Port 10/100 Switch,Agasti Invertr-7.5 Kva,17 Battery

Lab Incharge
Prof. Kurhe P.V.

HOD
Dr.U.B.Pawar
Department of Computer Engineering
S.N.D. College of Engg & RC,Yeola

Software Lab I

Date: 25-08-2022

Subject: LP 1(310248)
Semester : 1
List of Practicles :

Sr.No	Assignments
1	Design suitable Data structures and implement Pass-I and Pass-II of a two-pass assembler for pseudo-machine. Implementation should consist of a few instructions from each category and few assembler directives. The output of Pass-I (intermediate code file and symbol table) should be input for Pass-II
2	Design suitable data structures and implement Pass-I and Pass-II of a two-pass macroprocessor. The output of Pass-I (MNT, MDT and intermediate code file without any macro definitions) should be input for Pass-II.
3	Write a program to recognize infix expression using LEX and YAAC.

S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

Lab: - Software Lab-I

w.e.f:- 28/08/2022

TIME / DAY	10:00 TO 11:00	11:00 TO 12:00	12:00 TO 12:45	12:45 TO 01:45	01:45 TO 02:45	02:45 TO 03:00	03:00 TO 04:00	04:00 TO 05:00
MON			L U N C H B R E A K	T1-LP1		T E A B R E A K		
TUE				T3-LP1				
WED				T2-LP1				
THU				T1-LP1				
FRI				T2-LP1				
SAT								

Lab Incharge
(Prof. P. P. Kurhe P.V)

Time Table I/C
(Prof. P. S. Gursal)

HOD
(Prof. HOD Pawar)

Department of Computer Engineering
S.N.D. College of Engineering

LAB FLOORING

SOFTWARE LAB-II   **LAB AREA=77.26 Sq.m.**

UL-06	UL-05	UL-04	UL-03	UL-02	UL-01		CH-20
							LAB INCHARGE CABIN
CH-6	CH-5	CH-4	CH-3	CH-2	CH-1	CH-23	CH-21 CH-22

Cupboard&Switc (left vertical label)

White Board

Practical I/C

CH-12	CH-11	CH-10	CH-9	CH-8	CH-7

UL-12	UL-11	UL-10	UL-9	UL-08	UL-07

UL-18	UL-17	UL-16	UL-15	UL-14	UL-13

CH-18	CH-17	CH-16	CH-15	CH-14	CH-13

Cupboard (left vertical label)

CH-19

Lab Asst

CUPBOARD (left vertical label)

SL-II

Sag Rack1   Sag Rack2

ENTRY
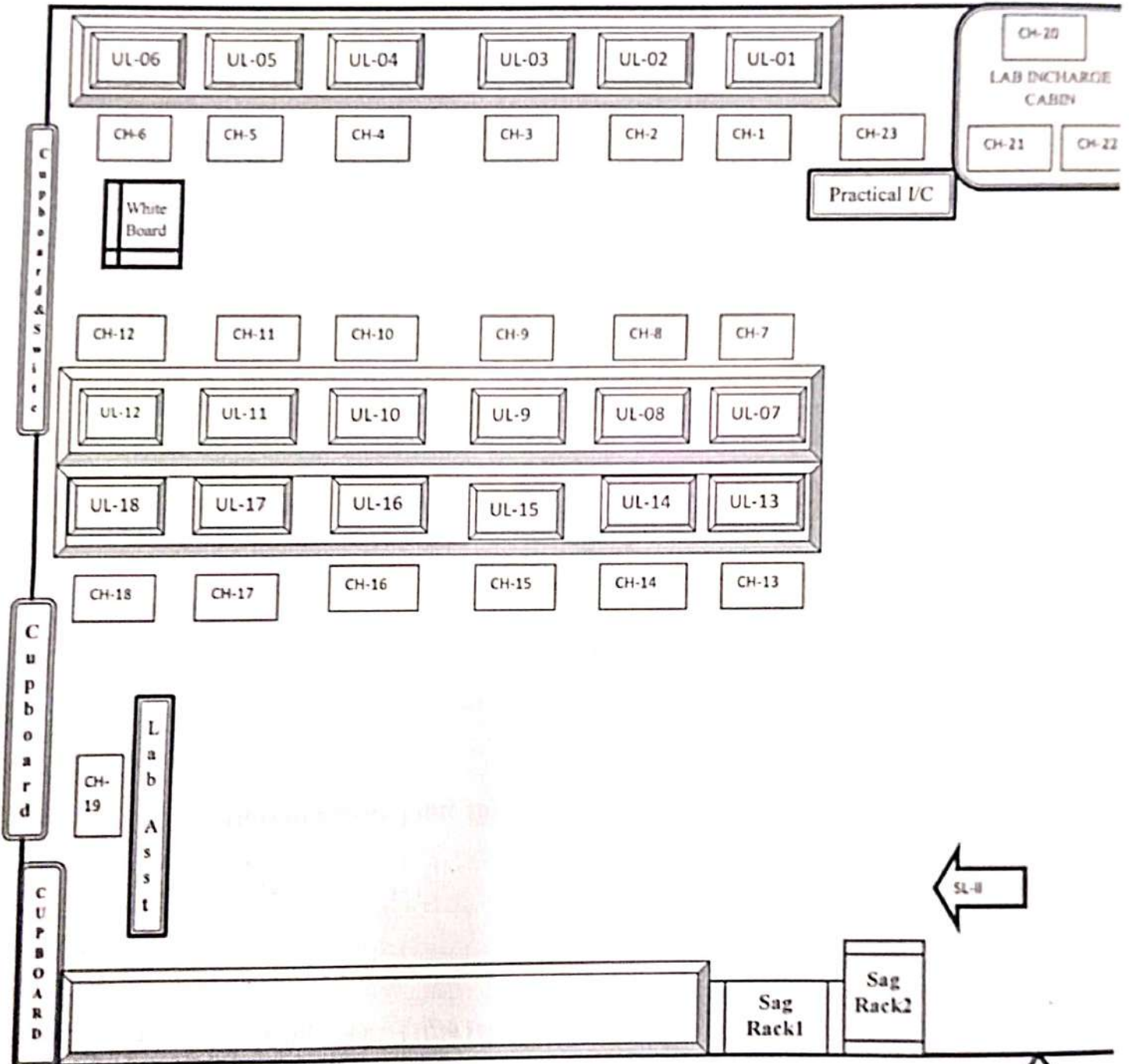
Lab Incharge - Prof. Kulprakashsingh A. Mistri.

Lab Asst. - Mr.Roshan Wagh

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

Date: 18-07-2022

Software Lab-II

Sub: Object Oriented Programming (210247)

Semester: I

List of Course Objectives (CO'S):

Sr. No	List of Course Objectives
	To understand basics of Computer Graphics, apply various methods and techniques for implementing line- circle drawing, projections, animation, shading, illumination and lighting using concepts of Object Oriented Programming.

List of Course Outcomes:

Sr.No	List of Course Outcomes
1	**CO1:** Understand and apply the concepts like inheritance, polymorphism, exception handling and generic structures for implementing reusable programming codes.
2	**CO2:** Analyze the concept of file and apply it while storing and retrieving the data from secondary storages.
3	**CO3:** Analyze and apply computer graphics algorithms for line-circle drawing, scan conversion and filling with the help of object oriented programming concepts.
4	**CO4:** Understand the concept of windowing and clipping and apply various algorithms to fill and clip polygons.
5	**CO5:** Apply logic to implement, curves, fractals, animation and gaming programs.

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S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-sndcomp@gmail.com   Ph.No.-02559-225015

DEPARTMENTAL ORGANIZATION CHART

SOFTWARE LAB-II

PRINCIPAL DR. D.M. YADAV

↓

H.O.D. Dr. U.B.PAWAR

↓

LAB INCHARGE Mr.Kulprakashsingh A. Mistri)

↓

LAB ASSISTANT Mr.Nikhil Shinde

↓

LAB PEON MR. KAHAR

S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

EQUIPMENT LIST

Name of Laboratory :-- SOFTWARE LAB-II

Lab Area :-- 77.26 Sq. m

Sr. No	Item Description With Accessories Description	Total Quantity	Available	Transfer/ Remark
1	Lenova Think Center i5(6th Gen) , 8 Gb Ram, 256 Gb SSD, 18.5" Monitor, USB Keyboard, & USB Mouse	18	18	Nil
2	Switch D-Link 16-Port 10/100	01	01	Nil

Lab Incharge

Prof. Kulprakashsingh A. Mistri

HOD

HOD
Department of Computer Engineering
S.N.D. College of Engg & R.C. Yeola

S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

COMPUTER ENGINEERING DEPARTMENT

Email-comp.sndcoe@gmail.com   Ph.No.-02559-225015

EQUIPMENT COST

Name of Laboratory :-- SOFTWARE LAB-II

Lab Area :-- 77.26 Sq. m

Sr. No	Item Description With Accessories Description	Total Quantity	Rate /Unit	Total Amount
1	Lenova Think Center i5(6th Gen) , 8 Gb Ram, 256 Gb SSD, 18.5" Monitor, USB Keyboard, & USB Mouse	18	17,800	3,20,400/-
2	Switch D-Link 16-Port 10/100	01	3000/-	3000/-
			Grand Total	3,23,400/-

Lab Incharge

(Prof. Kulprakashsingh A. Mistri)

HOD
Department of Computer Engineering
S.N.D. College of Engg & RC,Yeola
(Dr. U.B. Pawar)

