

Remedial Classes 2023-24 Phase -I

Department of Humanities and Sciences

COKVARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY (Autonomous)



GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING & TECHNOLOGY

REMEDIAL SCHOOL

Remedial Classes Schedule for II-Year students

2023-2024

Phase-I faculty information

S.NO	Subject	Name of the faculty	Mobile number
1	DEVC	Ch. Phan: Roma	9885003643
2	Engineering physics	Dr. K. Vagdev?	9885667090
3	Engineering Mechanics	Me. K. Ratha Babu	8885849748
4	P&S	DR. J. N. Romadewi	9490145046

Dean-Remedial School

Signature of HOD



Gokaraju Rangaraju Institute of Engineering and Technology

(Autonomous)

Subject - Differential Equations and Vector Calculus Phase- 1, 2023-24

Attendance and Result table

ROLL NO.	2-JAN	3-JAN	4-JAN	5-JAN	6-JAN	RESULT
22241A0109	Р	Р	Р	Р	Р	PASS
22241A0120	АВ	Р	AB	Р	Р	FAL
22241A0135	Р	AB	АВ	Р	Р	PASS
22241A0207	Р	Р	Р	Р	Р	PASS
22241A0208	AB	Р	АВ	Р	Р	FAL
22241A0320	Р	Р	Р	Р	Р	PASS
22241A0324	AB	Р	Р	Р	Р	FAL
22241A0417	Р	Р	Р	Р	Р	PASS
22241A0464	Р	Р	Р	Р	Р	FAI
22241A0465	AB	Р	Р	Р	Р	PASS
22241A0467	AB	Р	АВ	Р	Р	FAL
22241A0468	AB	Р	Р	Р	Р	FAL
22241A0496	Р	Р	Р	Р	Р	PASS
22241A04A8	Р	Р	Р	Р	Р	PASS
22241A04B4	AB	Р	Р	AB	AB	PASS
22241A04B7	Р	Р	Р	Р	Р	PASS
22241A0516	Р	Р	Р	Р	Р	PASS
22241A053D	Р	Р	Р	Р	Р	PASS
22241A0564	Р	Р	Р	Р	Р	PASS
22241A056A	Р	Р	Р	Р	Р	PASS
22241A0596	Р	Р	Р	Р	Р	PASS
22241A0598	AB	Р	AB	Р	Р	FAI
22241A059B	Р	Р	Р	Р	Р	PASS
22241A05A5	Р	Р	Р	Р	Р	PASS
22241A05B9	AB	Р	АВ	Р	Р	FAI
22241A05C8	АB	Р	АВ	Р	Р	PASS
22241A05D8	Р	Р	Р	AB	AB	PASS
22241A05F2	Р	Р	Р	Р	Р	PASS
22241A05G5	Р	Р	Р	Р	Р	PASS
22241A05K3	Р	Р	Р	Р	Р	PASS
22241A05N1	AB	Р	АВ	Р	Р	FAL
22241A05N5	Р	Р	Р	Р	Р	PASS
22241A05N9	Р	Р	Р	Р	Р	PASS
22241A05P3	Р	AB	Р	AB	AB	PASS

22241A05T9	Р	Р	Р	Р	Р	PASS
22241A05V1	Р	Р	Р	Р	Р	PASS
22241A05W6	AB	Р	AB	Р	Р	FAL
22241A05X8	AB	Р	AB	Р	Р	FAL
22241A1255	Р	Р	Р	Р	Р	PASS
22241A1276	Р	Р	Р	Р	Р	PASS
22241A1283	Р	Р	Р	Р	Р	PASS
22241A12A9	Р	Р	Р	Р	Р	PASS
22241A12B2	Р	Р	Р	Р	Р	PASS
22241A12C8	Р	Р	Р	Р	Р	PASS
22241A12C9	AB	Р	AB	Р	Р	FAL
22241A12F1	AB	Р	Р	AB	AB	PASS
22241A12H1	Р	Р	Р	Р	Р	PASS
22241A12H7	AB	Р	AB	Р	Р	FAL
22241A6660	Р	Р	Р	Р	Р	PASS
22241A6680	Р	Р	Р	Р	Р	PASS
22241A6765	AB	Р	AB	Р	Р	FAL
22241A6794	AB	Р	AB	Р	Р	FAL

