

REMEDIAL CLASSES 2022-2023

DEPARTMENT OF HUMANITIES AND SCIENCES





GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING & TECHNOLOGY

REMEDIAL SCHOOL

Remedial Classes Schedule for II &III Year students

2022-2023

Phase-I

Timings:3.00 pm-4.00 pm

S.NO	Subject	Session-	Session-	Session-	Session-	Session-	Session-
	-	1	2	3	4	5	6
1	PPS	17/3	18/3	20/3	21/3	-	-
		(3501)	(3501)	(3501)	(3501)		
2	EC	17/3	18/3	20/3	21/3	-	-
		(3512)	(3512)	(3512)	(3512)		
3	DSA for	17/3	18/3	20/3	21/3	-	-
	CSBS	(4512)	(4512)	(4512)	(4512)		
4	DEVC	23/3	24/3	25/3	27/3	28/3	29/3
		(3501)	(3501)	(3501)	(3501)	(3501)	(3501)
5	BEE	23/3	24/3	25/3	27/3	-	-
		(3512)	(3512)	(3512)	(3512)		
6	EG	25/3	27/3	28/3	29/3	-	-
		(4512)	(4512)	(4512)	(4512)		
7	LADC	28/3	29/3	31/3	1/4	-	-
		(3501)	(3501)	(3501)	(3501)		
8	AP	29/3	31/3	1/4	3/4	-	-
		(3512)	(3512)	(3512)	(3512)		

V Nohamatici

Dean-Remedial School



Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous) Subject: Engineering Chemistry Phase 1, 2022-23 Attendance and Result table

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ROLL NO.	17-Mar	18-Mar	20-Mar	21-Mar	RESULT
20241A0202	Р	Р	Р	Р	PASS
20241A0102	Р	Р	Р	Р	PASS
20241A0103	Р	AB	AB	Р	FAIL
20241A0106	Р	Р	Р	Р	PASS
20241A0133	Р	Р	Р	Р	PASS
20241A0139	Р	Р	Р	Р	PASS
20241A0213	Р	Р	Р	Р	PASS
20241A0237	Р	Р	Р	Р	PASS
20241A0244	Р	Р	Р	Р	PASS
20241A0255	Р	Р	Р	Р	PASS
20241A0302	Р	Р	Р	Р	PASS
20241A0303	Р	Р	Р	Р	FAIL
20241A0309	Р	Р	Р	Р	PASS
20241A0321	Р	Р	Р	Р	PASS
20241A0406	AB	Р	Р	AB	FAIL
20241A0449	Р	Р	Р	Р	PASS
20241A0496	Р	Р	Р	Р	PASS
20241A053A	Р	Р	Р	Р	PASS
20241A0560	Р	Р	Р	Р	PASS
20241A05C8	Р	Р	Р	Р	PASS
20241A05E9	Р	Р	Р	Р	PASS
20241A05G7	AB	AB	AB	AB	FAIL
20241A12B5	Р	Р	Р	Р	PASS
20241A6624	Р	Р	Р	Р	PASS
20241A6649	AB	AB	AB	AB	FAIL
20241A6719	AB	AB	AB	AB	FAIL
21241A0103	AB	AB	AB	AB	FAIL
21241A0120	Р	Р	Р	Р	PASS
21241A0128	Р	Р	Р	Р	PASS
21241A0140	Р	Р	Р	Р	PASS
21241A0223	AB	AB	AB	AB	FAIL
21241A0251	Р	Р	Р	Р	PASS
21241A0263	Р	Р	Р	Р	PASS
21241A0312	AB	AB	AB	AB	FAIL
21241A0325	Р	Р	Р	Р	PASS
21241A04G0	P	P	P	P	PASS
21241A04J0	AB	AB	AB	AB	FAIL
21241A0526	AB	AB	AB	AB	FAIL
21241A0527	P	P	P	P	PASS

21241A05A6	Р	Р	Р	Р	PASS
21241A05W5	Р	Р	Р	Р	PASS
21241A1242	Р	Р	Р	Р	PASS
21241A1265	Р	Р	Р	Р	PASS
21241A1270	Р	Р	Р	Р	PASS
21241A12A6	AB	AB	AB	AB	FAIL
21241A6627	AB	Р	Р	AB	FAIL
21241A6634	Р	Р	Р	Р	PASS
21241A6655	Р	Р	Р	Р	PASS
21241A6685	Р	Р	Р	Р	PASS
21241A66F5	Р	Р	Р	Р	PASS
21241A6714	AB	Р	Р	AB	FAIL
21241A6726	Р	Р	Р	Р	PASS

Gokaraju Rangaraju Institute of Engineering and Technology Remedial School Faculty Report on Subject GR20A1005: Engineering Chemistry

UNIT I

Atomic and Molecular Structure : Atomic and Molecular orbitals - and MO energy diagrams of N_2 and $\mathrm{O}_2.$

Molecular orbital theory, Valence Bond Theory – Postulates and Limitations, Bonding in $\bar{}$, $[Ni(CN)_4]^2$, Crystal Field Theory, Crystal Field Splitting of transition metal ion d-orbitals in octahedral, tetrahedral and square planar geometries.

UNIT II

Spectroscopic Techniques and Applications: Rotational spectra of rigid diatomic molecules, Selection rules.

Vibrational Spectroscopy: The vibrating diatomic molecule, Simple and anharmonic oscillators of a diatomic molecule, Selection rules, Applications of IR spectroscopy. NMR Spectroscopy: Criteria for NMR activity (Magnetic and non-magnetic nuclei), and Basic concepts.

UNIT III

Batteries: Primary and Secondary types, Lithium ion and Lead acid batteries. Fuel cells: Definition, Hydrogen-Oxygen fuel cell and Microbial Fuel cell – working principle and applications.

Corrosion: Definition, causes and effects of corrosion, Nature of Environment (Corrosion control methods: Cathodic protection (sacrificial anodic and impressed current cathodic protection), Hot dipping- galvanization and tinning.

UNIT IV

Engineering Materials and Water Technology Semiconductors: Si and Ge - preparation, purification and crystal growth by zone refining and Czochralski pulling methods, Doping – Epitaxy, Diffusion and Ion implantation.

Plastics: Comparison between thermoplastics and thermosets, Fabrication of plastics - compression moulding and injection moulding. Conducting polymers –

Water: Hardness - Causes, types and units. Boiler troubles-scales and sludges, caustic embrittlement. Water purification: Demineralization by Ion-exchange process, Desalination by reverse osmosis method.

UNIT V

Stereochemistry and Energy Resources

Stereochemistry: Elements of symmetry-plane of symmetry, centre of symmetry, alternating axis of symmetry. Chirality, Enantiomers – tartaric acid and Diastereomers.

Energy sources: Fossil Fuels: Coal –types, analysis of coal- proximate and ultimate analysis and their significance, Petroleum-its composition, Cracking – Definition,, Octane rating, Hydrogen gas generation by Electrolysis process.

II. Previous Question papers are discussed

III.Material Shared with students

IV.Classes are conducted for doubts clarification

IMAGES OF CLASSES TAKEN (OFFLINE MODE) Phase-I, 2022-23 Subject: Engineering Chemistry





Gokaraju Rangaraju Institute of Engineering and Technology Remedial School Student's Feedback on Remedial classes (I year subjects for 2 and 3 years)

Branch:All branches	Year:II and III years	Semester:I
Subject: Engineering	Faculty Name:Bh. Saroja Rani	
Chemistry		

S.No	Item	Feed back
1.	Material presented	Excellent
2.	Teaching Clarity	Very Good
3.	Coverage of important	Excellent
	topics	
4.	Doubts clarification	Excellent

Suggestions: Nil

Report on Remedial Classes

This is to inform you that Finishing school of GRIET is conducting Remedial classes for B.Tech II year, III year, and IV year students to clear their backlogs. Details are

1. Remedial classes are conducted in different Subjects to support the Students in clearing their backlogs. Students shown lot of interest .Faculty gave tips as well as material for the students. More than 60% of the students who have attended got benefit and they passed in the exams.

2. The classes are aimed to help the students having a maximum of three backlogs so that they will get the degree as per their academic calendar. Students preferred material and few tips as they were busy in Projects. For some subjects they came and attentive.

3. To increase attendance for the classes a brief motivation lecture is organized with the key note address by HOD.

The following shows the courses for which Remedial classes are held and the Transition rate in such course:

	TOTAL ATTENDED	PASSED	TRANSITION RATE(%)
CE	9	7	78
EEE	7	6	4
ME	6	4	67
ECE	5	3	60
CSE	9	7	78
IT	5	4	80
CSE(DS,AI)	10	6	60
TOTAL	51	37	73



Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous) Subject: Applied Physics Phase 1, 2022-23 Attendance and Result table

	17-Mar	18-Mar	20-Mar	21-Mar	Result
ROLL NO.					
18241A0152	P	Р	Р	Р	Pass
19241A0106	P	Р	Р	Р	Pass
19241A0138	AB	AB	AB	Р	Fail
19241A0141	Р	Р	Р	Р	Pass
19241A0146	Р	Р	Р	Р	Pass
19241A0149	Р	Р	Р	Р	Pass
19241A0151	AB	Р	AB	AB	Fail
19241A0156	AB	AB	AB	AB	Fail
19241A0159	AB	AB	Р	AB	Fail
19241A0195	Р	Р	Р	Р	Pass
19241A0226	Р	Р	Р	Р	Pass
19241A0237	Р	Р	Р	Р	Pass
19241A0259	AB	AB	AB	AB	Fail
19241A0324	AB	AB	AB	AB	Fail
19241A04C4	AB	AB	AB	AB	Fail
19241A04G5	AB	AB	Р	AB	Fail
19241A04K7	AB	AB	AB	AB	Fail
19241A0544	AB	AB	AB	AB	Fail
19241A05N7	AB	AB	AB	AB	Fail
20241A0102	Р	Р	Р	Р	Pass
20241A0103	AB	AB	AB	AB	Fail
20241A0133	Р	Р	Р	Р	Pass
20241A0209	Р	Р	Р	Р	Pass
20241A0302	Р	Р	Р	Р	Pass
20241A0303	AB	AB	AB	AB	Fail
20241A0309	AB	AB	AB	AB	Fail
20241A0496	Р	Р	Р	Р	Pass
20241A0559	Р	Р	Р	Р	Pass
20241A0569	Р	Р	Р	Р	Pass
20241A05P5	Р	Р	Р	Р	Pass
20241A05Y9	Р	Р	Р	Р	Pass
20241A12H6	Р	Р	Р	Р	Pass
20241A6624	Р	Р	Р	Р	Pass
21241A0128	Р	Р	Р	Р	Pass
21241A0136	Р	Р	Р	Р	Pass
21241A0140	Р	Р	Р	Р	Pass
21241A0147	Р	Р	Р	Р	Pass
21241A0209	AB	AB	AB	AB	Fail
21241A0223	Р	Р	Р	Р	Pass