Jagdamba Education Society's

SND College of Engineering and Research Centre ,Yeola

Ta.Yeola,Dist: Nashik

Department of Electrical Engineering

All Lab Details

Sr.No	Name of Laboratory	Lab-Incharge
1	Electrical Machine -I	Prof.N.V.Hadpe
	Electrical Machine -II	
2	Analog & Digital Electronics	Prof.S.T.Kamble
	Fundamental of Microcontroller and Applications	Prof.G.L.Dake
3	Network Analysis	Prof.S.S.Sudake
	Electrical Machines & Instrumentation	Prof.C.K.Shejwal
4	Power Electronics	Prof .Fareed Ahmed
	Advance Electrical Drives and Control	Prof.A.M.Solanki
5	Control System Lab	Prof.S.G.Phiske
6	Material Science	Prof.S.H.Choube
	High Voltage	Prof.A.B.Pawar
7	Switchgear and Protection	Prof.Y.V.Lukare
8	PLC & SCADA/Computer system I	Prof.G.L.Dake
	Computer System Lab -II	Prof.N.D.Mutha
10	PG Research	Prof.N.V.Hadpe

HOD

Dr. P.C. Tapre

Head

Department Of Electrical Engg

SND College of Engg.& Rc,Yeola

Machine lab I & II

➢ Laboratory Area :Required As Per Norms: 66.00 Sq. m

Machine lab II Available: 75.00 Sq. m

➢ Total Cost of Laboratory: Rs. 7,59,501/-

Prof.Hadpe N.V.
[M.E.Power System]
Laboratory In charge

Mr.Bhatude R.
[DEE]
Laboratory Assistant

Mr. Tribhuvan
[SSC]
Laboratory Attendant

Sr No	Name of Equipments	Quantity in No.s	Page No.
1	D.C. Motor	6	01-04
2	D.C. Generator	2	05-07
3	Alternator (Non -salient pole type)	1	08-10
4	Induction Motor	6	11-16
5	Synchronous Motor	2	17-20
6	Rotor Resistance Starter	2	21-22
7	2 Point Starter	1	23-24
8	3 Point Starter	4	25-27
9	4 Point Starter	1	28-29
10	Rectifier	2	30-31
11	Tachometer	3	32-32
12	Transformer	6	33-36
13	Slide Wire Rheostat	20	37-39
14	D.O.L. Starter	4	40-42
15	Wattmeter	15	43-46
16	Dimmerstat	3	47-49
17	D.C Voltmeter	10	50-53
18	A.C Voltmeter	12	54-56
19	D.C Ammeter	22	57-59
20	A.C. Ammeter	19	60-63
21	Digital Multimeter	8	64-65
22	Phase Sequence Meter	1	66
23	Synchronizing Panel	1	67
24	Excitation unit for Alternator	1	68
25	Knife Switch	3	69
26			
27			

Lab Incharge

Prof.Hadpe N.V.& Yeole S.S.

HOD

Dr. Tapre P.C

Head
Department Of Electrical Engg.
SND College of Engg.& Rc,Yeola

Jagadamba Education Society's
S.N.D. College of Engineering & Research Center, Yeola
Tal: Yeola, Dist: Nashik-423401
Department of Electrical Engineering
All Lab Details
Academic Year: 2021-22

Lab Name:	Electrical Machine Lab I & II			
Sr. No.	Apparatus/Equipment Description	Quantity	Rate (Rs/Unit)	Cost (including discount, VAT, Packeging,etc (Rs.)
1	1-PHASE DIMMERSTAT (2.5 KVA , 0 to 230 V)	2	3300	7525
2	3-PHASE DIMMERSTAT (0 to 440 V, 12 A)	1	15,620	17,572
3	DC- VOLTMETER (0 to 50 to 100 V)	2	1645	3701
4	AC- VOLTMETER (0 to 300 to 600 V)	3	1515	5113
5	DC- AMMETER (0 to 1 to 2 A)	1	1670	1878
6	DC- AMMETER (0 to2.5 to5 A)	1	1670	1878
7	DC- AMMETER (0 to 5 to 10 A)	4	1670	7515
8	DC- AMMETER (0 to 10 to 20 A)	2	1670	3758
9	AC- AMMETER (0 to 5 to 10 A)	2	1450	3262
10	AC- AMMETER (0 to 10 to 20 A)	2	1450	3262
11	DC SHUNT MOTOR COUPLED WITH 3 PHASE ALTERNATOR (D.C.SHUNT MOTOR : 5 HP , 230V, 17 A, 1500 RPM)	1	15,000	15,000
12	DC COMPOUND GENERATOR (2KW , 230 V, 7 A, 1500 RPM)	1	13,000	13,000
13	3 PHASE ALTERNATOR (NON SALIENT POLE TYPE) COUPLED WITH D.C . SHUNT MOTOR (3 PHASE ALTERNATOR : 3.5 KVA, 415 V, 4.5 A, 1500 RPM)	1	18,000	18,000
14	DC COMPOUND GENERATOR (5 KW , 440 V, 10 A, 1500 RPM)	1	30,000	30,000
15	3 PHASE INDUCTION MOTOR WITH MECHANICAL LOADING ARRANGMENT (5 HP , 415 V, 10.5 A, 50 Hz , 1440 RPM)	1	12,000	12,000
16	1 PHASE INDUCTION MOTOR WITH MECHANICAL LOADING ARRANGMENT (1 HP , 230 V ,6 A, 1440 RPM)	1	6,000	6,000
17	3 PHASE INDUCTION MOTOR COUPLED WITH DC GENERATOR (3 HP , 415 V, 7.5A, 1440 RPM)	1	18000	18000
18	RECTIFIER (I/P : 0-230 V AC , 0 to 230 V DC , 20 A)	1	7706	7706
19	TECHOMETER (DIGITAL) (0 to 9999 RPM)	2	3038	6076
20	1 PHASE TRANSFORMER (2KVA, 10A , 230/120V, 115V, 110V WITH TAPPINGS,)	1	6300	6300
21	SLIP RING INDUCTION MOTOR WITH MECHANICAL LOADING ARRANGMENT (3 Phase, 5HP , 415 V, 7A, 1440 RPM)	1	18,000	18000
22	3 PHASE SYNCHRONOUS MOTOR (5 HP ,415 V, 7A, 1500 RPM)	1	22,000	22,000
23	ROTOR RESISTANCE STARTER FOR 3 PHASE	1	3000	3000

Jagdamba Education Society's

S.N.D. College of Engineering & Research Center, Yeola
Tal: Yeola, Dist: Nashik-423401

Department of Electrical Engineering
All Lab Details

Academic Year: 2021-22

24	2 POINT STARTER FOR D.C. SERIES MOTOR	1	1500	1500
25	3 POINT STARTER D.C. SHUNT MOTOR	1	1500	1500
26	4 POINT STARTER D.C. SHUNT MOTOR	1	1500	1500
27	3 PHASE TRANSFORMER (5 KVA, 415 /230 V ,7A)	1	18500	18500
28	DC SHUNT MOTOR WITH MECHANICAL LOADING ARRANGMENT (3HP , 230 V,13 A, 1500 RPM)	1	30,000	30,000
29	DC SERIES MOTOR WITH MECHANICAL LOADING ARRANGMENT (2.2KW , 230 V,11.8 A, 1500 RPM)	1	25,900	25,900
30	3 POINT STARTER FOR D.C. SHUNT MOTOR	1	2000	2000
31	RHEOSTAT 10 Ohm / 5.2 Amp	1	960	960
32	ROTOR RESISTANCE STARTER FOR 3 PHASE SLIP RING INDUCTION MOTOR	1	5000	5000
33	3 POINT STARTER FOR D.C. SHUNT MOTOR	3	1710	5130
34	1 PHASE TRANSFORMER (2 KVA,230V /110 V , 10 A)	4	6650	26600
35	RHEOSTAT 520 Ohm / 1.2 Amp	4	1100	4400
36	DOL STARTER FOR 3 PHASE SQUIRREL CAGE INDUCTION MOTOR (FOR 3HP & 5 HP INDUCTION MOTOR)	3	1330	3990
37	WATTMETER(UPF TYPE) (2.5/5 A),(300 V/600V), (0 to 750 W) SP/SE	3	3121	9363
38	WATTMETER(UPF TYPE) (2.5/5 A),(300 V/600V), (0 to 400W) SP/SE	1	3121	3121
39	RHEOSTAT 1000 ohm / 1 Amp	4	4000	18000
40	WATTMETER(LPF TYPE) (5/10 A),(150/300 V /600V), (0 to 750 W)	4	4806	21,627
41	DC VOLTMETER (0 to 75 to 150 V)	1	1468	1652
42	DC VOLTMETER (0 to 50 to 100 V)	1	1468	1652
43	DC VOLTMETER (0 to 300 to 600 V)	2	1468	3304
44	AC VOLTMETER (0 to 75 to 150 V)	2	1348	3033
45	AC AMMETER (0 to 2.5 to 5 A)	2	1348	3033
46	ODM DIGITAL MULTIMETER	4	266	1199
47	ODM DIGITAL CLAMPMETER	1	262	294
48	ABDEC MAKE, DC POWER SUPPLY UNIT THYRISTOR CONTROLLED REGULATED TYPE WORKING ON 3 PHASE, 415V, 50HZ.AC INPUT , OUTPUT - 220 V. D.C. 100 A.	1	1,48,517	1,48,517
49	TACHOMETER (0 to 9999 RPM)	2	2360	4,720
50	DIGITAL MULTIMETER	1	1400	1400
51	MEX-TECH 15 B –Digital Multimeter	1	2150	5412
52	RHEOSTATE 110 Ω/5 A	3	5940	17820
53	RHEOSTATE 520Ω/1.2 A	3	2600	7800
54	DIGITAL TACHOMETER CONTACT TYPE	2	2100	4200
55	PHASE SEQUANCE METER	1	2000	2000
56	3.0 HP/ 220 V/1500 RPM DC SHUNT MOTOR WITH	1	29600	29600