DIFFERENTIAL EQUATIONS AND VECTOR CALCULUS (Revised)

COMMON TO CE, EEE, ME, ECE, CSE, CSM, CSD, CSA, CSI, IT

UNIT-I: FIRST ORDER ODE

LDE of the first order: Solution of Exact, linear and Bernoulli equations, modeling of Newton's law of cooling, growth and decay models, modeling an R-L circuit

Non - linear differential equations of the first order: Equations solvable for p, equations solvable for x, equations solvable for y

UNIT-II: ORDINARY DIFFERENTIAL EQUATIONS OF HIGHER ORDER

LDE with constant coefficients: Complementary function, over damping, under damping and critical damping of a system, Particular integrals for f(x) of the form e^{ax} , x^n , cosax, sinax, $e^{ax}V(x)$ and x V(x) where $V(x) \equiv cosax$ and sinax, the method of variation of parameters

LDE with variable coefficients: Cauchy's homogeneous equation, Legendre's homogeneous equations

UNIT-III: MULTIPLE INTEGRALS

Double integrals: Evaluation of Double Integrals, change of order of integration (only Cartesian form), change of variables (Cartesian and polar coordinates)

Triple Integrals: Evaluation of triple integrals, Change of variables (Cartesian to Spherical and Cylindrical polar coordinates)

Applications: Areas (by double integrals) and volumes (by double integrals and triple integrals), Centre of mass and Gravity (constant and variable densities) by double and triple integrals (applications involving cubes, sphere and rectangular parallelepipeds

UNIT-IV: VECTOR DIFFERENTIATION AND LINE INTEGRATION

Vector differentiation: Scalar and vector point functions, Concepts of gradient, divergence and curl of functions in cartesian framework, solenoidal fields, irrotational fields, potentials Vector line integration: Evaluation of the line integral, concept of work done by a force field, Conservative fields

UNIT-V: SURFACE INTEGRATION AND VECTOR INTEGRAL THEOREMS

Surface integration: Evaluation of surface and volume integrals, flux across a surface Vector integral theorems: Green's, Gauss and Stokes theorems (without proofs) and their applications

TEXT BOOKS

1. R.K.Jain and S.R.K.Iyengar, Advanced Engineering Mathematics, Narosa publishing house, Fourth edition 2014







Gokaraju Rangaraju Institute of Engineering and Technology Remedial School

Student's Feedback on Remedial classes (II year I semester)

Branch : All branches Year : II year Semester: I

Subject: DEVC Faculty Name: Ch. Phani Rama Krishna

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 I Semester 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	3	2	67
EEE	2	1	50
ME	2	1	50
ECE	9	6	67
CSE	22	17	77
IT	10	8	80
CSM	4	2	50
TOTAL	52	37	71



GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY ENGINEERING PHYSICS

Course Code: GR22A1004 L/T/P/C: 3/1/0/4 I Year II Semesters

Course Objectives:

- 1. Explain the interaction of light with matter through interference and diffraction phenomena.
- 2. Discuss the use of lasers as light sources in optical fiber applications.
- 3. Outline the behavior of free electrons in materials.
- 4. Describe the properties and fabrication methods of nanomaterials.
- 5. Recognize the basic concepts of acoustics and ultrasonic.

Course Outcomes:

- 1. Apply the principles of interference and diffraction of light in engineering applications.
- 2. Analyze the properties of Laser and its propagation in different types of optical fibers.
- 3. Classify materials based on the theory of Kronig Penny model.
- 4. Enumerate the nature and characterization of nanomaterials and its applications.
- 5. Use the concepts of acoustics and non-destructive testing in solving engineering problems.

UNIT I

Wave Optics: Superposition of waves, Interference of light by wave front splitting: Young's double slit experiment, Interference in thin films by reflection, Interference of light by amplitude splitting: Newton's rings, Difference between interference and diffraction, Fraunhofer diffraction from a single slit, Diffraction grating, Grating spectrum, Determination of wavelength of light using diffraction grating.