21241A0319	Р	Р	Р	Р	Pass
21241A0443	Р	Р	Р	Р	Pass
21241A0457	Р	Р	Р	AB	Pass
21241A04A9	Р	Р	Р	Р	Pass
21241A04G0	Р	Р	Р	Р	Pass
21241A0510	Р	AB	Р	Р	Pass
21241A0547	Р	Р	Р	Р	Pass
21241A055C	Р	Р	Р	Р	Pass
21241A05E5	Р	AB	Р	Р	Pass
21241A05G4	Р	Р	Р	Р	Pass
21241A05R5	Р	AB	Р	Р	Pass
21241A05V2	Р	Р	Р	Р	Pass
21241A05X3	Р	Р	Р	Р	Pass
21241A1202	AB	AB	AB	AB	Fail
21241A1217	Р	Р	Р	Р	Pass
21241A1249	Р	Р	Р	Р	Pass
21241A1268	Р	Р	Р	Р	Pass
21241A1270	Р	Р	Р	Р	Pass
21241A12A6	Р	Р	Р	Р	Pass
21241A12B7	Р	Р	Р	Р	Pass
21241A12G8	Р	Р	Р	Р	Pass
21241A12H0	AB	AB	AB	AB	Fail
21241A12H3	Р	Р	Р	Р	Pass
21241A12K2	Р	Р	Р	Р	Pass
21241A6624	Р	Р	Р	Р	Pass
21241A6634	Р	Р	Р	Р	Pass
21241A6674	AB	AB	AB	AB	Fail
21241A6689	AB	AB	AB	AB	Fail
21241A6693	Р	Р	Р	Р	Pass
21241A6726	Р	Р	Р	Р	Pass
21241A6747	AB	AB	AB	AB	Fail
21241A6763	Р	Р	Р	Р	Pass
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Gokaraju Rangaraju Institute of Engineering and Technology Remedial School

Faculty Report on Subject

GR20A1007:programming for problem solving

UNIT I

INTRODUCTION TO PROGRAMMING

Introduction to Algorithms: Representation of Algorithm, Flowchart, Pseudo code with examples, compiling and executing programs, syntax and logical errors. Introduction to C Programming Language: Structure of C program, keywords, variables, constants, data types, operators, precedence and associativity, expression evaluation, implicit and explicit type conversion, formatted and unformatted I/O.

UNIT II

DECISION MAKING AND ARRAYS

Branching and Loops: Conditional branching with simple if, if-else, nested if else, else if ladder, switch- case, loops: for, while, do-while, jumping statements: goto, break, continue, exit.

Arrays: one and two dimensional arrays, creating, accessing and manipulating elements of arrays.

Searching: Introduction to searching, Linear search and Binary search.

UNIT III

STRINGS AND FUNCTIONS

Functions: Introduction to structured programming, function declaration, signature of a function, parameters and return type of a function, categories of functions, parameter passing techniques, passing arrays and strings to functions, recursion, merits and demerits of recursive functions, storage classes.

Strings: Introduction to strings, operations on characters, basic string functions available in C - strlen, strcat, strcpy, strrev, strcmp, String operations without string handling functions, arrays of strings.

UNIT IV

POINTERS AND STRUCTURES

Pointers: Idea of pointers, declaration and initialization of pointers, pointer to pointer, void pointer, null pointer, pointers to arrays and structures, function pointer.

Structures and Unions: Defining structures, declaring and initializing structures, arrays within structures, array of structures, nested structures, passing structures to functions, unions, typedef.

UNIT V

FILE HANDLING AND PREPROCESSOR IN C

Files: Text and binary files, creating, reading and writing text and binary files, random access to files, error handling in files.

Preprocessor: Commonly used preprocessor commands like include, define, undef, if, ifdef, ifndef, elif, Command Line Arguments, Enumeration Data Type.

Text Books

1. Byron Gottfried, Schaum's Outline of Programming with C, McGraw-Hill

2. B.A. Forouzan and R.F. Gilberg C Programming and Data Structures, Cengage Learning, (3^{ed} Edition)

II. Previous Question papers are discussed

III.Material Shared with students

IV.Classes are conducted for doubts clarification

IMAGES OF CLASSES TAKEN (OFFLINE MODE) Phase-I, 2022-23 Subject: Programming for problem solving







Gokaraju Rangaraju Institute of Engineering and Technology

Remedial School

Student's Feedback on Remedial classes

(I year subjects for 2 and 3 years)

Branch:All branches	Year:II and II years	Semester:I
Subject:PPS	Faculty Name:R.S.Shalini	

S.No	ltem	Feed back
1.	Material presented	Excellent
2.	Teaching Logical Methods	Excellent
3.	Important topics Discussion	Excellent
4.	Doubts clarification	Excellent

Suggestions: Nil

Report on Remedial Classes

This is to inform you that Finishing school of GRIET is conducting Remedial classes for B.Tech II year, III year, and IV year students to clear their backlogs. Details are

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2. The classes are aimed to help the students having a maximum of three backlogs so that they will get the degree as per their academic calendar. Students preferred material and few tips as they were busy in Projects. For some subjects they came and attentive.

3. To increase attendance for the classes a brief motivation lecture is organized with the key note address by HOD.

The following shows the courses for which Remedial classes are held and the Transition rate in such course:

	TOTAL ATTENDED	PASSED	TRANSITION RATE(%)
CE	17	12	71
EEE	6	4	4
ME	5	2	40
ECE	8	5	63
CSE	14	12	86
IT	12	10	83
CSE(DS,AI)	8	5	63
TOTAL	70	50	71

Gokaraju Rangaraju Institute of Engineering & Technology

(Autonomous)

Subject: Basic Electrical Engineering

Phase 1, 2022-23

Attendance and Result table						
ROLL NO.	23-Mar	24-Mar	25-Mar	27-Mar	RESULT	
18241A0152	Р	Р	Р	Р	PASS	
18241A0329	Р	Р	Р	Р	PASS	
19241A0101	Р	Р	Р	Р	PASS	
19241A0141	Р	Р	Р	Р	PASS	
19241A0324	Р	Р	Р	Р	PASS	
20241A0102	Р	Р	Р	Р	PASS	
20241A0103	AB	AB	AB	AB	FAIL	
20241A0106	AB	AB	AB	AB	FAIL	
20241A0133	Р	Р	Р	Р	PASS	
20241A0148	AB	Р	AB	AB	FAIL	
20241A0152	Р	Р	Р	Р	PASS	
20241A0255	Р	Р	Р	Р	PASS	
20241A0302	Р	Р	Р	Р	PASS	
20241A0303	AB	AB	Р	AB	FAIL	
20241A0309	Р	Р	Р	Р	PASS	
20241A0310	AB	AB	AB	AB	FAIL	
20241A0321	Р	Р	Р	Р	PASS	
20241A0424	Р	Р	Р	Р	PASS	
20241A053A	Р	Р	Р	Р	PASS	
20241A054A	Р	Р	Р	Р	PASS	
20241A05Z6	Р	Р	Р	Р	PASS	
20241A05Z8	Р	Р	Р	Р	PASS	
20241A05Z9	Р	Р	Р	Р	PASS	
20241A1267	Р	Р	Р	Р	PASS	
20241A12G6	Р	Р	Р	Р	PASS	
20241A6658	Р	Р	Р	Р	PASS	
21241A0209	Р	Р	Р	Р	PASS	
21241A0471	Р	Р	Р	Р	PASS	
21241A04C9	Р	Р	Р	Р	PASS	
21241A04E6	Р	Р	Р	Р	PASS	
21241A056E	Р	Р	Р	Р	PASS	
21241A0596	Р	Р	Р	Р	PASS	
21241A05A6	Р	Р	Р	Р	PASS	
21241A05A7	Р	Р	Р	Р	PASS	
21241A05Y4	Р	Р	Р	Р	PASS	
21241A1202	Р	Р	Р	Р	PASS	
21241A12C5	Р	Р	Р	Р	PASS	

21241A12D0	Р	Р	Р	Р	PASS
21241A12D6	Р	Р	Р	Р	PASS
21241A12E1	Р	Р	Р	Р	PASS
21241A12H0	Р	Р	Р	Р	PASS
21241A12K2	Р	Р	Р	Р	PASS
21241A6603	Р	Р	Р	Р	PASS
21241A6613	Р	Р	Р	Р	PASS
21241A6624	Р	Р	Р	Р	PASS
21241A6626	Р	Р	Р	Р	PASS
21241A6627	Р	Р	Р	Р	PASS
21241A6634	Р	Р	Р	Р	PASS
21241A6635	Р	Р	Р	Р	PASS
21241A6660	Р	Р	Р	Р	PASS
21241A6668	Р	Р	Р	Р	PASS
21241A6674	Р	Р	Р	Р	PASS
21241A6689	Р	Р	Р	Р	PASS
21241A66F2	Р	Р	Р	Р	PASS
21241A66F5	Р	Р	Р	Р	PASS
21241A66F7	Р	Р	Р	Р	PASS
21241A66G4	Р	Р	Р	Р	PASS
21241A66H5	Р	Р	Р	Р	PASS
21241A6764	Р	Р	Р	Р	PASS
21241A6765	Р	Р	Р	Р	PASS

Faculty Report on Subject

Gokaraju Rangaraju Institute of Engineering & Technology

Phase 1, 2022-23

Subject: Basic Electrical Engineering

Subject: Basic Electrical Engineering Graphics Faculty: Mrs. K.Sudha

Unit I: D.C. CIRCUITS

KVL&KCL, analysis of simple circuits with dc excitation. Superposition, Thevenin and Norton Theorems.

Unit II: A.C. CIRCUITS

Representation of sinusoidal waveforms, peak and rms values, phasor representation, real power, reactive power, apparent power, power factor, Analysis of single-phase ac circuits consisting of R, L, C, RL, RC, RLC combinations, resonance in series RL-C circuit.

Unit III: TRANSFORMERS

Ideal and practical transformer, equivalent circuit, losses in transformers.

Unit IV: ELECTRICAL MACHINES

Construction and working of a three-phase induction motor. Single-phase induction motor. Construction, working, torque-speed characteristic dc motor. Construction and working of synchronous generators.

Unit V: ELECTRICAL INSTALLATIONS

Components of LT Switchgear: Types of Wires and Cables, Earthing. Types of Batteries, Important Characteristics for Batteries, power factor improvement and battery backup.