Jagdamba Education Society's

S.N.D. College of Engineering & Research Center, Yeola
Tal: Yeola, Dist: Nashik-423401

Department of Electrical Engineering
All Lab Details

Academic Year: 2021-22

57	3.0 HP/ 220 V/1500 RPM DC SERIES MOTOR WITH BDA (SR NO.1401-9713)	1	29600	29600
58	5.0 HP /415V/1440RPM/3 PH SQUIM WITH BDA(SR NO.20928-1261)	1	22545	22545
59	5.0 HP/220V/1500RPM/SHUNT MOTOR # 3.0KVA/1415V/1500RPM/3PH/ROTOR WOUND SILENT POLE TYPE ALTERNATOR(SR NO.1401-9715#A1401-585)	1	60105	60105
60	SYNCHRONISING PANNEL	1	22140	22140
61	3 POINT STARTER	2	2125	4250
62	DUAL STARTER FOR 5.0 HP SQIM	1	2125	2125
63	FIELD RHEOSTATE 200Ω/1.7 A	5	1735	8675
64	2 A SEPARATE EXCITATION UNIT	1	5530	5530
65	SPDT KNIFE SWITCHWITH BAKELITE BED AND TERMINALS	3	840	2520
66	PO PORT MSSB-3(AC)0-300V ACCU 1.0%	3	1340	3166
67	PO PORT MSSB-3 AC 0-300/600 V ACCU 1.0%	4	1395	4394
68	MP PORT MSSB-1 DC 0-150/300 V ACCU 1.0%	04	1600	5040
69	PO PORT MSSB-3 AC 0-2 A ACCU 1.0%	01	1880	1480
70	PO PORT MSSB-3 AC 0-5 A ACCU 1.0%	03	1880	4441
71	PO PORT MSSB-3 AC 0-5/10 A ACCU 1.0%	03	2050	4843
72	PO PORT MSSB-3 AC 0-10 A ACCU 1.0%	02	1880	2961
73	PO PORT MSSB-3 AC 0-10/20 A ACCU 1.0%	04	2050	6457
74	MP PORT MSSB-1 DC 0-2 A ACCU 1.0%	02	1645	2591
75	MP PORT MSSB-1 DC 0-2 A ACCU 1.0%	02	1880	2961
76	MP PORT MSSB-1 DC 0-5/10A ACCU 1.0%	06	1815	8575
77	MP PORT MSSB-1 DC 0-10/20A ACCU 1.0%	04	1815	5717
78	PO PORT MSMB-4, 0-750 WATT 2.5/5A,300/600 V,ACCU 1.0 %	03	2245	5304
79	PO PORT MSMB-4, 0-1500 WATT 5/10A,300/600 V,ACCU 1.0 %	02	2290	3607
80	PO PORT LSDW-1, 0-750 WATT 2.5/5A,150/300 V,ACCU 1.5 %	02	4320	6804
81	BENLEC AUTO SYNCHRONOUS MOTOR -3 HP, 3 PH, 415V, 1500 RPM, 50 HZ, SALIENT POLE SEPERATLY EXCITE WITH MECH BRAKE DRUM LOADING ARRANGEMENT	01	34110	42326
82	3 HP,5HP,PUMP SET INDUCTION MOTOR 415V, 50 HZ	01	Transfer from Mech. To Elect. Dept.	
	Total Cost (Including VAT, Tax, etc & Discount, if any):			**7,59,501**

Lab Area: 146.49 Sq.m.
Lab Incharge: Prof. Hadpe N.V.
Lab Assistant: Mr.Bhatude R.

Lab Incharge

H.O.D.

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Jagdamba Education Society's

S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401

DEPARTMENT OF ELECTRICAL ENGINEERING

S E Electrical (Even Sem)

Electrical Machines- I

Sr. No.	Name Of Experiment	QR Code
1	Open Circuit and Short Circuit test on single phase two winding transformer.	
2	Polarity Test on single phase transformer	
3	Parallel operation of two single phase transformer	
4	Speed control of DC shunt motor by armature and field control	
5	To conduct load test on given three phase induction motor and plot the performance characteristics induction motor	

(10.36 Meter)

PRACTICAL TABLE

STAFF TABLE

COMPUTER TABLE

SYNCHRONOUS MOTOR PANEL

INDUCTION MOTOR PANEL

DC SHUNT MOTOR PANEL

SINGLE PHASE INDUCTION MOTOR PANEL

RECTIFIER UNIT

(6.73 Meter)

(6.73 Meter)

INSTRUMENT CUPBOARD

DC SERIES MOTOR PANEL

L.A TABLE

STUDENT RACK

(10.36 Meter)

Jagdamba Education Society's
S. N. D. College of Engineering & Research Center, Yeola
Approved by AICTE & Govt. of Maharashtra, Affiliated to SPPU Pune, Accredited by NAAC, ISO 9001:2015 Certified

Department of Electrical Engineering

Name of Laboratory : Electrical Machine Lab

List Of Experiments

As per Syllabus

Semester – II

Class – SE

Subject - Electrical Machines-I (203146)

1	O.C. and S.C. test on single phase Transformer a. Determination of equivalent circuit parameters from the test data b. Determination of voltage regulation and efficiency
2	Parallel operation of two single phase transformers and study of their load sharing under various conditions of voltage ratios and leakage impedance.
3	. Speed control of D.C. Shunt motor and study of starters.
4	. Load test on 3-phase induction motor.
5	Polarity test on single phase and three phase transformer.
6	Brake test on D.C. Shunt motor
7	Load characteristics of D.C. series motor.
8	. No load & blocked-rotor test on 3-phase induction motor:

Beyond Syllabus :

1	NO load test on DC shunt motor
2	Speed control of slip ring induction motor by using rotor resistance starter.

Prof. N.V. Wadpe
Lab Incharge

Dr. R.C. Tapre
HOD

6	No load and blocked rotor test on three phase induction motor	
7	Calculation and performance test on three phase induction motor	
8	Load test on DC series motor	

Subject Teacher
Prof. Shejwal C.K.

HOD
Dr. Tapre P.C.

Head
Department Of Electrical Engg.
SND College of Engg.& Rc,Yeola

ADE LAB

➢ Laboratory Area :Required As Per Norms: 66.00 Sq. m

Available: 70.05 Sq. m

➢ Total Cost of Laboratory: Rs. 335760/-

Prof.Kamble S.T
[M.E.]
Laboratory In charge

Mr. Jadhav K.K.
[DEE]
Laboratory Assistant

Mr. Tribhuvan
[SSC]
Laboratory Attendant

Jagdamba Education Society's

S.N.D. College of Engineering & Research Center, Yeola
Tal: Yeola, Dist: Nashik-423401

Department of Electrical Engineering
All Lab Details

Academic Year: 2022-23

Lab Name:	ADE Lab			
Sr. No.	Apparatus/Equipment Description	Quantity	Rate (Rs/Unit)	Cost (including VAT, Packaging, etc) (Rs.)
1	Function Generator 8005 B 2 MHz, with digital display	10	4600	51750
2	F.G.-8005B 2 MHz Function Generator	06	4675	28050
3	P.S. 302D, 0-30V/2A D.C. Regulator Power Supply	10	5500	61875
4	P.S. 302D, 0-30V/2A D.C. Regulator Power Supply, Dual Tracking Power Supply	06	5015	30090
5	D.C.-005, 0-5V/1A Power Supply	05	1550	8715
6	ADROIT DC-005, 5V Fixed power Supply	10	1828	18280
7	CQ620, 20 MHz Dual Trace Analog Oscilloscope	10	11500	119600
8	MS-8264 Digital Multimeter	10	1400	15750
9	Digital Multimeter	01	1650	1650
	Total Cost (Including VAT, Tax, etc & Discount, if any):			335760

Lab Area: 70.07 Sq.m.
Lab Incharge: Prof. Kamble S.T.
Lab Assistant: Mr. Jadhav K. K.

Lab Incharge
Prof. Kamble S.T.
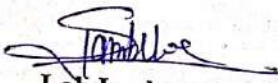
H.O.D.
Dr.Tapre P.C.
Head
Department Of Electrical Engg
SND College of Engg & RC, Yeola

SND COLLEGE OF ENGINEERING AND RESERCH CENTER
BABHULGAON, YEOLA
Department Of Electrical Engineering
MAJOR EQUIPMENT LIST
(ADE LAB)

Sr. No	ITEM DETAILS	Qty.	COST
01	Function Generator 8005 B 2 MHz, with digital display	16	79800/-
02	P.S. 302D, 0-30V/2A D.C. Regulator Power Supply	16	91965/-
03	D.C.-005, 0-5V/1A Power Supply	15	26995/-
04	CQ620, 20 MHz Dual Trace Analog Oscilloscope	10	119600/-
05	MS-8264 Digital Multimeter	10	15750/-
06	Digital Multimeter	01	1650/-
	Total Cost Of ADE Lab		**3,35,760/-**

Lab In charge

Prof. Kamble S.T.

H.O.D.

Dr.Tapre P.C.