UNIT II

Lasers: Introduction, Characteristics of lasers, Lasing action, Essential components of laser, Construction and working: Ruby laser, He-Ne laser and Semiconductor 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, Types of optical fibers, Acceptance angle-Numerical aperture, Losses associated with optical fibers, Applications of optical fibers. **UNIT III Introduction to solids:** Bloch's theorem, Kronig – Penny model and its conclusions, E-K diagram, Brillion Zones, Effective mass of electron, Classification of solids on the basis of energy bands, Intrinsic and extrinsic semiconductors, Direct and Indirect band gap semiconductors.

UNIT IV

Nanomaterials: Introduction, Quantum confinement, Surface to volume ratio, Classification of Nanomaterials, Synthesis methods: Top-Down technique-Ball milling method, Bottom-Up technique-Sol- Gel method, Characterization techniques: SEM, TEM and EDAX.

UNIT V

Acoustics: Basic requirements of acoustically good hall, Reverberation and Reverberation time, Sabine's formula for Reverberation time, Measurement of absorption coefficient of a material, Factors affecting the architectural acoustics and their remedies.

Ultrasonics: Introduction, Classification of ultrasonic waves: Longitudinal waves, Transverse waves, Surface waves and Plate waves, Production of ultrasonic waves: Piezoelectric method and Magnetostriction method, Properties of ultrasonic waves, Applications of ultrasonics: SONAR and NDT

- Pulse echo method.

T	eac	hiı	ng	met	hod	O.	logi	es:
_								

White board a	nd marker \square
Power Point P	resentations \square
Video lectures	

Text Books:

- 1. Engineering Mechanics, 2nd edition- MK Harbola, Cengage Learning
- 2. Mechanics, D S Mathur and P S Hemne, S Chand
- 3. Engineering Physics, P.K Palanisamy, Scitech Publishers.
- 4. Ajoy Ghatak, "Optics", McGraw Hill Education, 2012

Reference Books:

- 1. H. J. Pain, "The physics of vibrations and waves", Wiley, 2006
- 2. O. Svelto, "Principles of Lasers"
- 3. "Introduction to Mechanics", M.K. Verma, Universities Press
- 4. I. G. Main, "Vibrations and waves in physics', 3rd Edition, Cambridge University Press, 2018
- 5. Applied Physics, T. Bhīma Sankaram, BSP



Gokaraju Rangaraju Institute of Engineering & Technology (Autonomous)

Subject:Engineering Physics

Phase I: 2023-24

Attendance and Result Table

Roll No	9-Jan	10-Jan	11-Jan	12-Jan	Result
22241A0107	р	р	Р	р	Pass
22241A0108	р	р	Р	р	Pass
22241A0109	р	р	Р	р	Pass
22241A0110	AB	Р	AB	р	Fail
22241A0119	р	р	Р	р	Pass
22241A0120	Р	AB	AB	р	Fail
22241A0123	р	р	Р	р	Pass
22241A0125	р	р	р	р	Pass
22241A0128	Р	AB	AB	р	Fail
22241A0129	р	р	р	р	Pass
22241A0132	р	р	р	р	Pass
22241A0133	AB	Р	AB	р	Fail
22241A0134	р	р	р	р	Pass
22241A0135	р	р	р	р	Pass
22241A0141	р	р	р	р	Pass
22241A0219	р	р	р	p	Pass
22241A0228	AB	Р	AB	р	Fail
22241A0237	Р	AB	AB	р	Fail
22241A0321	р	р	р	р	Pass
22241A0323	AB	AB	AB	р	Fail
22241A0342	р	р	р	р	Pass
22241A0343	AB	AB	AB	р	Fail
22241A0433	AB	Р	AB	р	Fail
22241A04B7	р	р	р	р	Pass
22241A0598	AB	AB	Р	р	Fail
22241A053D	р	р	р	р	Pass
22241A056A	р	р	р	р	Pass
22241A05G5	р	р	р	р	Pass
22241A05M9	р	р	р	р	Pass
22241A05N9	р	р	р	р	Pass
22241A1260	AB	AB	Р	р	Fail
22241A1274	р	р	р	р	Pass
22241A1276	р	р	р	р	Pass
22241A3257	р	р	р	р	Pass
22241A3259	AB	AB	AB	р	Fail
22241A6619	AB	AB	Р	AB	Fail
22241A6633	р	р	р	р	Pass
22241A6725	р	р	р	р	Pass
22241A67C8	р	р	р	р	Pass
22241A6650	р	р	р	р	Pass