IMAGES OF CLASSES TAKEN (OFFLINE MODE)

Phase-I, 2022-23

BASIC ELECTRICAL ENGINEERING







GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING & TECHNOLOGY FINISHING SCHOOL

REMEDIAL CLASSES (Academic support for students) Student Feed Back

Branch: EEE Phase-I, 2022-23

Subject: Basic Electrical Engineering

Faculty Name: K.Sudha

S.No	Item	Feed back
1.	Material presented	Good
2.	Teaching Clarity	Good
3.	Coverage of important topics	Very Good
4.	Doubts clarification	Excellent

Suggestions:

Dean Finishing School

Report on Remedial Classes

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CE	9	7	78
EEE	2	2	100
ME	7	5	71
ECE	4	4	100
CSE	10	10	100
IT	9	9	100
CSE(DS,AI)	19	19	100
TOTAL	60	56	93



(Autonomous)

Subject: Engineering Graphics

Phase 1, 2022-23

Attendance and Result table

S.NO	Roll.N0	25-Mar	27-Mar	28-Mar	29-Mar	RESULT
1	20241A0102	Р	Р	Р	Р	Pass
2	20241A0133	Р	Р	Р	Р	Pass
3	20241A0139	Р	Р	Р	Р	Pass
4	20241A0213	Р	Р	Р	Р	Pass
5	20241A0228	Р	Р	Р	Р	Pass
6	20241A0302	Р	Р	Р	Ρ	Pass
7	20241A0309	Р	Р	Р	Ρ	Pass
8	20241A0321	Р	Р	Р	Ρ	Pass
9	20241A0442	Р	Р	Р	Ρ	Pass
10	20241A0496	Р	Р	Р	Ρ	Pass
11	20241A0506	Р	Р	Р	Ρ	Pass
12	20241A0569	Р	Р	Р	Ρ	Pass
13	20241A053A	Р	Р	Р	Ρ	Pass
14	20241A1249	Р	Р	Р	Ρ	Pass
15	20241A1279	Р	Р	Р	Ρ	Pass
16	20241A12B1	Р	Р	Р	Р	Pass
17	21241A0104	Р	Р	Р	Ρ	Pass
18	21241A0106	Р	Р	Р	Р	Pass
19	21241A0111	Р	Р	Р	Р	Pass
20	21241A0218	Р	Р	Р	Ρ	Pass
21	21241A0260	Р	Р	Р	Р	Pass
22	21241A0438	Р	Р	Р	Р	Pass
23	21241A0443	Р	Р	Р	Р	Pass
24	21241A0448	Р	Р	Р	Р	Pass
25	21241A0474	Р	Р	Р	Р	Pass
26	21241A0478	Р	Р	Р	Р	Pass
27	21241A0483	Р	Р	Р	Р	Pass
28	21241A0490	Р	Р	Р	Р	Pass
29	21241A04A4	Р	Р	Р	Р	Pass
30	21241A04A9	Р	Р	Р	Р	Pass
31	21241A04H2	Р	Р	Р	Р	Pass
32	21241A04H7	Р	Р	Р	Р	Pass
33	21241A04J7	Р	Р	Р	Р	Pass
34	21241A0524	Р	Р	Р	Р	Pass
35	21241A05J4	Р	Р	Р	Р	Pass
36	21241A1207	Р	Р	Р	Р	Pass

37	21241A1212	Р	Р	Р	Р	Pass
38	21241A1231	Р	Р	Р	Р	Pass
39	21241A1276	Р	Р	Р	Р	Pass
40	21241A1285	Р	Р	Р	Р	Pass
41	21241A12B7	Р	Р	Р	Р	Pass
42	21241A12D8	Р	Р	Р	Р	Pass
43	21241A12E1	Р	Р	Р	Р	Pass
44	21241A12F4	Р	Р	Р	Р	Pass
45	21241A12J9	Р	Р	Р	Р	Pass
46	21241A6627	Р	Р	Р	Р	Pass
47	21241A6634	Р	Р	Р	Р	Pass
48	18241A0152	Р	Р	Р	Р	Pass
49	20241A0110	Р	Р	Р	Р	Fail
50	20241A0255	Р	Р	Р	Р	Fail
51	20241A0320	Р	Р	Р	Р	Fail
52	20241A0357	Р	Р	AB	Р	Fail
53	20241A0406	AB	AB	AB	AB	Fail
54	20241A0427	AB	Р	AB	Р	Fail
55	20241A04B6	AB	AB	AB	AB	Fail
56	20241A05G3	Р	AB	AB	Р	Fail
57	20241A1243	Р	AB	AB	Р	Fail
58	20241A1267	Р	Р	AB	Р	Fail
59	20241A1268	AB	Р	AB	Р	Fail
60	20241A12F8	Р	AB	AB	Р	Fail
61	20241A12G6	Р	AB	AB	Р	Fail
62	20241A6624	AB	Р	AB	Р	Fail
63	21241A0101	AB	Р	AB	Р	Fail
64	21241A0102	AB	Р	AB	Р	Fail
65	21241A0103	AB	Р	AB	Р	Fail
66	21241A0129	AB	Р	AB	Р	Fail
67	21241A0133	AB	Р	AB	Р	Fail
68	21241A0211	AB	Р	AB	Р	Fail
69	21241A0216	Р	Р	Р	Р	Fail
70	21241A0263	AB	Р	Р	Р	Fail
71	21241A0326	AB	AB	Р	Р	Fail
72	21241A0351	AB	AB	Р	Р	Fail
73	21241A0428	AB	AB	Р	Р	Fail
74	21241A04J2	AB	AB	AB	AB	Fail
75	21241A0526	AB	AB	AB	AB	Fail
76	21241A1202	AB	AB	AB	AB	Fail
77	21241A6765	Р	Р	AB	AB	Fail

Faculty Report on Subject (Topics covered)

Subject: Engineering Graphics

Faculty: Mr. V Balaji

Unit I:

- Principles of Engineering Graphics and their Significance,
- Conic Sections including
- Rectangular Hyperbola General method only.
- Cycloid, Epicycloid and Hypocycloid, Scales
- Plain and Diagonal.

Unit II:

- Projections of Points and Lines,
- Projections of Plane regular geometric figures

Unit III:

- Sections or Sectional views of Right Regular Solids Prism, Cylinder,
- Pyramid, Cone Auxiliary views Sections of Sphere

Unit IV:

- Prism, Cylinder, Pyramid and Cone
- Intersection of Prism vs Prism Cylinder Vs Cylinder

Unit V:

- Isometric Scale Isometric Views –Conventions
- Isometric Views of Lines, Plane Figures, Simple and Compound Solids Isometric

IMAGES OF CLASSES TAKEN (OFFLINE MODE)

Phase-I, 2022-23

ENGINEERING GRAPHICS





GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING & TECHNOLOGY FINISHING SCHOOL

REMEDIAL CLASSES (Academic support for students) Student Feed Back

Branch: MECH

Phase-I, 2022-23

Subject: Engineering Graphics

Faculty Name: Mr V Balaji

S.No	Item	Feedback
1	Material presented	✓ Excellent/Very Good/Good/Average/Below Average
2	Teaching Clarity	✓ Excellent/Very Good/Good/Average/Below Average
3	Covering of important topics	Excellent/✓Very Good/Good/Average/Below Average
4	Doubts clarification	Excellent/ Very Good/Good/Average/Below Average

Suggestions:

Dean Finishing School

Report on Remedial Classes

This is to inform you that Finishing school of GRIET is conducting Remedial classes for B.Tech II year, III year, and IV year students to clear their backlogs.

Details are

1. Remedial classes are conducted in different Subjects to support the Students in clearing their backlogs. Students shown lot of interest .Faculty gave tips as well as material for the students. More than 60% of the students who have attended got benefit and they passed in the exams.

2. The classes are aimed to help the students having a maximum of three backlogs so that they will get the degree as per their academic calendar. Students preferred material and few tips as they were busy in Projects. For some subjects they came and attentive.

3. To increase attendance for the classes a brief motivation lecture is organized with the key note address by HOD.

The following shows the courses for which Remedial classes are held and the Transition rate in such course:

Engineering Graphics:

	TOTAL		TRANSITION
	ATTENDED	PASSED	RATE(%)
CE	13	7	54
EEE	8	4	4
ME	7	3	43
ECE	19	14	74
CSE	7	5	71
IT	19	13	68
CSE(DS,AI)	4	2	50
TOTAL	77	48	62



Gokaraju Rangaraju Institute of Engineering and Technology

(Autonomous)

Subject : Linear Algebra and Differential Calculus

Attendance and Result of phase-I,2022-23

ROLL NO.	28-Mar	29-Mar	31-Mar	1-Apr	Result
16241A1262	Р	Р	Р	Р	Pass
16241A12B5	Р	Р	Р	Р	Pass
17241A0232	Р	Р	Р	Р	Pass
17241A05A0	Р	AB	Р	Р	Pass
18241A0152	Р	Р	Р	Р	Pass
18241A0249	Р	Р	Р	Р	Pass
18241A05S3	Р	Р	Р	Р	Pass
19241A0141	Р	Р	Р	Р	Pass
19241A0175	Р	Р	Р	Р	Pass
19241A0273	Р	Р	Р	Р	Pass
19241A0324	Р	Р	AB	Р	Pass
19241A0357	Р	Р	Р	Р	Pass
19241A04P4	Р	Р	Р	Р	Pass
19241A05R6	Р	Р	Р	Р	Pass
19241A05Z9	Р	Р	Р	Р	Pass
19241A1281	Р	Р	Р	Р	Pass
20241A0102	Р	Р	Р	Р	Pass
20241A0103	AB	AB	AB	Р	Fail
20241A0105	Р	AB	AB	Р	Fail
20241A0133	Р	Р	Р	Р	Pass
20241A0207	AB	AB	AB	Р	Fail
20241A0213	Р	Р	Р	Р	Pass
20241A0250	AB	AB	AB	Р	Fail
20241A0252	AB	AB	AB	Р	Fail
20241A0302	Р	Р	Р	Р	Pass
20241A0309	Р	Р	Р	Р	Pass
20241A0321	Р	Р	Р	Р	Pass
20241A0322	Р	Р	Р	Р	Pass
20241A0405	AB	Р	AB	Р	Fail
20241A0496	Р	Р	Р	Р	Pass
20241A04D6	Р	Р	Р	Р	Pass
20241A04G1	AB	AB	AB	Р	Fail
20241A04M2	Р	Р	Р	Р	Pass