Head
Department Of Electrical Engg.
SND College of Engg.& Rc,Yeola

DOOR

ADE LAB

Cupboard   Cupboard

Staff Table

Practical Table

Practical Table

Practical Table

Practical Table

Practical Table

Practical Table

Practical Table

Practical Table

Practical Table

Practical Table

Practical Table

Student Table

Cupboard

STAFF TABLE

STAFF TABLE

Cupboard

Cupboard   Cupboard

White Board

Department of Electrical Engineering

Subject-ADE

Sr.No	Name Of Experiment	QR Code
1	Design of logical circuit for display of decimal number on seven segment display.	
2	. Deign 3:8 decoder for binary to octal decoding	
3	. Design three bit full adder using any open source software	

4	. Design logical circuit to convert binary to EXCESS 3/Gray number system	
5	Design digital clock or stop watch using decade counter.(IC74192)	
6	Design first order high pass and low pass filter using OPAMP in any open source software. (For this provide one statement to each of four students to perform with desired cut-off frequency. Each group will demonstrate their result and prepare documentation)	
7	Find phase angle difference between same frequency signal using ZCD and AND gate	
8	Design astable multivibrator using IC-555	

Subject In charge

Prof. Kamble S.T.

HOD

Dr Tapre P.C.
Head
Department Of Electrical Engg.
SND College of Engg.& Rc,Yeola

FMA LAB

➤ Laboratory Area :Required As Per Norms: 66.00 Sq. m

Available: 70.05 Sq. m

➤ Total Cost of Laboratory: Rs. 216553/-

Prof.Dake G.L.
[M.E.]
Laboratory In charge

Mr. Jadhav K.K.
[DEE]
Laboratory Assistant

Mr. Tribhuvan
[SSC]
Laboratory Attendant

S.N.D. College of Engineering & Research Center, Yeola

Tal: Yeola, Dist: Nashik-423401

Department of Electrical Engineering
All Lab Details

Academic Year: 2022-23

Lab Name:	FMA Lab			

Sr. No.	Apparatus/Equipment Description	Quantity	Rate (Rs/Unit)	Cost (including VAT, Packaging, etc) (Rs.)
01	8085 Microprocessor Trainer Kit (Anshuman)	10	3800	38000
02	Dyna 85-LU #200 to 202 (8085 Trainer Kit-Dynalog)	03	6950	27230
03	Dyna 51 #1304 to 1311 (8051 Trainer Kit-Dynalog)	08	7293	58344
04	PIO-ADC 01 #2242; 2243 (2 KHz)	02	782	1941
05	PIO- ADC 08 # 697;698	02	1800	4839.50
06	PIO-DAC 01 #2711;2712	02	629	1561
07	PIO-DAC 01 #3263;3264	02	1550	4189.50
08	Study DCM #802	01	969	1202
09	Study 8255 #2013;2014	02	2250	6048
10	Study 8253 #1688 to 1691	04	2175	11459
11	PIO Stepper #1894	01	629	781
12	TR-STP- Motor 12V, 2Kg, CM2 for STP PIO Card	01	1377	1460
13	PIO- SERDISP #605 to 608	04	1250	6634
14	PIO-STEPPER #2424,2425	02	1250	3411
15	Cable & Connector Set with Keyboard for dyna 51	08	523	4438
16	LCD Projector- BENQ (DLP) MP515	01	24888	28000
17	Cable set for Dyna 85LU	03	450	1446
18	MAS-830L- Digital Multimeter	01	450	506
19	STUDY- DCM #940,941	02	1500	4060
20	TR-PSU-SMPS 03 Power Supply for Dyna 85 LU	03	1450	4659
21	TR-KBD,PS2 Keyboard for LCD Kit for Dyna 85 LU	03	575	1846
22	TR-STP, stepper motor, 12V, 2Kg CM2 for STP-PIO Card	02	2100	4498
	Total Cost (Including VAT, Tax, etc & Discount, if any):			216553

Lab Area: 70.07 Sq.m.

Lab Incharge
Prof. Dake G.L.

H.O.D
Dr.Tapre P.C.

Head
Department Of Electrical Engg
SND College of Engg.& Rc,Yeola

DOOR

Cupboard **Cupboard**

Staff Table

Practical Table

Practica l Table

Practical Table

Student Table

Practical Table

Practical Table

Practical Table

Practical Table

Practical Table

Practical Table

Practical Table

STAFF TABLE

STAFF TABLE

Cupb oar d

Cupb oar d

Cupboard **Cupboard**

White Board

EMI & NA Lab

➢ Laboratory Area :Required As Per Norms: 66.00 Sq. m

Available: 78.84 Sq. m

➢ Total Cost of Laboratory: Rs. 2,74,984/- (EMI Lab)

➢ Total Cost of Laboratory: Rs.14450/- (NA Lab)

Prof. Shejwal C.K.
[M.E.PS]
EMI Laboratory In charge

Mr. Shaikh Nasir
[I.T.I]
Laboratory Assistant

Mr. Tribhuvan
[SSC]
Laboratory Attendant

EMI & NA LAB

White Board

Cupboard

IN

Practical Table

Practical Table

Practical Table

Practical Table

Lamp Bank

Practical Table

Practical Table

Practical Table

Practical Table

Cupboard

Staff Table

Student Table

Student Table

Staff Table
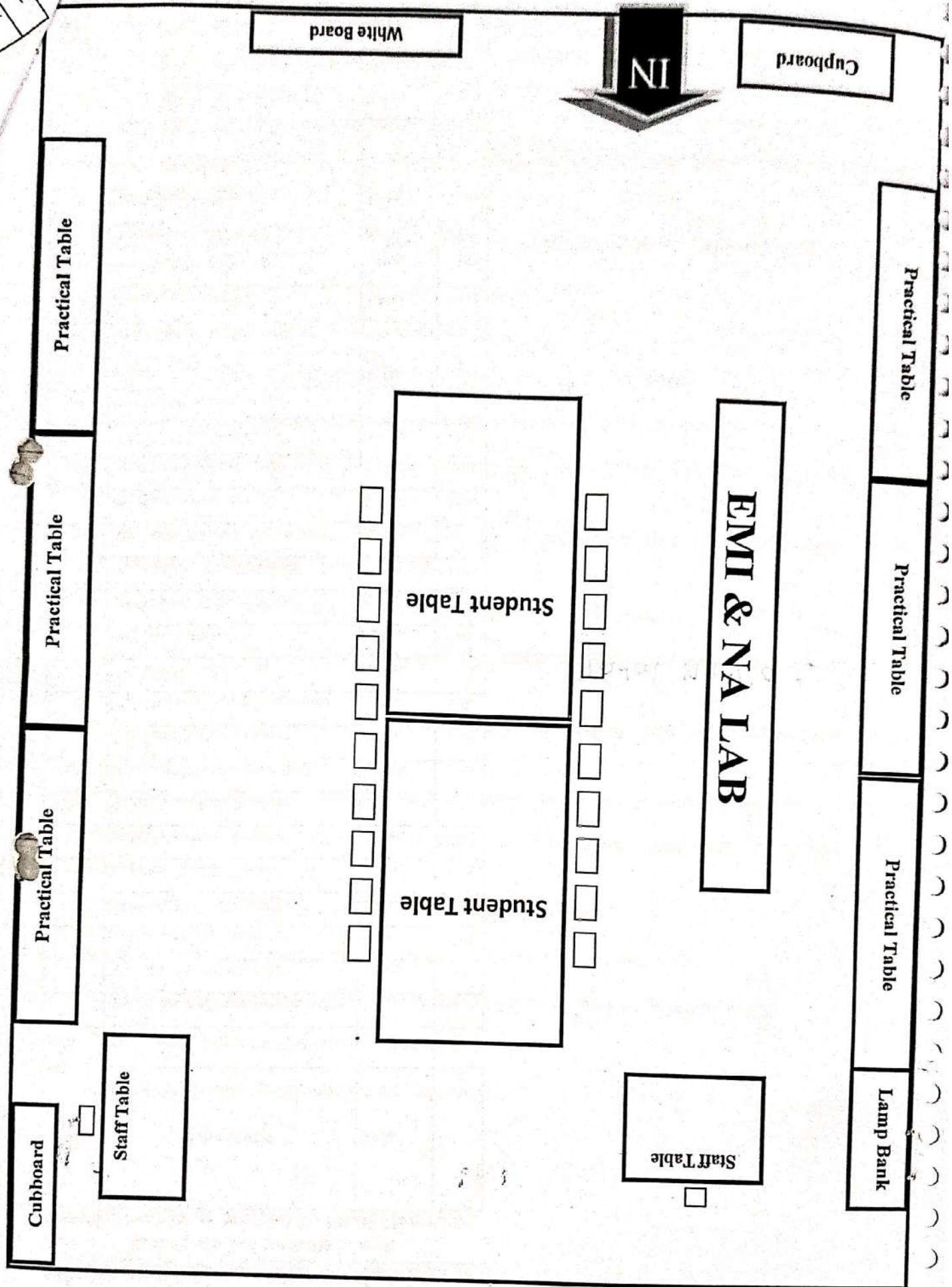
Jagdamba Education Society's

S.N.D. College of Engineering & Research Center, Yeola
Tal: Yeola, Dist: Nashik-423401

Department of Electrical Engineering
List of Experiment

Academic Year: 2021-22

As per Syllabus

Class: SE   Semester: I   Subject: Electrical Measurements & Instrumentation

Practical section will comprise of two part; part A and part B.

Practical examination will be conducted on Part A.

Distribution of term works marks; Part A : 10 Marks, Part B : 15 Marks.

Part A: Minimum eight experiments are to be conducted from the following experiments:

1. Extension of ammeter range using CT, voltmeter range using PT and watt meter range using CT / PT.

2. i) Measurement of medium resistance by Ammeter- Voltmeter method. ii) Measurement of low resistance using Kelvin's Double Bridge.

3. Measurement of inductance using Anderson's bridge / Maxwell's bridge.

4. Measurement of active & reactive power in three phase balanced circuit using one wattmeter method with two way switch.