Gokaraju Rangaraju Institute of Engineering and Technology Remedial School

Student's Feedback on Remedial classes (II year I semester)

Branch : All branches Year : II year Semester: I

Subject: Engineering Faculty Name: Dr. K Vagdevi

Physics

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 I Semester students to clear their backlogs.

Details are

- 4. 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.
- 5. 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.
- 6. 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	15	11	73
EEE	3	1	33
ME	4	2	50
ECE	2	1	50
CSE	6	5	83
IT	3	2	67
CSM	3	2	67
TOTAL	36	24	67

Subject: Engineering MechanicsPhase I, 2022-23 Attendance and Result Table

ROLL NO	9-Jan	10-Jan	11-Jan	12-Jan	RESULT
22241A0107	Р	Р	Р	Р	PASS
22241A0109	Р	Р	Р	Р	PASS
22241A0119	Р	Р	Р	Р	PASS
22241A0126	Р	Р	Р	Р	PASS
22241A0315	Р	Р	Р	Р	PASS
22241A0321	Р	Р	Р	Р	PASS
22241A0324	AB	AB	AB	AB	FAIL
22241A0328	AB	AB	AB	Р	FAIL
22241A0340	Р	Р	Р	Р	PASS

Remedial School Faculty Report on Subject GR22A1010: Engineering Mechanics

UNIT I

INTRODUCTION TO ENGINEERING MECHANICS - FORCE SYSTEMS

Basic concepts, Particle equilibrium in 2-D & 3-D; Rigid Body equilibrium; System of Forces, Coplanar Concurrent Forces, Components in Space – Resultant- Moment of Forces and its Application; Couples and Resultant of Force System, Equilibrium of System of Forces, Free body diagrams, Equations of Equilibrium of Coplanar Systems; Static Indeterminacy

UNIT II

FRICTION: Types of friction, Limiting friction, Laws of Friction, Static and Dynamic Friction; Motion of Bodies, wedge friction, screw Centroid and Centre of Gravity-Centroid of Lines, Areas and Volumes from first principle, centroid of composite sections; Centre of Gravity and its implications.

UNIT III

AREA MOMENT OF INERTIA: Definition, Moment of inertia of plane sections from first principles, Theorems of moment of inertia, Moment of inertia of standard sections and composite sections; Product of Inertia, Parallel Axis Theorem, Perpendicular Axis Theorem, Mass Moment of Inertia of Masses - Transfer Formula for Mass Moments of Inertia – Mass moment of inertia of composite bodies.

UNIT IV

ANALYSIS OF TRUSSES: Introduction, Classification of trusses, Assumptions made in the analysis of perfect truss, Methods of Analysis of Trusses- Method of Joints and Method of Sections. Principle of Virtual Work: Equilibrium of ideal systems, efficiency of simple machines, stable and unstable equilibriums.

UNIT V

REVIEW OF PARTICLE DYNAMICS: Rectilinear motion, Plane curvilinear motion (rectangular, path, and polar coordinates). 3-D curvilinear motion, Relative and constrained motion; Newton's 2nd law (rectangular, path, and polar coordinates). Work-kinetic energy, power, potential energy. Impulse-momentum (linear, angular), Impact (Direct and oblique).

Text Books:

- Reddy Vijay Kumar K. and J. Suresh Kumar (2010), Singer's Engineering Mechanics
 Statics & Dynamics
- A. Nelson, "Engineering Mechanics: Statics & Dynamics", Tata McGraw-Hill Education, 2009.