20241A04N2	Р	Р	Р	Р	Pass
20241A053A	Р	Р	AB	Р	Pass
20241A0546	AB	AB	AB	AB	Fail
20241A0560	AB	Р	AB	Р	Fail
20241A1203	AB	Р	AB	Р	Fail
20241A1231	AB	Р	AB	AB	Fail
20241A6624	AB	AB	AB	AB	Fail
20241A6719	AB	Р	AB	Р	Fail
21241A0112	Р	Р	Р	Р	Pass
21241A0128	Р	Р	Р	Р	Pass
21241A0152	AB	Р	AB	Р	Fail
21241A0201	Р	AB	AB	AB	Fail
21241A0209	Р	AB	AB	AB	Fail
21241A0218	Р	Р	Р	Р	Pass
21241A0241	Р	Р	Р	Р	Pass
21241A0262	AB	AB	AB	AB	Fail
21241A0310	AB	Р	AB	Р	Fail
21241A0428	AB	AB	AB	AB	Fail
21241A0466	Р	Р	Р	Р	Pass
21241A0477	Р	Р	Р	Р	Pass
21241A04G0	AB	AB	AB	AB	Fail
21241A04H9	Р	Р	Р	Р	Pass
21241A0524	Р	Р	Р	Р	Pass
21241A0547	Р	AB	Р	AB	Fail
21241A057E	Р	Р	Р	Р	Pass
21241A05K4	Р	Р	Р	Р	Pass
21241A05W8	Р	AB	Р	Р	Pass
21241A1217	Р	Р	Р	Р	Pass
21241A1247	Р	Р	AB	Р	Pass
21241A1261	Р	Р	Р	Р	Pass
21241A1285	Р	Р	Р	Р	Pass
21241A12C8	Р	Р	Р	Р	Pass
21241A12D9	Р	Р	Р	Р	Pass
21241A12E6	Р	Р	Р	Р	Pass
21241A12K2	AB	AB	AB	AB	Fail
21241A6668	AB	AB	AB	Р	Fail
21241A6689	Р	Р	Р	Р	Pass
21241A66D0	Р	Р	Р	Р	Pass
21241A66G1	Р	Р	Р	Р	Pass
21241A66G7	Р	Р	Р	Р	Pass
21241A66K0	Р	Р	Р	Р	Pass
21241A6763	Р	Р	Р	Р	Pass
21241A6765	AB	AB	AB	Р	Fail

Gokaraju Rangaraju Institute of Engineering and Technology

(Autonomous)

Faculty Report on Subject

phase-I,2022-23

Subject: Linear Algebra and Differential Calculus Faculty: B.Suresh

UNIT-1: VECTOR AND MATRIX ALGEBRA

Vector space (definition and examples), linear independence of vectors, orthogonality of vectors, projection of vectors, Gram-Schmidt orthonormalization of vectors.Symmetric, Hermitian,skew-symmetric,skew-Hermitian, orthogonal and unitary matrices; Rank of a matrix by echelon reduction, Solution of a linear algebraic system of equations (homogeneous and non-homogeneous)

UNIT-II: MATRIX EIGENVALUE PROBLEM AND QUADRATIC FORMS

Determination of eigenvalues and eigenvectors of a matrix, properties of eigenvalues and eigenvectors (without proof), diagonalization of a matrix, orthogonal diagonalization of symmetric matrices, Similarity of matrices. Quadratic Forms:Definiteness and nature of a quadratic form, reduction of quadratic form to canonical forms by orthogonal transformation

UNIT-III: MATRIX DECOMPOSITION AND PSEUDO INVERSE OF A MATRIX

Spectral decomposition of a symmetric matrix, L-U decomposition, Q-R factorization, Singular value decomposition .Moore-Penrose pseudo inverse of a matrix, least squares solution of an over determined system of equations using pseudo inverse

UNIT-IV: MULTIVARIABLE DIFFERENTIAL CALCULUS AND FUNCTION OPTIMIZATION

Partial Differentiation: Total derivative. Jacobian; Functional dependence. Unconstrained optimization of functions using the Hessian matrix, constrained optimization using Lagrange multiplier method

UNIT-V: SINGLE VARIABLE CALCULUS

Mean value theorems: Rolle's Theorem, Lagrange's Mean value theorem and Taylor's theorem (without proof), their geometrical interpretation, approximation of a function by Taylor's series, Applications of definite integrals to evaluate surface areas and volumes of revolutions of curves (for Cartesian coordinates).

II. Previous Question Papers Discussed

III. Material shared with the students

IV Classes are conducted for Doubts Clarification

IMAGES OF CLASSES TAKEN (OFFLINE MODE)

Phase-I, 2022-23

Subject: Linear Algebra and Differential Calculus







Gokaraju Rangaraju Institute of Engineering and Technology

Remedial School

Student's Feedback on Remedial classes

(I year subjects for 2 and 3 years)

Branch: All branches Subject: LADC Year:III and II years Faculty Name: B.Suresh

Semester: I

S.No	Item	Feed back
1.	Material presented	Excellent
2.	Teaching Clarity	Very Good
3.	Coverage of important topics	Excellent
4.	Doubts clarification	Excellent

Suggestions: Nil

Report on Remedial Classes

This is to inform you that Finishing school of GRIET is conducting Remedial classes for B.Tech II year, III year, and IV year students to clear their backlogs.

Details are

1. Remedial classes are conducted in different Subjects to support the Students in clearing their backlogs. Students shown lot of interest .Faculty gave tips as well as material for the students. More than 60% of the students who have attended got benefit and they passed in the exams.

2. The classes are aimed to help the students having a maximum of three backlogs so that they will get the degree as per their academic calendar. Students preferred material and few tips as they were busy in Projects. For some subjects they came and attentive.

3. To increase attendance for the classes a brief motivation lecture is organized with the key note address by HOD.

The following shows the courses for which Remedial classes are held and the Transition rate in such course:

	TOTAL		TRANSITION	
	ATTENDED	PASSED	RATE(%)	
CE	10	7	7	70
EEE	12	6	L .	50
ME	7	6		36
ECE	13	8	E	62
CSE	12	9	7	75
IT	13	10	7	77
CSE(DS,AI)	9	6	E	67
TOTAL	76	52	E	58



Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous) Subject: Applied Physics Phase 1, 2022-23 Attendance and Result table

ROLL NO.	29-Mar	31-Mar	01-Apr	03-Apr	RESULT
20241A0202	Р	Р	Р	Р	PASS
20241A0203	Р	Р	Р	Р	PASS
20241A0213	Р	Р	Р	Р	PASS
20241A0214	Р	Р	Р	Р	PASS
20241A0221	Р	Р	Р	Р	PASS
20241A0236	Р	Р	Р	Р	PASS
20241A0237	Р	Р	Р	Р	PASS
20241A0247	Р	Р	Р	Р	PASS
20241A0496	Р	Р	Р	Р	PASS
20241A053A	Р	Р	Р	Р	PASS
20241A1232	Р	Р	Р	Р	PASS
20241A1243	Р	Р	Р	Р	PASS
20241A1273	Р	Р	Р	Р	PASS
20241A1285	Р	Р	Р	Р	PASS
20241A12C6	Р	Р	Р	Р	PASS
20241A12D7	Р	Р	Р	Р	PASS
20241A12E2	Р	Р	Р	Р	PASS
20241A6701	Р	Р	Р	Р	PASS
20241A6707	Р	Р	Р	Р	PASS
20241A6708	Р	Р	Р	Р	PASS
20241A6715	Р	Р	Р	Р	PASS
20241A6718	Р	Р	Р	Р	PASS
20241A6719	Р	Р	Р	Р	PASS
20241A6727	Р	Р	Р	Р	PASS
20241A6728	Р	Р	Р	Р	PASS
20241A6730	Р	Р	Р	Р	PASS
21241A0201	Р	Р	Р	Р	PASS
21241A0202	Р	Р	Р	Р	PASS
21241A0209	Р	Р	Р	Р	PASS
21241A0232	Р	Р	Р	Р	PASS
21241A0233	Р	Р	Р	Р	PASS
21241A04H4	Р	Р	Р	Р	PASS
21241A04J2	Р	Р	Р	Р	PASS
21241A04J7	Р	Р	Р	Р	PASS
21241A1207	Р	Р	Р	Р	PASS
21241A1214	Р	Р	Р	Р	PASS
21241A1218	Р	Р	Р	Р	PASS
21241A1242	Р	Р	Р	Р	PASS
21241A1244	Р	Р	Р	Р	PASS

21241A1265	Р	Р	Р	Р	PASS
21241A6613	Р	Р	Р	Р	PASS
21241A6634	Р	Р	Р	Р	PASS
21241A6726	Р	Р	Р	Р	PASS
21241A6743	Р	Р	Р	Р	PASS
21241A6748	Р	Р	Р	Р	PASS
20241A0207	AB	Р	AB	AB	FAIL
20241A0255	AB	AB	AB	AB	FAIL
20241A0406	AB	Р	AB	AB	FAIL
20241A0560	AB	AB	AB	AB	FAIL
20241A1228	AB	Р	AB	Р	FAIL
20241A1231	AB	AB	AB	AB	FAIL
21241A0216	AB	AB	AB	AB	FAIL
21241A0263	AB	Р	AB	AB	FAIL
21241A0419	AB	AB	AB	AB	FAIL
21241A1202	AB	AB	AB	AB	FAIL
21241A1212	AB	Р	AB	Р	FAIL
21241A12K2	AB	AB	AB	AB	FAIL
21241A6627	AB	AB	AB	AB	FAIL
21241A6668	AB	AB	AB	AB	FAIL
21241A6674	AB	AB	AB	AB	FAIL
21241A6765	AB	AB	AB	AB	FAIL
21248A0501	AB	Р	AB	AB	FAIL
21248A6602	AB	Р	AB	AB	FAIL

Gokaraju Rangaraju Institute of Engineering and Technology Remedial School Faculty Report on Subject GR20A1003: Applied Physics

UNIT I

Quantum Mechanics: Photoelectric effect- Einstein's Photoelectric equation, Compton effect de Broglie hypothesis, Davisson and Germer experiment, Heisenberg's uncertainty principle, Born's interpretation of the wave function, Schrodinger's time independent wave equation, Particle in one dimensional infinite potential box.

UNIT II

Semiconductor Physics: Estimation of carrier concentration, Dependence of Fermi level on carrier concentration and variation with temperature, Hall Effect, p-n junction diode: I-V Characteristics, Bipolar Junction Transistor (BJT): Construction and principle of operation (n-p-n and p-n-p) in common base configuration.

UNIT III

Optoelectronics: LED and Semiconductor lasers: Device structure, Materials, Characteristics, Semiconductor photo-detectors: PIN and Avalanche detectors and their structure, Materials, Working principle and Characteristics, Solar cell: Structure and Characteristics.

UNIT IV

Lasers: Introduction, Characteristics of lasers, Einstein coefficients, Resonating cavity, Active medium-Meta stable state, Pumping, Population inversion, Construction and working of Ruby laser and He-Ne laser, Applications of lasers.

Fiber Optics: Introduction, Principle and Structure of an optical fiber, Basic components in optical fiber communication system, Comparison of optical fibers over conventional cables, Acceptance angle-Numerical aperture, Types of optical fibers, Applications of optical fibers.

UNIT V

Dielectric Materials: Electronic and Ionic polarizability.

Magnetic Materials: classification of dia, para and ferro magnetic materials on the basis of magnetic moment, Hysteresis curve based on domain theory, Soft and hard magnetic materials, Properties of anti-ferro and ferri magnetic materials.

Superconducting materials: Meissner effect, Type I and Type II superconductors, Applications of superconducting materials.