5. Measurement of reactive power by one wattmeter with all possible connections of current coil and pressure coil.

6. Measurement of three phase active & reactive power by two wattmeter method procedure.

7. Measurement of active power in three phase, four wire system using three CTs & two wattmeter.

8. Calibration of single phase wattmeter at different power factors.

9. Calibration of single phase static energy meter at different power factors.

10. Measurement of voltage, current, time period, frequency & phase angle using CRO.

11. To study and plot the characteristics of LVDT.

12. Electrical methods for measurement of liquid level.

Jagdamba Education Society's

S.N.D. College of Engineering & Research Center, Yeola

Tal: Yeola, Dist: Nashik-423401

Department of Electrical Engineering
List of Experiment

Academic Year: 2021-22

Part B: Minimum eight experiments / case studies are to be conducted from the following:

1. Study of various standards (IS/IEC) related to calibration process of various instruments and NABL accredited Test Laboratory visit.

2. Measurement of soil resistivity using four pin wenner method.

3. Study of programmable LCR meter; Measure L, C, R, Q, dissipation factor and power factor of given component.

4. Demonstration of Power analyser and multifunction meter for measurement of various 16 electrical quantities.

5. Study of Digital Storage Oscilloscope: a) Different modes in DSO such as Roll, Average, Peak detection. b) Capture transients c) FFT analysis d) Various MATH operations

6. Study and demonstration of net meter and four quadrant TOD Meter.

7. Detailed study of various temperature transducers, their selection procedure, specifications, characteristics and comparison, calibration process of temperature transducer.

8. Determination of polarities and ratio, phase angle and ratio error of various CTs and PTs.

9. Study and demonstration of DIAF / Woodward alternator synchronization relay used in industrial power system for synchronization of DG sets and Alternators.

10. Detailed study of on line Energy Monitoring System, various parameters, EMS software capabilities, trending with IOT applications. Demonstration of EMS system by inviting Expert.

11. Virtual instrument modeling using software like LABVIEW.

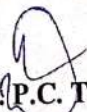12. Study of advanced metering infrastructure in smart grid

Jagdamba Education Society's

S.N.D. College of Engineering & Research Center, Yeola
Tal: Yeola, Dist: Nashik-423401

Department of Electrical Engineering
Major Lab Equipments Details

Academic Year: 2021-22

Lab Name:	EMI Lab			
Sr. No.	Apparatus/Equipment Description	Quantity	Rate (Rs/Unit)	Cost (Rs.)
1	DC Voltmeter 0-150-300V	04	1645	7403
2	DC Voltmeter 0-10-20V	06	1469	9912
3	DC Voltmeter 0-50-100V	03	1469	4957
4	DC Voltmeter 0-75-150 V	01	1469	1652
5	MP Port MSSB-1 (D.C.) 0-150/300V Accuracy 1%	02	1600	3060
6	DC Ammeter 0-2.5-5A	02	1420	3195
7	DC Ammeter 0-5-10A	02	1348.35	3033.70
8	DC mAmmeter 0-100mA	03	1544	5211
9	MP Port MSSB-01 DC 0-2 A Accu 1%	02	1645	2591
10	MP Port MSSB-01 DC 0-5 A Accu 1%	02	1880	2961
11	AC Voltmeter 0-75-150V	06	1348.35	9101.10
12	AC Voltmeter 0-300-600V	08	1348.35	12135.15
13	PO Port MSSB-03 AC 0-300V Acc 1%	03	1340	3166
14	PO Port MSSB-03 AC 0-150/300V Acc 1%	02	1395	2197
15	PO Port MSSB-03 AC 0-300/600V Acc 1%	02	1395	2197
16	AC Ammeter 0-5-10A	02	1450	3262.50
17	AC mAmmeter 0-200mA	04	1291	5809.50
18	PO Port MSSB-03 AC 0-2A Acc 1%	02	1880	2961
19	PO Port MSSB-03 AC 0-5A Acc 1%	02	1880	2961
20	PO Port MSSB-03 AC 0-5-10A Acc 1%	03	2050	4843
21	PO Port MSSB-03 AC 0-10A Acc 1%	02	1880	2961
22	PO Port MSSB-03 AC 0-10/20A Acc 1%	02	2050	3228
23	Wattmeter, LPF, 5-10A, 300-600V, 0-750 W, 0.2PF	02	5800	13050
24	Wattmeter, UPF, 2.5-5A, 300-600V, 0-750 W	04	2840	12780
25	PO Port MSMB-04 0-750W, 2.5-5A, 300/600V Acc 1%, UPF	03	2245	5304
26	PO Port MSMB-04 0-1500W, 5-10A, 300/600V Acc 1%, UPF	02	2290	3607
27	PO Port LSDW-01 0-750W, 2.5/5A, 150-300V Acc 1.5%, LPF	02	4320	6804
28	Digital Multimeter	03	1400	4200
29	Digital Multimeter	01	1650	1650
30	9101-BEE TECH Digital Multimeter	01	1100	1237.50
31	Anderson Bridge Kit	01	5900	5900
32	Schearing Bridge Kit	01	5900	5900

EMI & NA Lab

➢ Laboratory Area :Required As Per Norms: 66.00 Sq. m

Available: 78.84 Sq. m

➢ Total Cost of NA Laboratory: Rs. 14450/-

Prof. Sudake S.S.
[M.E. PS]
Laboratory In charge

Mr. Shaikh Nasir
[I.T.I]
Laboratory Assistant

Mr. Tribhuvan
[SSC]
Laboratory Attendant

As per Syllabus

Class: SE   **Semester: II**   **Subject: Network Analysis**

Any four experiments from the first five of the following and any four experiments from rest of the list. (Minimum four experiments should be based on simulation software along with hardware verification)

1. Verification of Superposition theorem in A.C. circuits.

2. Verification of Thevenin's theorem in A.C. circuits.

3. Verification of Reciprocity theorem in A.C. circuits.

4. Verification of Millmans' theorem.

5. Verification of Maximum Power Transfer theorem in A.C. circuits.

6. Determination of time response of R-C circuit to a step D.C. voltage input. (Charging and discharging of a capacitor through a resistor)

7. Determination of time response of R-L circuit to a step D.C. voltage input. (Rise and decay of current in an inductive circuit)

8. Determination of time response of R-L-C series circuit to a step D.C. voltage input.

9. Determination of parameter of Two Port Network.

10. Determination of current under parallel Resonance condition.

11. Determination of Resonance, Bandwidth and Q factor of R-L-C series circuit.

Jagdamba Education Society's
S.N.D. College of Engineering & Research Center, Yeola
Tal: Yeola, Dist: Nashik-423401
Department of Electrical Engineering
Major Lab Equipments Details

Academic Year: 2021-22

Lab Name:	Network Analysis Lab			
Sr. No.	Apparatus/Equipment Description	Quantity	Rate (Rs/Unit)	Cost (Rs.)
01	Verification of Superposition Theorem with AC Source	01	2890	2890
02	Verification of Thevenins Theorem with AC Source	01	2890	2890
03	Verification of Reciprocity Theorem with AC Source	01	2890	2890
04	Verification of Millimans Theorem with AC Source	01	2890	2890
05	Verification of Maximum Power Transfer Theorem with AC Source	01	2890	2890
	Total Cost (Including VAT, Tax, etc & Discount, if any):			14450/-

Lab Area: 78.84 Sq.m.
Lab Incharge: Prof. Sudake S.S.
Lab Assistant: Mr.Shaikh Nasir

Lab Incharge
Prof. Sudake S.S.

H.O.D.
Dr.P.C.Tapre
Head
Department Of Electrical Engg.
SND College of Engg.& Rc,Yeola

Scanned with OKEN Scanner

Power Electronics Lab & Advanced Electrical Drives and Control Lab
Laboratory Area: Required as per Norms: 66.00 Sq. m.
Available: 77.00Sq.m.
Total cost of Laboratory: Rs. 3,46,574/-

Prof. Fareed Ahmad
[Ph.D. perusing]
Laboratory In Charge
(Power Electronics)

Prof. A.M. Solanki
[M.E.]
Laboratory In Charge
(Advanced Electrical Drives and Control)

Nasir Shaikh
[I.T.I.]
Lab Assistant

Jagdamba Education Society's

S.N.D. College of Engineering & Research Center, Yeola
Tal: Yeola, Dist: Nashik-423401

Department of Electrical Engineering
Major Lab Equipments Details

Academic Year: 2022-23

Lab Name:	Power Electronics Lab&Advanced Electrical Drives and Control Lab			
Sr. No.	Apparatus/Equipment Description	Qty.	Rate (Rs/Unit)	Cost (Rs.)
1	V-I Char. Of SCR,TRIAC,GTO	1	14,720	17,369
2	TRANSFER Char. Of MOSFET & IGBT,	1	7,820	9,227
3	1-ph Full &half-controlled converter for R & RL LOAD	1	11,684	13,787
4	3-Ph Controlled Rectifier	1	24,104	28,442
5	Step down Chopper CLC & TRC KIT	1	9,660	11,398
6	3-Ph Voltage source converter for 120&180 deg mode	1	27,600	32,568
7	Speed control characteristics of 1-ph fully controlled converter with SEDCMotor,	1	33,718	39,787
8	Speed control characteristics of 3-ph fully controlled converter with Motor	1	37,582	44,347
9	Study of Chopper fed DC Series Motor	1	24,702	29,148
10	Study of VSI fed 3-ph I.M with cable SCADA using V/F Control Method	1	63,480	74,906
11	Study of Solid state 3- phase Stator Voltage Control	1	38,640	45,595
	Total Cost (Including VAT, Tax, etc & Discount, if any):			3,46,574

Lab Area: 77.00 Sq.m.
Lab Incharge: Prof. Fareed Ahmad
Lab Incharge: Prof. A.M. Solanki