Reference Books:

- 1. Timoshenko S.P and Young D.H., "Engineering Mechanics", McGraw Hill International Edition, 1983.
- 2. Andrew Pytel, JaanKiusalaas, "Engineering Mechanics", Cengage Learning, 2014.
- 3. Beer F.P & Johnston E.R Jr. "Vector Mechanics for Engineers", TMH, 2004.
- 4. Hibbeler R.C & Ashok Gupta, "Engineering Mechanics", Pearson Education, 2010.
- 5. Tayal A.K., "Engineering Mechanics Statics & Dynamics", Umesh Publications, 2011.
- 6. Basudeb Bhattacharyya, "Engineering Mechanics", Oxford University Press, 2008.
- 7. Meriam. J. L., "Engineering Mechanics", Volume-II Dynamics, John Wiley & Sons, 2008.







Year : II year Faculty Name : K Ratnababu **Branch: All branches** Semester: I

Subject: Engineering Mechanics

S.No	Item	Feed back
1.	Material presented	Excellent
2.	Teaching Clarity	Very Good
3.	Coverage of important topics	Excellent
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 I Semester students to clear their backlogs.

Details are

- 7. 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.
- 8. 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 preferredmaterial and few tips as they were busy in Projects. For some subjects they came and attentive.
- 9. 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	4	4	100
ME	5	3	60
TOTAL	9	7	78

Transition rate for all subjects:

S.No	Course	No.of students attended	No.of students passed	Transition rate
1.	Differential Equations and Vector Calculus	52	37	71 %
2.	Engineering Physics	36	24	67 %
3.	Engineering Mechanics	9	7	78 %



Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous)

REMEDIAL SCHOOL

Remedial Classes Schedule for I Year students 2023-2024 Phase – II

Timings: 2.10 pm to 3.30 pm

S.No	Subject	Name of the faculty	Session 1	Session 2	Session 3	Session 4
1	LAFA	Ch. Phani Rama Krishna	5/6/24 (3314)	6/6/24 (3314)	7/6/24 (3314)	10/6/24 (3314)
2	PPS	M.Mounica	11/6/24 (3314)	12/6/24 (3314)	13/6/24 (3314)	14/6/24 (3314)
3	EC	M Haritha Kiranmai	15/6/24 (3314)	17/6/24 (3314)	18/6/24 (3314)	19/6/24 (3314)
4	ITSPC	Dr. G Revathi	5/6/24 (3206)	6/6/24 (3201)	7/6/24 (3209)	10/6/24 (3204)
5	FCS	K. Shoban Babu	11/6/24 (3211)	12/6/24 (3206)	13/6/24 (3201)	14/6/24 (3209)

HOD

Dean Remedial School (Dr. J Sridevi)



Gokaraju Rangaraju Institute of Engineering and Technology

(Autonomous)

Subject-Linear Algebra and Functional Approximation Phase-II, 2023-24

Attendance table

Branch: CE Subject: LAFA

S.No	Roll Number	6/5/2024	6/6/2024	6/7/2024	6/10/2024	Results
1	23241A0102	Р	Р	Р	Р	
2	23241A0104	Р	Р	Р	Р	
3	23241A0107	Р	Р	Р	Р	
4	23241A0110	Α	Α	Α	Α	
5	23241A0111	Р	Р	Р	Р	
6	23241A0112	Р	Р	Α	Α	
7	23241A0114	P	Р	Р	Р	
8	23241A0115	Р	Р	Р	Р	
9	23241A0116	Р	Р	Α	Α	
10	23241A0117	Р	Р	Р	Р	
11	23241A0118	Α	Α	Α	Α	
12	23241A0119	Α	Α	Α	Α	
13	23241A0125	Α	Α	Α	Α	
14	23241A0127	Α	Α	P	Р	
15	23241A0128	Р	Р	Р	Р	
16	23241A0129	Р	Р	Α	Α	
17	23241A0131	Р	Р	Р	Р	
18	23241A0133	Р	Р	Р	Р	
19	23241A0134	Р	Р	Α	Α	
20	23241A0135	Р	Р	Р	Р	
21	23241A0136	Α	Α	Р	Р	
22	23241A0138	Α	Α	Р	Р	
23	23241A0140	Α	Α	Р	Р	
24	23241A0143	Р	Р	Р	Р	
25	23241A0145	Р	Р	Α	Α	
26	23241A0146	Р	Р	Р	Р	
27	23241A0147	Р	Р	Р	Р	
28	23241A0148	Р	Р	Α	Α	
29	23241A0149	Р	Р	Р	Р	
30	23241A0150	Р	Р	Р	Р	