II. Previous Question papers are discussed

III.Material Shared with students

IV.Classes are conducted for doubts clarification

IMAGES OF CLASSES TAKEN (OFFLINE MODE) Phase-I, 2022-23 Subject: Applied Physics







Gokaraju Rangaraju Institute of Engineering and Technology Remedial School Student's Feedback on Remedial classes (I year subjects for 2 and 3 years)

Branch:All branches	Year:II and II years	Semester:I
Subject:AP	Faculty	
	Name:Dr.Kishorebabu	

S.No	Item	Feed back		
1.	Material presented	Excellent		
2.	Teaching Clarity	Very Good		
3.	Coverage of important	Excellent		
	topics			
4.	Doubts clarification	Excellent		

Report on Remedial Classes

This is to inform you that Finishing school of GRIET is conducting Remedial classes for B.Tech II year, III year, and IV year students to clear their backlogs. Details are

1. Remedial classes are conducted in different Subjects to support the Students in clearing their backlogs. Students shown lot of interest .Faculty gave tips as well as material for the students. More than 60% of the students who have attended got benefit and they passed in the exams.

2. The classes are aimed to help the students having a maximum of three backlogs so that they will get the degree as per their academic calendar. Students preferred material and few tips as they were busy in Projects. For some subjects they came and attentive.

3. To increase attendance for the classes a brief motivation lecture is organized with the key note address by HOD.

The following shows the courses for which Remedial classes are held and the Transition rate in such course:

	TOTAL		TRANSITION
	ATTENDED	PASSED	RATE(%)
EEE	17	13	76
ECE	6	4	67
CSE	3	1	33
IT	18	13	72
CSE(DS,AI)	19	14	74
TOTAL	63	45	71

LADC

BRANCH	TOTAL ATTENDED	PASSED	TRANSITION RATE(%)
CE	10	7	70
EEE	12	6	50
ME	7	6	86
ECE 13		8	62
CSE 12		9	75
IT 13		10	77
CSE(DS,AI) 9		6	67
TOTAL 76		52	68

EG

	-		
BRANCH	TOTAL ATTENDED	PASSED	TRANSITION RATE(%)
CE	13	7	54
EEE	8	4	4
ME	7	3	43
ECE 19		14	74
CSE 7		5	71
IT 19		13	68
CSE(DS,AI)	4	2	50
TOTAL	77	48	62

BRANCH	TOTAL ATTENDED	PASSED	TRANSITION RATE(%)
CE	9	7	78
EEE 7		6	4
ME	6	4	67
ECE	5	3	60
CSE	9	7	78
IT	5	4	80
CSE(DS,AI)	10	6	60
TOTAL	51	37	73
	D EL (C		

DEVC

BRANCH	TOTAL ATTENDED	PASSED	TRANSITION RATE(%)
CE	11	91	
EEE	7	4	4
ME	10	8	80
ECE 11		8	73
CSE 18		12	67
IT	IT 11		73
CSE(DS,AI)	16	11	69
TOTAL	84	61	73

	AP		
BRANCH	TOTAL ATTENDED	PASSED	TRANSITION RATE(%)
EEE	17	13	4
ECE	6	4	67
CSE	3	1	33
IT	18	13	72
CSE(DS,AI)	19	4	21
TOTAL	63	45	71

	BEE		
BRANCH	TOTAL ATTENDED	PASSED	TRANSITION RATE(%)
CE	9	7	78
EEE	2	2	100
ME 7		5	71
ECE 4		4	100
CSE	CSE 10		100
IT	9	9	100
CSE(DS,AI)	19	19	100
TOTAL	60	56	93

	PPS		
BRANCH	TOTAL ATTENDED	PASSED	TRANSITION RATE(%)
CE	17	12	71
EEE	6	4	4
ME	5	2	40
ECE	8	5	63
CSE	14	12	86
IT	12	10	83
CSE(DS,AI)	8	5	63
TOTAL	70	50	71

EC

Report of Remedial Classes

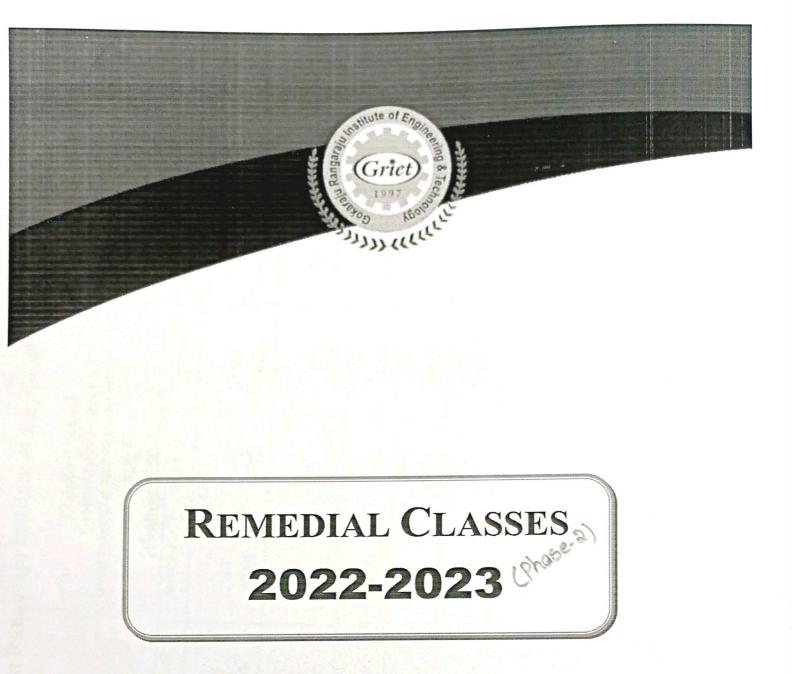
<u>2022-2023</u>

This is to inform you that the Remedial school of GRIET is conducting Remedial classes of through online mode for B. Tech I-year students to clear their backlogs.

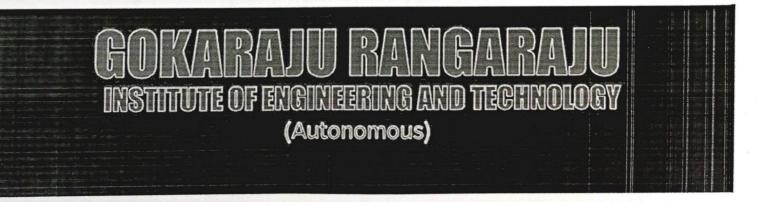
- Remedial classes are conducted in different Subjects to support the students in clearing their backlogs. As the first step, classes are held to students in different schedules. Students were informed through SMS. Students' show lot of interest. Faculty gave tips as well as material for the students above 70% of the students who have attended got benefit and they passed in the exams.
- 2. The classes are aimed to help the students having a maximum of three backlogs so that they will get the degree as per their academic calendar. Students preferred material and few tips. For some subjects they came and attentive.
- 3. The sessions are to prevent failure rate and thereby increasing transition rate. The subjects are selected based on results. To increase attendance for the classes a brief motivation lecture is organized with the key note address by HOD.

The following shows the courses for which Remedial classes are held and the Transition rate in such course.

S. No	Course Title		No. of Students Passed In Exam	Transition Rate
1	PPS	70	50	71
2	EC 51		37	73
3	DEVC	/C 84		73
4	BEE	60		93
5	EG	77	48	62
6	LADC	76	52	68
7	AP	63	45	71
8	PPS	70	50	71



DEPARTMENT OF HUMANITIES AND SCIENCES





Gokaraju Rangaraju Institute of Engineering and Technology (I year subjects for 2022-26 batch I years) Remedial Classes Schedule Finishing School

Phase-II

		Session-6	2/06	(3201)	1140	1117	(1020)	(3302)	20/7	(3211)	27/7	(3211)
		Session-5	19/7	(3201)	26/7	(3201)	2-8	(3302)	19/7	(3211)	26/7	(3211)
	(0)	Session-4	18/7	(3201)	25/7	(3201)	1-8	(3302)	18/7	(3211)	25/7	(3211)
	(00.01-00-30.00-10.00)	C-UOISSAC	15/7	(3201)	24/7	(3201)	31/7	(3302)	15/7	2180 (TTZC)	2411	(3211)
(Timi	Session-2	4	14/7	(3201)	22/7	(3201)	29/7	(3302)	14/7 (3211)	7122	(1172)	(11720)
	Session-1		13/7	(1070)	2117	(3201)	28/7	(3302)	13// (3211)	21/7	(3211)	
	Subject		LAFA		EC		Sdd	2	ITSPC	Physics for computing	Science	
			ц н		2 E		m		4	L L		_

Dean, Finishing School

VN Remailers

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GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY (Autonomous) LINEAR ALGEBRA AND FUNCTION APROXIMATION

(COMMON TO CE, EEE, ME, ECE, CSE, CSML, CSDS & IT)

Code: GR221A1001

L: 3 T:1 P:0 C:4

UNIT-1

FUNDAMENTALS OF VECTOR AND MATRIX ALGEBRA

Operations on vectors and matrices- Orthogonal projection of vectors- Exact and generalized inverse of a matrix- Rank of a matrix- Linear independence of vectors- Structured square matrices (Symmetric, Hermitian, skew-symmetric, skew-Hermitian, orthogonal and unitary matrices)- Vector and matrix norms Solution of a linear algebraic system of equations (homogeneous and non-homogeneous) using Gauss elimination

UNIT-II

MATRIX EIGENVALUE PROBLEM AND QUADRATIC FORMS

Determination of eigenvalues and eigenvectors of a matrix, properties of eigenvalues and eigenvectors (without proof)- Similarity of matrices- Diagonalization of a matrix- Orthogonal diagonalization of a symmetric matrix- Definiteness of a symmetric matrix

Quadratic Forms- Definiteness and nature of a quadratic form- Reduction of a quadratic form to the canonical form using an orthogonal transformation

UNIT-III

MATRIX DECOMPOSITION AND LEAST SQUARES SOLUTION OF ALGEBRAIC SYSTEMS LU decomposition- Cholesky decomposition- Gram-Schmidt orthonormalization process- QR

factorization- Eigen decomposition of a symmetric matrix- Singular value decomposition Least squares solution of an over determined system of equations using QR factorization and the generalized inverse- Estimation of the least squares error

UNIT-IV

MULTIVARIABLE DIFFERENTIAL CALCULUS AND FUNCTION OPTIMIZATION

Partial Differentiation- Chain rule- Total differentiation- Jacobian- Functional dependence

Multivariable function Optimization- Taylor's theorem for multivariable functions- Unconstrained optimization of functions using the Hessian matrix- Constrained optimization using the Lagrange multiplier method

UNIT-V

FUNCTION APPROXIMATION TOOLS IN ENGINEERING

Function approximation using Taylor's polynomials- Properties of Chebyshev polynomials- Uniform approximation using Chebyshev polynomials

The principle of least squares- Function approximation using polynomial, exponential and power curves using matrix notation- Estimating the Mean squared error

TEXT BOOKS:

- 1. Advanced Engineering Mathematics, 5th edition, R.K.Jain and S.R.K.Iyengar, Narosa publishing house
- 2. Higher Engineering Mathematics- B.S.Grewal- Khanna publications

REFERENCES:

- 1. Introduction to Linear Algebra, Gilbert Strang, 5th edition, Wellesley, 2017.
- Numerical methods for scientific and engineering computation, M.K.Jain, S.R.K.Iyengar, R.K.Jain- 3rd edition- New Age publishers
- 3. Applied Mathematics, Vol. I & II, P. N. Wartikar and J. N. Wartikar, Pune Vidyarthi Griha Prakashan, 2010



Gokaraju Rangaraju Institute of Engineering & Technology (AUTONOMUS)

NO	ROLL NO	25-7-23	26-7-23	27-7-23	28-7-23	28-7-23
1	22241A0107	A	A	A	A	A
2	22241A0117	A	A	A	A	A
3	22241A0118	A	A	A	P	P
4	22241A0120	Р	p	P	A	A
5	22241A0123	A	A	A	A	A
6	22241A0125	A	A	A	A	A
7	22241A0126	A	A	A	A	A
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SUB: Linear Algebra and Function Analysis

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108	22241A6710		A		A	A	
109	22241A6763	A	A	A	P	P	
110	22241A6765		Р	P		P	3
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110	22241A67C8	P	P	1338	1338	1338	133



Gokaraju Rangaraju Institute of Engineering and Technology

Remedial School

Student's Feedback on Remedial classes

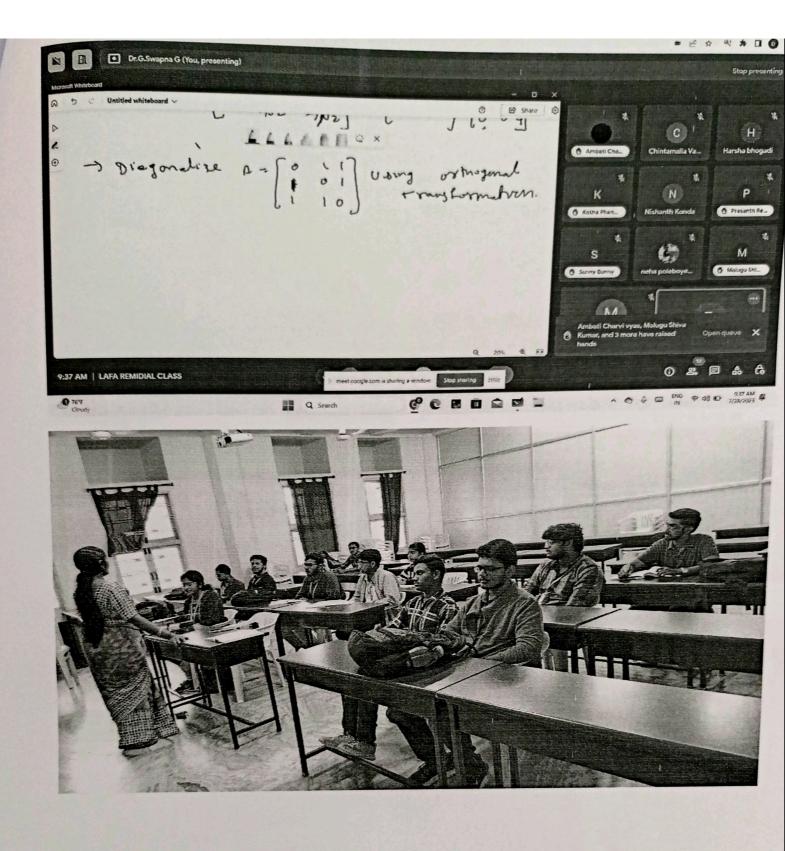
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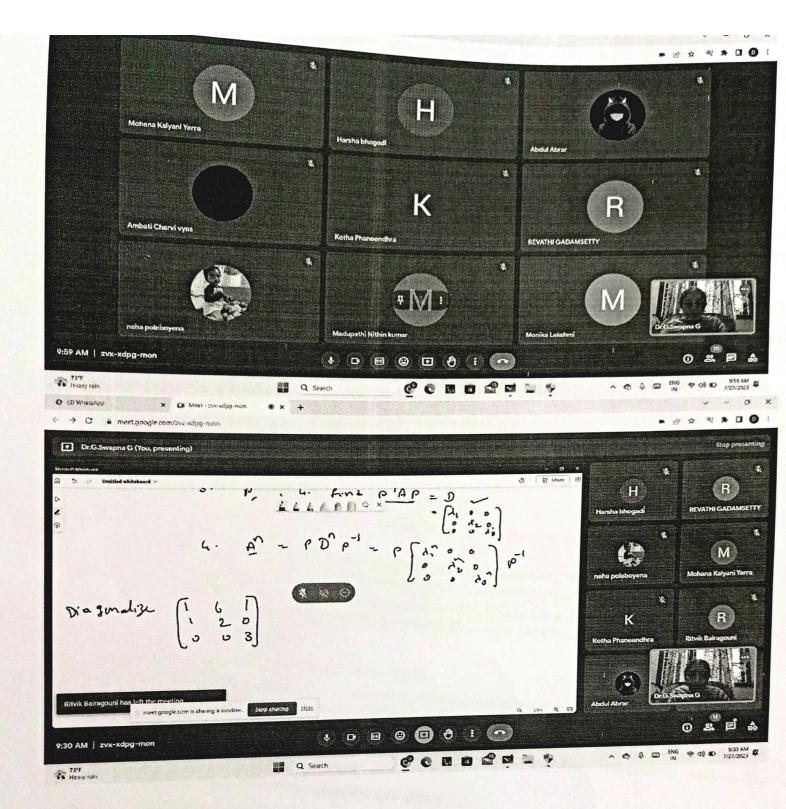
Branch:All branches Subject:LAFA

Faculty Name: Dr. G. SWAPNA Year: I year

Semester: |

Feed back	Excellent	Very Good	Excellent	Excellent
ltem	Material presented	Teaching Clarity	Coverage of important topics	Doubts clarification
S.No	1.	2.	3.	4.







Gokaraju Rangaraju Institute of Engineering and Technology Remedial School Faculty Report on Subject GR22A1005: Engineering Chemistry

UNIT I

Atomic and Molecular orbitals - Definition, examples and comparison, Molecular orbital theory- postulates and MO energy diagrams of N_2 and O_2 .

Bonding in $[Ni(CO)_4]$, $[Ni(Cl)_4]^2$, $[Ni(CN)_4]^2$, $[Co(NH_3)_6]^{3+}$, and $[CoF_6]^{3-}$. Crystal Field Theory, Crystal Field Splitting of transition metal ion d-orbitals in octahedral, tetrahedral geometries.

UNIT II

Spectroscopic Techniques and Applications

Regions of Electromagnetic spectrum.: Rotation of molecules, Rotational spectra of rigid diatomic molecules, Selection rules.

Vibrational Spectroscopy: The vibrating diatomic molecule, Applications of IR spectroscopy.

NMR Spectroscopy: Criteria for NMR activity (Magnetic and non-magnetic nuclei), Basic concepts and Principle of ¹H NMR spectroscopy, Chemical shift- Shielding and Deshielding. Magnetic Resonance Imaging.

UNIT III

:Batteries and Corrosion

Batteries: Primary and Secondary types, Lithium ion and Lead acid batteries. Fuel cells: Definition, Hydrogen-Oxygen fuel cell and Microbial Fuel cells.

Corrosion: Definition, causes and effects of corrosion, Theories of chemical corrosion. Factors affecting corrosion –Corrosion control methods: Cathodic protection (sacrificial anodic and impressed current cathodic protection), Metallic coatings: Hot dipping- galvanization and tinning.

UNIT IV

Engineering Materials and Water Technology

Semiconductors: Si and Ge - preparation, purification and crystal growth by zone refining and Czochralski pulling methods.

Plastics: Comparison between thermoplastics and thermosets, Fabrication of plastics - compression moulding and injection moulding. Conducting polymers - Definition, classification and applications.

Water: Hardness - Causes, types and units. Boiler troubles-scales and sludges, caustic embrittlement. Water purification: Demineralization by Ion-exchange process, Desalination by reverse osmosis method.

UNIT V

Stereochemistry and Energy Resources :

Stereochemistry: Elements of symmetry-plane of symmetry, centre of symmetry, Conformational analysis of nbutane. Structure, synthesis and pharmaceutical applications of aspirin and ibuprofen.

Energy sources: Fossil Fuels: Coal –types, analysis of coal- proximate and ultimate analysis and their significance, Petroleum-its composition, Cracking – Definition, Fluid bed catalytic cracking. Hydrogen gas generation by Electrolysis process.

II. Previous Question papers are discussed

III.Material Shared with students

IV.Classes are conducted for doubts clarification



Gokaraju Rangaraju Institute of Engineering & Technology Engineering Chemistry

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	1 22241A0107	A	A	A	A	A
2	2 22241A0128	р	Р	A	Р	A
3	22241A0133	A	A	А	А	A
4	22241A0134	A	Р	Р	Р	Р
5	22241A0135	A	A	A	А	A
6	22241A0137	A	A	A	A	A
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9	22241A1257	A	A	А	А	A
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11	22241A6710	А	A	А	А	A
12	22241A6725	A	А	А	А	А
13	22241A6763	A	A	А	А	A -
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	Faculty ID	816	816	816	816	816
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Sh: Sauja Rani (816)