Lab Incharge
Prof. Fareed Ahmad

Lab Incharge
Prof. A.M. Solanki

H.O.D.
Dr. P.C. Tapre
Head
Department Of Electrical Engg.
SND College of Engg.& Rc,Yeola

List of Experiment

Power Electronics Lab

Minimum eight experiment should be conducted

Expt. No.	Name of Experiment
1	Static VI characteristic of SCR / GTO.
2	Static VI characteristic of TRIAC
3	Study of Gate firing circuits of SCR (R, RC & UJT).
4	Single phase Half controlled converter with R and RL load.
5	Single phase fully controlled converter with R load.
6	Single Phase fully controlled converter with and without Free Wheeling diode with RL load
7	Three phase AC-DC fully controlled bridge converter R and RL load.
8	Study of DC step down chopper.
9	Single phase A.C. voltage regulator with R and RL load.
10	Output and Transfer Characteristic of MOSFET and IGBT (Both).
11	Three phase voltage source inverter using 120^0 and 180^0 mode
12	Study of three phase inverter (VSI)

Lab In-Charge
Prof. Fareed Ahmad

HOD
Dr. Tapre P.C.
Head
Department Of Electrical Engg.
SND College of Engg.& Rc,Yeola

List of Experiment

Advanced Electrical Drives and Control Lab

Following 5 experiments are compulsory

Expt. No.	Name of Experiment
1	Electrical braking of D.C. Shunt motor (Rheostatic, Plugging)
2	Speed control characteristics of single phase fully converter fed separately excited D.C. motor
3	VSI fed 3 phase Induction motor (using V/f control PWM Inverter) speed control characteristics
4	Chopper fed D.C. series/separately motor speed control characteristics
5	Electrical braking of 3 phases Induction Motor (DC Dynamic Braking, Plugging, Regenerative Braking)
Any 4 experiments from following	
6	Speed control characteristics of 3-ph fully converter fed separately excited D.C. motor
7	Simulation of Induction Motor Vector Control
8	Study of constant torque and constant power characteristic of Induction motor.
9	Study of speed control of BLDC / PMSM drive
10	Simulation of closed loop control of BLDC / PMSM drive
11	Simulation of vector control of PMSM/BLDC motor

Lab-In-Charge
Prof. A.M. Solanki

HOD
Dr. Tapre P.C.
Head
Department Of Electrical Engg.
SND College of Engg.& Rc,Yeola

Jagdamba Education Society

SND College of Engineering and Research Centre, Yeola

Department of Electrical Engineering

QR Code: Manual for Power Electronics (PE)

TE - Odd Sem

Lap Incharge

Prof. Fareed Ahmad

HOD

Dr. Tapre P. C.

Head
Department Of Electrical Engg
SND College of Engg.& Rc,Yeola

List of Experiments and Manual QR codes

Experiment Name

Experiment 1: V-I Characteristics of SCR

Experiment 2: V-I characteristics of TRIAC

Experiment 3: Characteristics of MOSFET/IGBT

Experiment 4: Study of Step-Down Chopper

Experiment 5: Single Phase Full Wave
Controlled Rectifier

Experiment 6: Single Phase Half Controlled
Converter

Experiment 7: Single Phase Fully Bridge
Controlled Converter

Experiment 8: 3-phase PWM Inverter

Lab Incharge (PE)
Prof. Fareed Ahmad

HOD
Dr. Tapre P.C.
Head
Department Of Electrical Engg.
SND College of Engg.& Rc,Yeola

Control System (Control System Engineering / Advance Control System) **Lab**

Laboratory Area :Required As Per Norms: 66.00 Sq. m

Available: 66·03 Sq. m

Total Cost of Laboratory : Rs. 1,01,419/-

Prof. Phiske S.G.
[M.E.EPS]
Laboratory In charge

Mr. Tribhuvan
[S.S.C.]
Laboratory Attendant

Control System Lab

IN
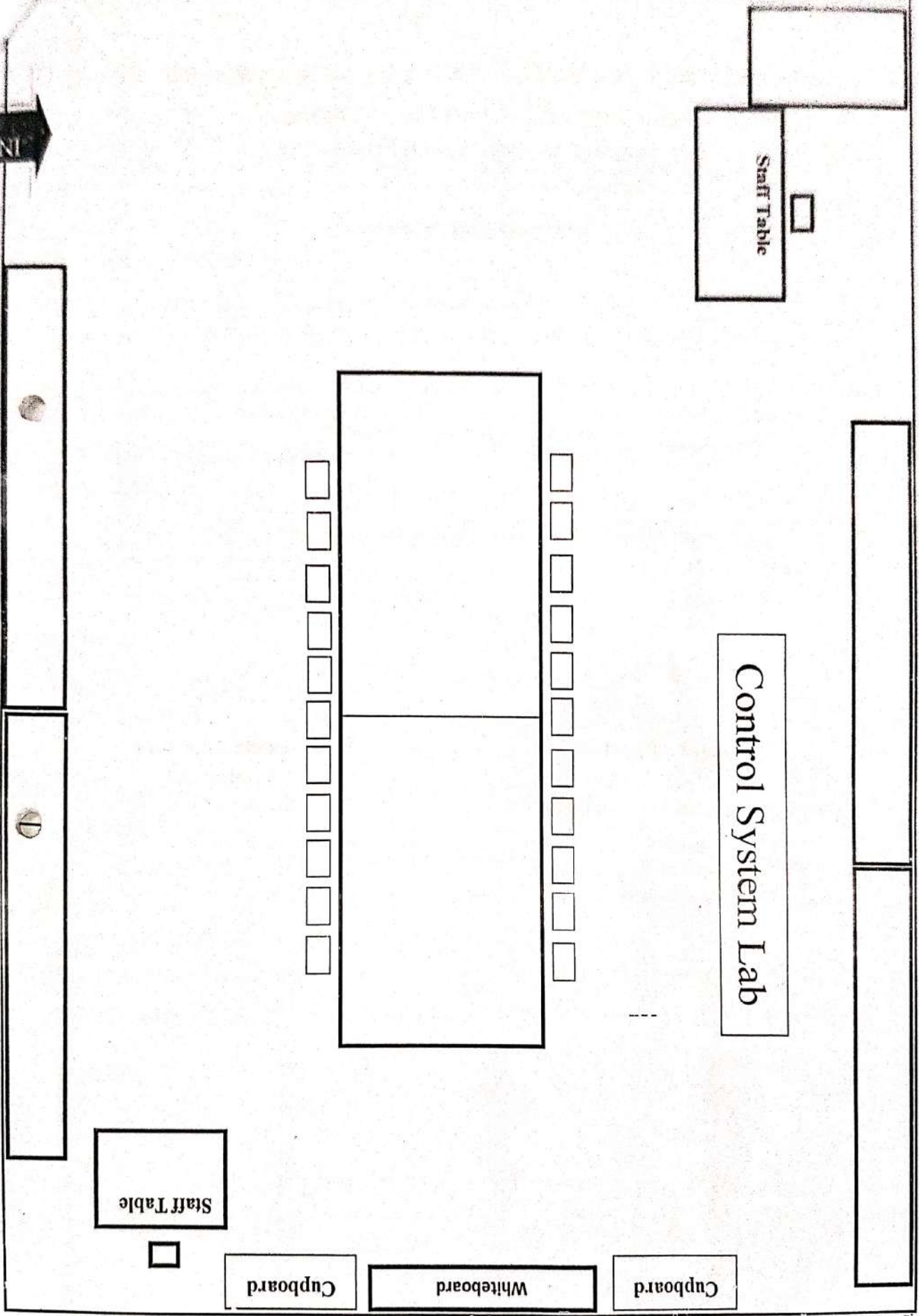
Staff Table

Staff Table

Cupboard

Whiteboard

Cupboard

S.N.D College of Engineering & Research Center, Yeola
Department of Electrical Engineering
List of Experiment – Beyond Syllabus

Control System Engineering	
Expt. No.	**Name of Experiment**
1	To study the process control system of thermal power plant
2	To study the control action of power control room in load dispatch center.

Advance Control System Engineering	
Expt. No.	**Name of Experiment**
1	To study the speed control of AC drives in Process Control Industry.
2	To study overload protection system by using feedback control system.

Prof. S. G. Phiske
Lab Incharge
Control System Lab

Dr. P.C. Tapre
HOD
Department of Electrical Engineering

Head
Department Of Electrical Engg.
SND College of Engg.& Rc,Yeola

Department of Electrical Engineering
List of Experiment
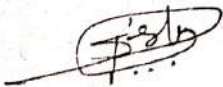
	Control System Engineering Lab
	Minimum five experiment should be conducted
Expt. No.	**Name of Experiment**
1	Experimental determination of DC servo motor parameters for mathematical modeling and transfer function
2	Experimental study of time response characteristics of R-L-C second order system.
3	Experimental determination of frequency response of Lead compensator.
4	Experimental determination of frequency response of Lag compensator.
5	PID control of level/ Temperature/speed control system.
6	Experimental determination of transfer function of any one physical systems (AC Servomotor/ Two Tank System/ Temperature control/ Level control)
7	Experimental analysis of D.C. Motor Position control System.
	Minimum **three** experiment should be conducted
1	Stability analysis using a) Bode plot, b) Root locus and c) Nyquist plot.
2	Effect of P, PI and PID controllers on time response of second order system.
3	Analysis of closed loop DC position control system using PID controller
4	Effect of addition of pole-zero on root locus of second order system.
5	Effect of addition of dominant and non-dominant poles on step response of second order system.
6	PID controller for speed/position control of DC servomotor.

Prof. S. G. Phiske
Lab Incharge
Control System Lab

Dr. P.C. Tapre
HOD
Department of Electrical Engineering

Department of Electrical Engineering
List of Experiment

	Advance Control System Lab
	Perform any 8 experiments using any simulation software
Expt. No.	Name of Experiment
1	Simulation of a lead or lag compensator for a given system and comparison of compensated and uncompensated systems responses.
2	Simulation of the closed-loop system with ideal real as a nonlinearity.
3	Software program for determining a state-space model for a given transfer function and vice versa.
4	Software program for determining the state transition matrix.
5	Software program for checking the observability and controllability of a given system.
6	Simulation of state feedback control design using software.
7	Simulation of a full-order observer-based state feedback control system.
8	Effect of sampling and verification of sampling theorem by simulation.
9	Converting a continuous-time system to a discrete-time system and checking the response using the software.
10	Design of a linear quadratic regulator for a given system using simulation.

Prof. S. G. Phiske
Lab Incharge
Control System Lab

Dr. P.C. Tapre
HOD
Department of Electrical Engineering

NAME OF LAB : PG Lab

JagdambaEducation Society's
SND COLLEGE OF ENGINEERING AND RESEARCH CENTRE, YEOLA
Department of Electrical Engineering
Academic Year 2022-2023
(ODD Semester)

DAY \ TIME	10.00 TO 11.00	11.00 TO 12.00	12.00 TO 12.45	12.45 TO 1.45	1.45 TO 02.45	02.45 TO 03.00	3.00 TO 04.00	04.00 TO 05.00
MONDAY							B2-ACS	
TUESDAY			L U N C H		T E A		B1-ACS	
WEDNESDAY								
THURSDAY			B R E A K		B R E A K		B3-ACS	
FRIDAY								
SATURDAY								

Prof. N. V. Hadpe
Lab In-charge

Dr. R. C. Tapre
HOD

Head
Department Of Electrical Engg
SND College of Engg.& Rs,Yeola

Dr. D.M. Yadav
Principal

S.N.D. College of Engineering & Research Center, Yeola

Tal: Yeola, Dist: Nashik-423401

Department of Electrical Engineering
Major Lab Equipments Details

Academic Year: 2021-22

Lab Name:	Control System (Control System Engineering / Advance Control System) Lab			
Sr. No.	Apparatus/Equipment Description	Quantity	Rate (Rs/Unit)	Cost (including discount, VAT, Packeging,etc (Rs.)
1	Experimental determination of DC servo motor parameters for mathematical modeling, transfer function and characteristics	1	22600.00	22600.00
2	Experimental frequency response determination of Lag and Lead compensator	1	26400.00	26400.00
3	Experimental determination of transfer function of PWM servo amplifier	1	23600.00	23600.00
4	Experimental analysis of D.C. Position Control System	1	23600.00	23600.00
5	Time response of second order system effect of P,PI, PID on it	1	24000.00	24000.00
	Total Cost (Including VAT, Tax, etc & Discount, if any):			1,01,419/-

Lab Area: 66.00Sq.m

Lab Incharge:- Prof.Phiske S.G.

Lab Incharge
Prof. Phiske S.G.

H.O.D.
Dr.Tapre P.C.

S.N.D. College of Engineering & Research Centre, Yeola
Department of Electrical Engineering
Practicals: Advanced Control System
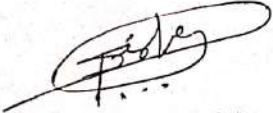
B·E (ODD SEM)

Expt. No.	Name of Experiment	QR Code
01	Simulation of Lead Lag Compensator for given system & comparison of compensated & Uncompensated system	
02	To determine the controllability & observability of state model of given system	
03	Software programming to obtain State Transition Matrix.	
04	To obtain State Space from a given Transfer Function & verify using software programming.	
05	Effect of Sampling & Verification of Sampling Theorem	

06	Simulation of a full order based state feedback control system	
07	To obtain the transfer function from a given state space & verify using software programming.	
08	To design system by Pole Placementthrough gain matrix.	

Prof. S. G. Phiske
Subject Incharge

Dr. P. C. Tapre
Head,
Department of Electrical Engineering

Switch Gear & Protection Lab

➤ Laboratory Area :Required As Per Norms: 67.05 Sq. m
Available: 70.05 Sq. m

➤ Total Cost of Laboratory: Rs.10,93,964/-

Prof.Y.V. Lukare
[M.E.]
Laboratory In charge

Mr. Tribhuvan
[SSC]
Laboratory Attendant

Sr. No	Name of Experiment
1	Study of switchgear testing kit.
2	Study of Fuse, MCB & MCCB
3	Testing of MCB & MCCB
4	Study and testing of contactor
5	Study and testing of ACB
6	Study and plotting Characteristics of IDMT type Induction over current relay
7	Study of Bus Bar Protection schemes
8	Study of various LT switchgears like RCCB, timers.
9	Industrial Visit.

Lab In Charge
Prof. Y.V.Lukare

HOD
Dr. P.C. Tapare
Head
Department Of Electrical Engg.
SND College of Engg.& Rc,Yeola

Jagdamba Education Society's
S.N.D. College of Engineering & Research Center, Yeola
Tal: Yeola, Dist: Nashik-423401
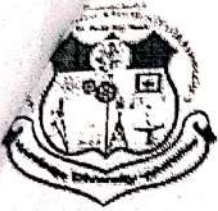## Department of Electrical Engineering
Major Lab Equipments Details

Academic Year: 2022-23

Lab Name:	Switchgear & Protection Lab			
Sr. No.	Apparatus/Equipment Description	Quantity	Rate (Rs/Unit)	Cost (Rs.)
1	Merz-price protection of alternator & % differential protection of Xmer (both exp. On single unit). Alternator—3 KVA,1500 RPM,50Hz,415V,3.87A, star with mechanically coupled. 3 phase induction motor—1400 RPM,415V,50Hz,4.7A, delta connected. Transformer—3 phase star/star,403V Resistive load bank—3 phase,400V,3KW,15 steps	1	6,12,000	6,02,781
2	Study of Thermal overload relay. Thermal overload relay test kit—100A current source,variac 0-270V,digital current display,digital time interval meter, Two rotory switches—1 switch current range selection-1,2,5,10,20,50A.---2 switch-current o/p(1-short,2-inject) 3 Relay unit—(1)0.63 to 1A capacity (2)1.6 to 2.5 A capacity (3)2.5 to 4 A capacity	1	71,300	70,226
3	Electromechanical over current relay kit for IDMT charect. Secondary current injection unit, over current relay – variac 0-270V,digital current display,digital time interval meter,rotory protection timer Two rotory switches—1 switch current range selection-1,2,5,10,20,50A.---2 switch-current o/p(1-short,2-inject) Electromechanical over current relay , plug setter,current capacity of relay 0.5-2A	1	83,100	81,848

Jagdamba Education Society's

S.N.D. College of Engineering & Research Center, Yeola
Tal: Yeola, Dist: Nashik-423401

Department of Electrical Engineering
Major Lab Equipments Details

Academic Year: 2022-23

4	600A capacity ACB –L&T make ACB test unit source 1000A i/p 1 phase 230 V,50Hz AC supply, display current time in second in testing unit(digital) Variac 0-270V	1	96,500	96,046
5	Study of charec. Of MCB & FUSE(up to 50A) MCB testing unit—Variac 0-270V,100A,digital current source, digital time interval meter, Two rotory switches—1 switch current range selection-1,2,5,10,20,50A.---2 switch-current o/p(1-short,2-inject) MCB(1,2,4,6A) Fuse testing kit with measurable scale	1	82,000	80,746
6	Study of switchgear & ACB kit 3 CT ACB, 630 A,800A 3 phase ACB	1	76,800	75,643
7	Charect. Of microprocessor based overcurrent relay kit. Secondary current injection unit, over current relay – variac 0-270V,digital current display,digital time interval meter,rotory protection timer Two switches—(1) current range selector (2)current o/p microprocessor based over current relay- indicatot ,power on trip test reset	1	88,000	86,674
	Total Cost (Including VAT, Tax, etc & Discount, if any):			10,93,964

Lab Area: 67.05 Sq.m.
Lab Incharge: Prof.Y.V.Lukare

Lab Incharge
Prof.Y.V.Lukare

H.O.D.
Dr. P.C. Tapre
Head
Department Of Electrical Engg
SND College of Engg.& Rc,Yeola

Jagadamba Education Society's

SND College of Engineering & Research Center
Babhulgaon Yeola -423 401
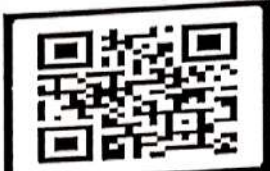### Department of Electrical Engineering
Switch Gear & Protection
Lab layout

Green Board

Lab Entrance →
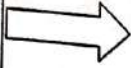
Notice Board

Faculty Sitting 1

Faculty Sitting 2

Cupboard for Students Record

Mertz- Price Protection Kit

Students Sitting Arrangement

Window

Students Bag Stand

Protection Experiments Kits

Lab In-Charge

H.O.D

Class- B.E.