Gokaraju Rangaraju Institute of Engineering and Technology

Remedial School

Student's Feedback on Remedial classes

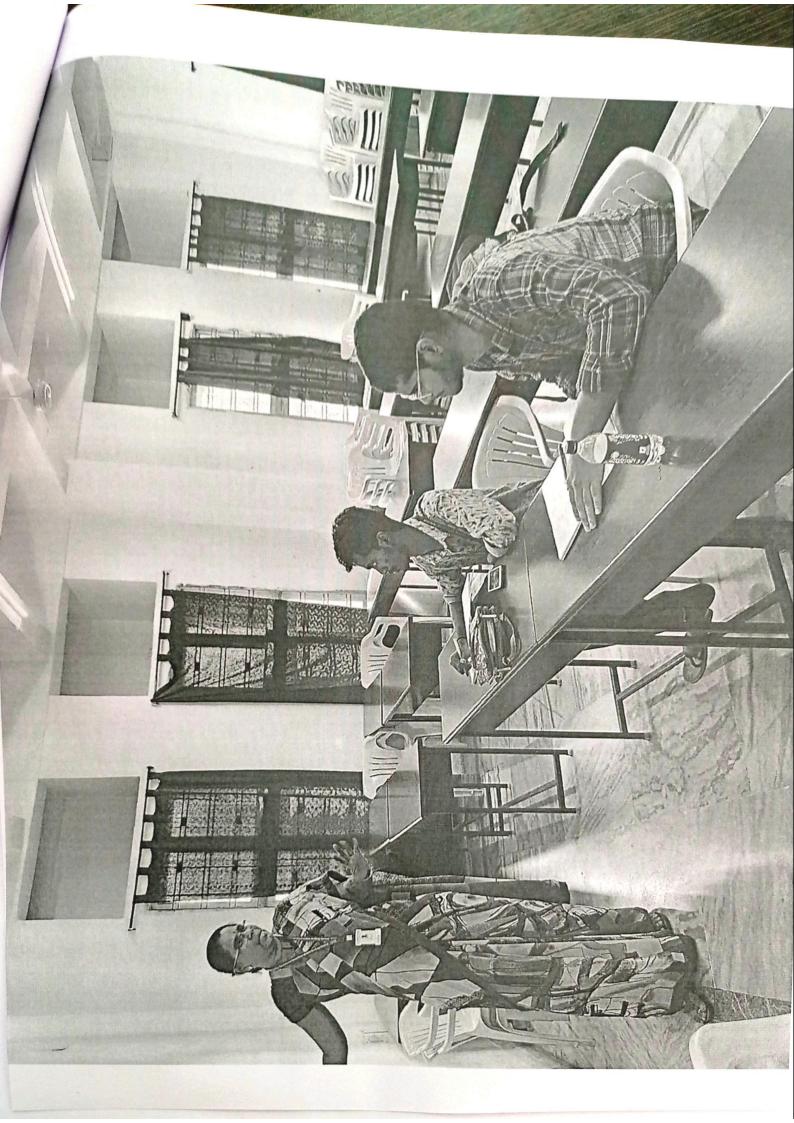
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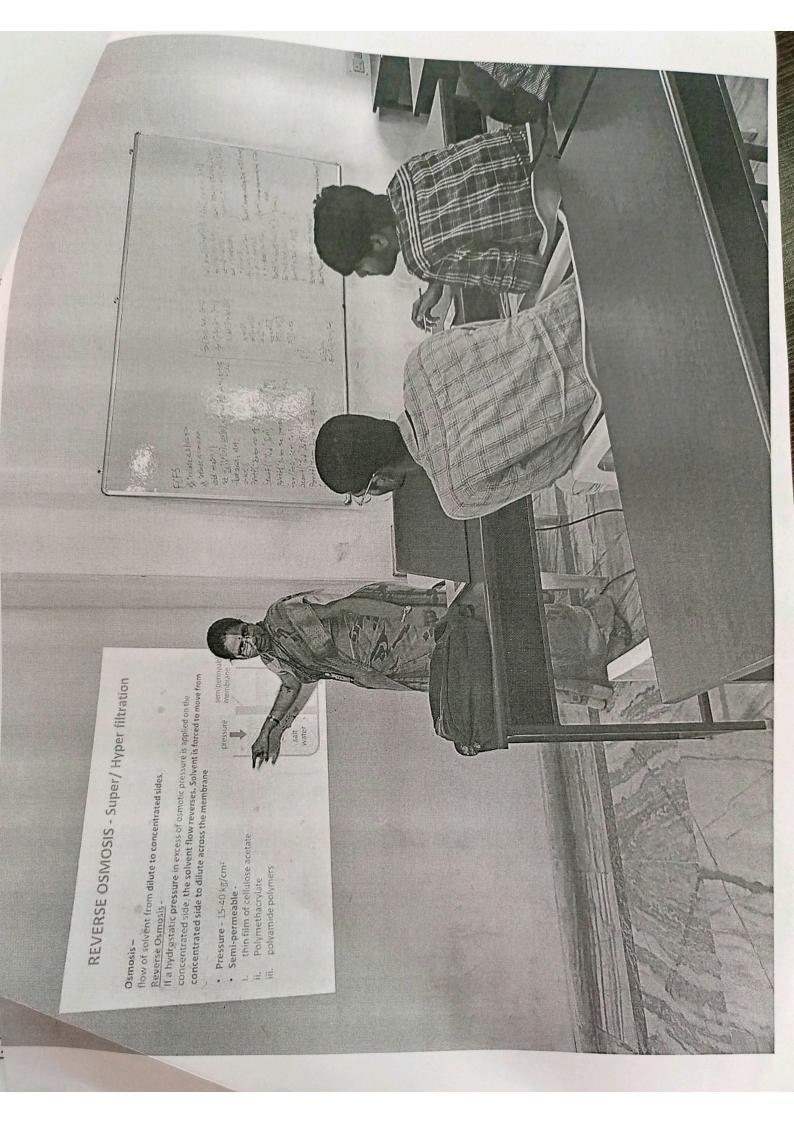
Branch: It, Civil, Mechanical, EEE Subject: Engineering Chemistry

Year: I year Faculty Name: Bh. Saroja Rani

Semester: |

•	Feed back	F.colloat	EXCELIEUL	Vin. Cand	very good	Excellent		Fxcellent			
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PPS REMEDIAL CLASS ATTENDANCE

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GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY

PROGRAMMING FOR PROBLEM SOLVING

Course Code: GR22A1007 I Year I Semester

L/T/P/C:2/1/0/3

Course Objectives

- 1. To interpret the various steps in problem solving and program development.
- 2. To recall and reuse the fundamentals, syntax and semantics of C programming language.
- 3. To illustrate problem solving using arrays, strings, structures and pointers.
- 4. To demonstrate structured and modular programming approach in solving problems.
- 5. To interpret code and debug the given problems using files.

Course Outcomes

- 1. To design algorithms and flowcharts for problem solving and illustrate the fundamentals of C language.
- 2. To identify and apply control structures and arrays to solve problems.
- 3. To discover the need for strings and functions in problem solving and apply it.
- 4. To analyze the need for pointers and structures in C and implement for solutions.
- 5. To interpret working with files, preprocessor directives and command line arguments in C.

UNIT I

INTRODUCTION TO PROGRAMMING

Introduction to Algorithms: Representation of Algorithm, Flowchart, Pseudo code with examples, compiling and executing programs, syntax and logical errors.

Introduction to C Programming Language: Structure of C program, keywords, variables, constants, datatypes, operators, precedence and associativity, expression evaluation, implicit and explicit type conversion, formatted and unformatted I/O.

UNIT II

DECISION MAKING AND ARRAYS

Branching and Loops: Conditional branching with simple if, if-else, nested if else, else if ladder, switchcase, loops: for, while, do-while, jumping statements: goto, break, continue, exit.

Arrays: one and two dimensional arrays, creating, accessing and manipulating elements of arrays. Searching: Introduction to searching, Linear search and Binary search.

UNIT III

STRINGS AND FUNCTIONS

Functions: Introduction to structured programming, function declaration, signature of a function, parameters and return type of a function, categories of functions, parameter passing techniques, passing arrays and strings to functions, recursion, merits and demerits of recursive functions, storage classes.

Strings: Introduction to strings, operations on characters, basic string functions available in C - strlen, strcat, strcpy, strrev, strcmp, String operations without string handling functions, arrays of strings.

UNIT IV

POINTERS AND STRUCTURES

Pointers: Idea of pointers, declaration and initialization of pointers, pointer to pointer, void pointer, null pointer, pointers to arrays and structures, function pointer.

Structures and Unions: Defining structures, declaring and initializing structures, arrays within structures, array of structures, nested structures, passing structures to functions, unions, typedef.

FILE HANDLING AND PREPROCESSOR IN C Files: Text and binary files, creating, reading and writing text and binary files, random access to files, erro

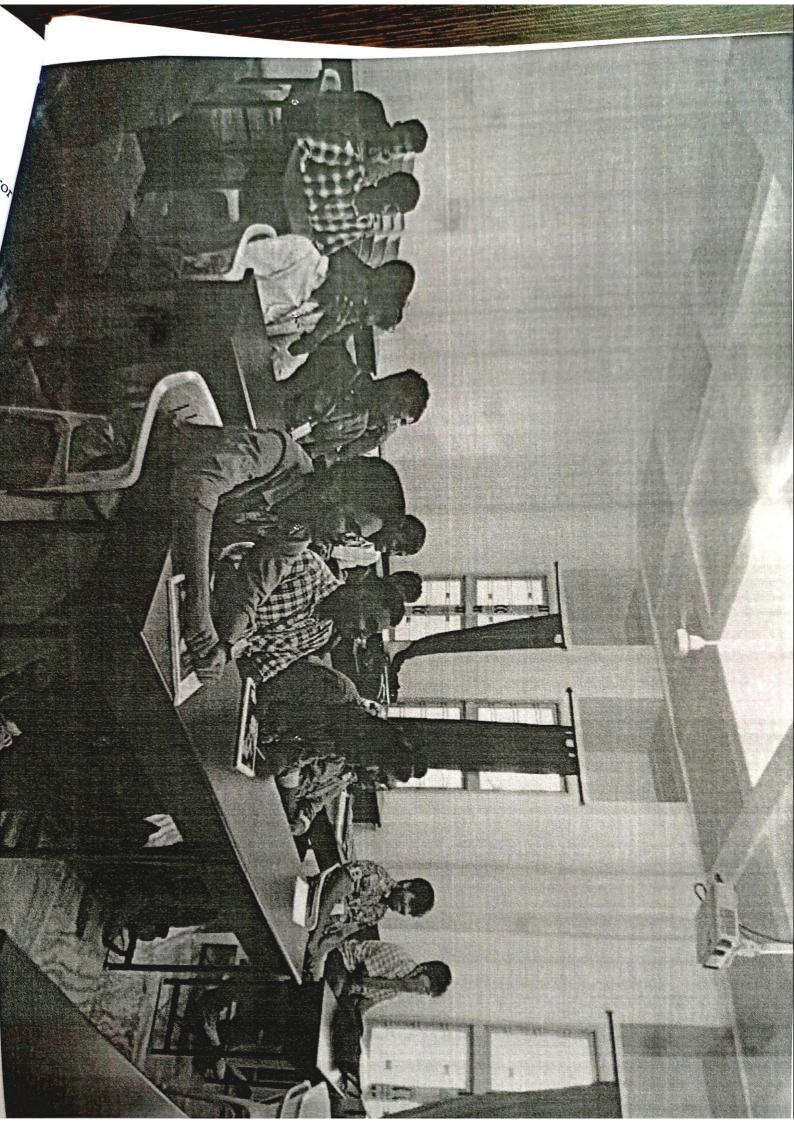
Preprocessor: Commonly used preprocessor commands like include, define, undef, if, ifdef, ifndef, elif, Command Line Arguments, Enumeration Data Type.

Text Books

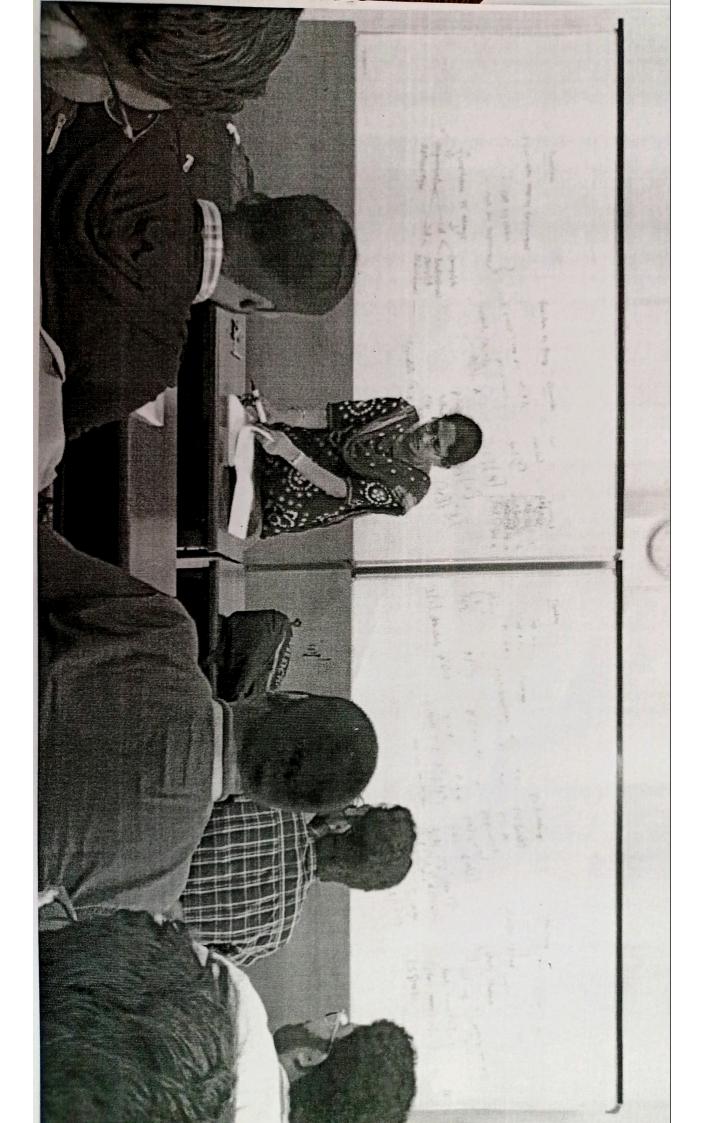
- 1. Byron Gottfried, Schaum's Outline of Programming with C, McGraw-Hill
- 2. B.A. Forouzan and R.F. Gilberg C Programming and Data Structures, Cengage Learning, (3rd
 - a. Edition)

Reference Books

- 1. Brian W. Kernighan and Dennis M. Ritchie, The C Programming Language, Prentice Hall of India
- 2. R.G. Dromey, How to solve it by Computer, Pearson (16th Impression)
- 3. Programming in C, Stephen G. Kochan, Fourth Edition, Pearson Education
- 4. Herbert Schildt, C: The Complete Reference, Mc Graw Hill, 4th Edition







S.No 1. 2. 3. 4.	Gokar Branch: All branches Subject:PPS
Item Material presented Teaching Clarity Coverage of important topics Doubts clarification	Gokaraju Rangaraju Institute of Engineering and Technology Remedial School Student's Feedback on Remedial classes (I year subjects for all years) Year: I year Faculty Name: D. SUGUNA KUMARI
Feed back Excellent Very Good Excellent Excellent	chnology Semester: I

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22241A3206	Р	Р	Р	Р	Р			
222.41A3218	Р	Р	Р	Р	Р			
22241A3219	A	A	Р	A	А			
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Gokaraju Rangaraju Institute of Engineering & Technolo

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Gokaraju Rangaraju Institute of Engineering and Technology

Remedial School

Faculty Subject Report

UNIT I

Introduction to Statistics and Descriptive Statistics

Definition of Statistics Basic objectives. Applications in various branches of science with examples. Collection of Data: Internal and external data. Primary and secondary Data: Population and sample. Representative sample.

Classification and tabulation of univariate data: graphical representation. Frequency curves. Descriptive measures — Central tendency and Dispersion.

UNIT II

Basic Probability and Mathematical Expectations

Concept of experiments sample space, event, Definition of Combinatorial Probability, Conditional Probability, Bayes' Theorem, Discrete and continuous random variables, Expected values and moments, mathematical expectation and its properties, Moments (including variance) and their properties (Statements), interpretation, Moment generating tous tion

UNIT III

Probability Distributions

Discrete distributions: Binomial Poisson and Geometric distribution. Continuous distributions: Uniform, Exponential, Normal distributions. Exact Sampling distributions: Chi-square, t and F distributions.

UNIT IV .

Differential Calculus

Limit of functions, continuity, derivatives. Taylor's and Maclaurin's series expansions, Partial derivatives, Maxima and minima of function of two variables.

UNIT-V

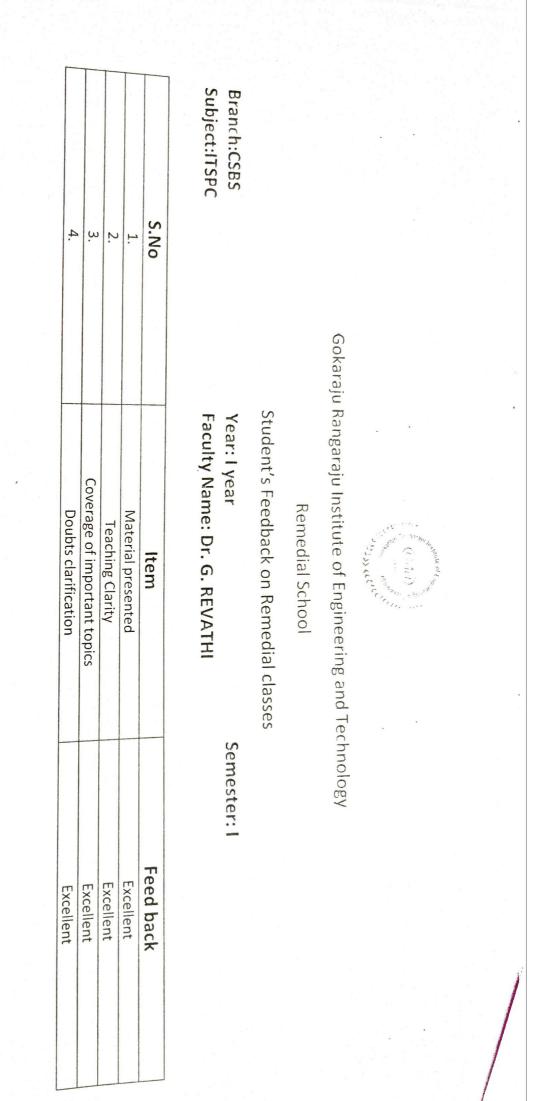
Integral Calculus

Length of a plane curve. Volume of solid of revolution. Area of surface of a solid of revolution (Cartesian form) Multiple Integrals double integrals with constant and variable limits (Cartesian and polar form), change of order of integration (Cartesian form), triple integrals (Cartesian coordinates), applications of double and triple integrals: Area as double integration in Cartesian coordinates and Volume as a triple integration.

II. Previous Question Papers Discussed

III. Material shared with the students

IV Classes are conducted for Doubts Clarification









Gokaraju Rangaraju Institute of Engineering & Technology PHYSICS for Computing S

S No.	Roll Number	20-Jul	21-Jul	22-Jul	24-Jul	25-Jul
- 1	22241A3201	A	A	А	А	A
2	22241A3206	Р	Р	А	Р	Α
3	22241A3209	А	A	A	А	Α
4	22241A3215	А	Р	Р	Р	Р
5	22241A3218	A	A	А	A	A
6	22241A3219	A	А	A	А	A
7	22241A3222	A	А	А	А	А
8	22241A3233	. A	Р	A	Р	Р
. 9	22241A3235	А	A	A	А	A
10	22241A3236	A	A	A	A	A
11	22241A3250	A	Α.	A	A	. A
12	22241A3255	A	A	A	А	A
13	22241A3256	А	А	А	А	A
	No of Absenties	12	10	. 12	10	11
	Faculty ID	1703	1703	1703	1703	1703
Fa	culty Signature	KUD	KUD	KUD	KUD	KUE



Gokaraju Rangaraju Institute of Engineering and Technology

Remedial School

Student's Feedback on Remedial classes

(I year subject for I years)

Year: I year Faculty Name: Dr. K. Umadevi

Branch: CSBS Subject: PCS

Semester: I

Feed back	Excellent	Very Good	Excellent	Excellent
Item	Material presented	Teaching Clarity	Coverage of important topics	Doubts clarification
S. No	1.	2.	3.	4.

Gokaraju Rangaraju Institute of Engineering and Technology Remedial School Faculty Report on Subject GR22A1028: Physics for computing Science

UNIT I

Oscillation: Periodic motion, Simple harmonic motion, Characteristics of simple harmonic motion, Vibration of simple spring mass system, Resonance definition, Damped harmonic oscillator: heavy, critical and light damping, Energy decay in a damped harmonic oscillator, Quality factor.

UNIT II

Interference: Principle of superposition, Young's experiment, Theory of interference fringes, Types of interference, Fresnel's prism, Newton's rings, Diffraction: Two kinds of diffraction, Differences between interference and diffraction, Fraunhofer diffraction at single slit, Temporal and spatial coherence.

Polarization of light: Polarization, Concept of production of polarized beam of light from two SHM acting at right angle, Plane, Elliptical and Circularly polarized light, Brewster's law, Double refraction.

UNIT III

Basic Idea of Electromagnetism: Continuity equation for current densities, Maxwell'sequation in vacuum and non-conducting medium.

Thermodynamics: Zeroth law of thermodynamics, First law of thermodynamics, Brief discussion on application of 1st law, Second law of thermodynamics and concept of Engine, Entropy, Change in entropy in reversible and irreversible processes.

UNIT IV

Quantum Mechanics: Introduction, Planck's quantum theory, Matter waves, de-Broglie wavelength, Heisenberg's Uncertainty principle, Time independent Schrödinger's wave equation, Physical significance of wave function, Particle in a onedimensional potential box.

Crystallography: Introduction, Types of crystal systems, Bravais lattices, Miller indices, Interplanar spacing, Atomic packing factor for SC, BCC and FCC.

Semiconductor Physics: Basic concept of Band theory: Bloch theorem, Kronig-Penny model and its conclusions, Differences between Conductors, Semiconductors and Insulators.

UNIT V

Laser and Fiber optics: Properties of laser beam: mono-chromaticity, coherence, directionality and brightness, Einstein's theory of matter radiation interaction and A and B coefficients, Amplification of light by population inversion, Different types of lasers: Ruby and CO₂, Applications of lasers, Fiber optics and applications, Types of optical fibers.

II. Previous Question papers are discussed

III. Material Shared with students

IV. Classes are conducted for doubts clarification