Lab Incharge - Prof. Y V Lukare

Sem-II

SCAN ME

Practical wise QR code

Course Name: SGP   **Class: BE Electrical A.Y.: 2022-23**

Name of Faculty: Prof.Y.V.Lukare   **Semester: 7TH**

Pr. No.	Name of Experiment	QR CODE
1	Study of Swich Gear Testing Kit	SCAN ME
2	Study of Fuse, MCB, MCCB	SCAN ME
3	Study of MCB & MCCB	SCAN ME
4	Study & Testing of Contractor	SCAN ME

5	Study & Testing of ACB	QR Code — SCAN ME
6	Study & Ploting Characteristics of IDMT Type Induction over Current Realy	QR Code — SCAN ME
7	Study of Bus Bar Protection Schems	QR Code — SCAN ME
8	Study of Various LT Swich Gears Like RCCB Timers	QR Code — SCAN ME

Subject Teacher
Prof. Y.V.Lukare

H.O.D
Dr.P.C.Tapre
Head
Department Of Electrical Engg.
SND College of Engg.& Rc,Yeola

Jagdamba Education Society's

S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

INFORMATION TECHNOLOGY DEPARTMENT

ACADEMIC YEAR(2022-23)SEM-I

Email-sndcoeit2008@gmail.com   Ph.No.-02559-225019

DIGITAL LAB (Lab Cost)

Lab Cost:

Sr. No.	Item Details with Accessories Description	Qty	Rate Per Unit(Rs.)	Total Amount(Rs.)
1	Lenovo Think center M73 DESKTOP INTEL i5 CPU 6th Gen, 8 GB RAM,256 GB SSD, GRAFICE CARD integrated 2 GB, 550 WATTS SMPS,6 USB PORT, RJ 45 1000 MBPS PORT, Power Cable 19" LED SCREEN with VGA & HDMI PORT USB KEYBORD & USB MOUSE	20	18,850	3,77,000/-
2	Stepper Motor DC Interfacing	01	1140/-	1140/-
3	ADC/DAC Interfacing	02	1140/-	2280/-
4	8051 Microcontroller Trainer	02	5925/-	11850/-
5	8086 Trainer Kit	02	8400/-	16800/-
6	Digital IC Trainer	06	3500/-	23625/-
7	Switch D-link 24Port	01	5,000/-	5,000/-
	Grand Total (Rs.)			4,37,695/-

Lab Incharge
Mr. PAWAR Y.B.

HOD
Prof.Rokade P.P

Jagdamba Education Society's

S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

INFORMATION TECHNOLOGY DEPARTMENT

ACADEMIC YEAR(2022-23)SEM-I

Email-sndcoeit2008@gmail.com   Ph.No.-02559-225019

UNIX LAB (Lab Cost)

Lab Cost:

Sr. No.	Item Details with Accessories Description	Qty	Rate Per Unit(Rs.)	Total Amount(Rs.)
1	Lenovo Think center M73 DESKTOP INTEL i5 CPU 6th Gen, 8 GB RAM,256 GB SSD, GRAFICE CARD integrated 2 GB, 550 WATTS SMPS,6 USB PORT,RJ 45 1000 MBPS PORT, Power Cable 19" LED SCREEN with VGA & HDMI PORT USB KEYBORD & USB MOUSE	18	17,800	3,20,400/-
2	EPSON Projector ED-E01	01	24,843	24,843/-
3	UPS 7.5 KVA,Tabular Batteries(15) 120AH(12V)	01	1,46,999	1,46,999/-
4	Switch D-link 24Port	01	7,950/-	7,950/-
	Grand Total (Rs.)			**5,00,192/-**

Lab Incharge
Mr.Abhale B A

HOD
Prof.Rokade P.P
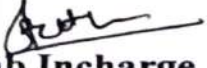
SOFTWARE LAB (Lab Cost)

Lab Cost:

Sr. No.	Item Details with Accessories Description	Qty	Rate Per Unit(Rs.)	Total Amount(Rs.)
1	20 Lenovo Think Center i5 CPU 4th Gen, 8 GB RAM,256 GB SSD, SMPS,6 USB PORT,RJ 45 1000 MBPS PORT, Power Cable 19" LED SCREEN with VGA & HDMI PORT USB KEYBORD & USB MOUSE	20	18,850/-	3,77,000/-
2	EPSON Projector ED-E01	01	24,843	24,843/-
3	UPS 3.5 KV/48 Volts SUKAM (FUSION) with 04 BATTERS	01	59800/-	59800/-
4	D-Link 24 Port Giga Swtich 100 mbps Swtich	01	29,50/-	29,50/-
	Grand Total (Rs.)			464,593/-

Lab Incharge
Mr. Tathe S.G.

HOD
Dept. of Information Technology
SND College of Engg.& Research Cen
Babhulgaon, Yeola Dist. Nasik (
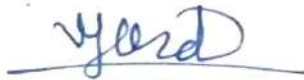
Programming Lab (Lab Cost)

Lab Cost:

Sr. No.	Item Details with Accessories Description	Qty	Rate Per Unit(Rs.)	Total Amount(Rs.)
1	HP Elite Desktop	20	17,000	340,000
2	TP link TLSG 10240	1	7,100	7,100
3	Lan Tray	100	80	8000
4	LAN Cable CAT-6 Finolex	2	4,800	9,600
5	Canon Printer Lasershot LBP-2900B	1	15,750	15,750
Grand Total (Rs.)				380,450

Lab Incharge
Prof. Gorde V.S.

HOD
Prof.Rokade P.P

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MICROPROCESSOR LAB (Lab Cost)

Lab Cost:

Item Details with Accessories Description	Qty	Rate Per Unit(Rs.)	Total Amount(Rs.)
Lenovo Think center M73 DESKTOP INTEL i5 CPU 6th Gen, 8 GB RAM,256 GB SSD, GRAFICE CARD integrated 2 GB, 550 WATTS SMPS,6 USB PORT, RJ 45 1000 MBPS PORT, Power Cable 19" LED SCREEN with VGA & HDMI PORT USB KEYBORD & USB MOUSE	20	18,850	3,77,000/-
Lan Switch	1	5,000	5000.00
screen 6*8ft. With traypod	1	5,000	5000.00
IR proximity sensor	3	27	88.00
PIR Sensor 85423100 SKU DAA700X	3	68	204.00
DHT11 Sensor Module	1	129	129.00
DHT22 Temp. Sensor &Humidity Sensor	3	294	882
Active Buzzer Module	3	43	123.00
NODEMCU based on CP2102	4	322	1288.00
Sound Sensor	4	26	104.00
MQ8 Gas sensor module	4	144	576
ultrasonic sensor	4	62	248
RELAY MODULE	3	175	525
BREAD BOARD MB 102	9	75	675.00
G1-12 Bread board	9	65	650.00
Ardinuo uno	1	752	752
IOT Equipments	80	-	368
Grand Total (Rs.)			393613/-

Lab Incharge
Prof. Algat Y. S.

HOD
Prof. Rokade P.P

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

INFORMATION TECHNOLOGY DEPARTMENT

ACADEMIC YEAR(2022-23)SEM-I

Email-sndcoeit2008@gmail.com   Ph.No.-02559-225019

DEPARTMENT OF INFORMATION TECHNOLOGY

LAB SUMMARY

- **Cost of Lab:** Rs 397750
- **Location Code: 214**
- **Lab Utilization:**

Semester 1	Semester 2
DSAL (SE)	CL-IX(BE)
LP-I (TE)	

- **Area Statement:**
  Area Required: 66,00 Sq. Mt   Area Available: 70 Sq. Mt

- **Lab In charge:** Prof.Thombare N.S.   **Lab In charge:** Miss.Pooja Bhavar

- **List of Major Apparatus/Equipment's in the Lab:**

Sr. No	Name	Quantity	Unit Price(Rs)	Total Price(Rs)
1.	Desktop Computer Lenovo Thinkcentre GEN 4,8 GB Ram 256 SSD,15" TFT Monitor	20	18850/-	377000/-
2.	LAN Switch	01	5000/-	5000/-
3.	Canon Printer	01	15750 /-	15750/-
			Total	3,97,750/-

Lab In charge

HOD

SOFTWARE LAB 2 (Lab Cost)

Lab Cost:

Sr. No.	Item Details with Accessories Description	Qty	Rate Per Unit(Rs.)	Total Amount(Rs.)
1	HP Compact Desktop PC Core-2 Duo | 1GB RAM,160 GB @7200pm HDD, DVD/R/W/Free Dos/Warranty 3-3-3/15"wide TFT with Keyboard Mouse	09	18,200/-	1,63,800/-
2	HP Pro 3090 MT Desktop | P/N 8639 0284 1GB | 320 GB | Free DOS | 15"wide TFT with Keyboard Mouse	11	17,250/-	1,89,750/-
3	Switch D-link 24Port	01	7,100/-	7,100/-
	Grand Total (Rs.)			3,60,650/-

Lab Incharge
Prof. Mistri K. A.

HOD
Prof. Rokade P. P.

Jagdamba Education Society's
S.N.D College of Engineering & Research Center, Babhulgaon, Yeola-423401.

INFORMATION TECHNOLOGY DEPARTMENT

ACADEMIC YEAR(2022-23)SEM-1

Email-sndcoeit2008@gmail.com   Ph.No.-02559-225019

PROJECT LAB (Lab Cost)

Lab Cost:

Sr. No.	Item Details with Accessories Description	Qty	Rate Per Unit(Rs.)	Total Amount(Rs.)
1	DESKTOP COMPUTER GEN 7 B 250 / i7-7700 3-6G 4C /4GB RAM DDR4 – 2400 /LTD RJ 45 1000 MBPS PORT, Power Cable 19" LED SCREEN with VGA & HDMI PORT USB KEYBORD & USB MOUSE	20	33,000/-	6,60,000/-
2	EPSON Projector EB-902	01	20,890/-	20,890/-
3	UPS 3.5 KV/48 Volts SUKAM (FUSION) with 04 BATTERS	01	20,000/-	20,000/-
4	D-Link 24 Port Giga Swtich 100 mbps Swtich	01	2,950/-	2,950/-
5	EPSON PRINTER Scan copy model-L210 SN-82AK32-4033	01	9,850/-	9,850/-
	Grand Total (Rs.)			7,13,690/-

Lab Incharge
Dr.Tambe S. N

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Babhulgaon, Yeola Dist. Nasik (M.S

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