Remedial classes 2023-2024 phase-II Attendance sheets

Branch: EEE Subject: LAFA

S.No	Roll Number	6/5/2024	6/6/2024	6/7/2024	6/10/2024	Results
1	23241A0208	P	P	P	P	
2	23241A0209	Р	Р	Р	Р	
3	23241A0214	Р	Р	Р	Р	
4	23241A0216	А	А	А	А	
5	23241A0217	Р	Р	Р	Р	
6	23241A0218	Р	Р	А	А	
7	23241A0220	Р	Р	Р	Р	
8	23241A0225	Р	Р	Р	Р	
9	23241A0226	Р	Р	Α	А	
10	23241A0229	Р	Р	Р	Р	
11	23241A0234	А	Α	Α	Α	
12	23241A0235	Α	Α	Α	Α	
13	23241A0239	Α	Α	Α	Α	
14	23241A0241	Α	Α	Р	Р	
15	23241A0243	Р	Р	Р	Р	
16	23241A0244	Р	Р	Α	Α	
17	23241A0245	Р	Р	Р	Р	
18	23241A0247	Р	Р	Р	Р	
19	23241A0249	Р	Р	Α	Α	
20	23241A0250	Р	Р	Р	Р	
21	23241A0251	А	А	Р	Р	
22	23241A0253	А	А	Р	Р	
23	23241A0257	А	А	Р	Р	
24	23241A0258	Р	Р	Р	Р	
25	23241A0262	Р	Р	Α	Α	

Remedial classes 2023-2024 phase-II Attendance sheets

Branch: ME Subject: LAFA

S.No	Roll Number	6/5/2024	6/6/2024	6/7/2024	6/10/2024	Results
1	23241A0301	P	Р	Р	Р	
2	23241A0302	Р	Р	Р	Р	
3	23241A0305	Р	Р	Р	Р	
4	23241A0306	Α	Α	Α	Α	
5	23241A0307	Р	Р	Р	Р	
6	23241A0308	Р	Р	Α	Α	
7	23241A0310	Р	Р	Р	Р	
8	23241A0311	Р	Р	Р	Р	
9	23241A0312	Р	Р	Α	Α	
10	23241A0313	Р	Р	Р	Р	
11	23241A0314	А	А	Α	Α	
12	23241A0316	Α	Α	Α	Α	
13	23241A0317	Α	Α	Α	Α	
14	23241A0318	А	А	Р	Р	
15	23241A0319	Р	Р	Р	Р	
16	23241A0320	Р	Р	Α	Α	
17	23241A0324	Р	Р	Р	Р	
18	23241A0326	Р	Р	Р	Р	
19	23241A0328	Р	Р	Α	Α	
20	23241A0329	Р	Р	Р	Р	
21	23241A0330	А	А	Р	Р	
22	23241A0331	Α	Α	Р	Р	
23	23241A0332	А	А	Р	Р	
24	23241A0333	Р	Р	Р	Р	
25	23241A0335	Р	Р	Α	Α	
26	23241A0337	Р	Р	Р	Р	
27	23241A0339	Р	Р	Р	Р	
28	23241A0340	Р	Р	А	Α	
29	23241A0341	Р	Р	Р	Р	
30	23241A0343	Р	Р	Р	Р	
31	23241A0345	Р	Р	Р	Р	
32	23241A0346	Р	Р	Р	Р	



GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY (Autonomous)

LINEAR ALGEBRA AND FUNCTION APROXIMATION

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

Code: GR22A1001

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

- I. Previous Question papers are discussed
- II. Material Shared with students
- III. Classes are conducted for doubts clarification

IMAGES OF CLASSES TAKEN (OFFLINE MODE) Phase-II, 2023-24









Gokaraju Rangaraju Institute of Engineering and Technology Remedial School Student's Feedback on Remedial classes

Branch: CE,EEE,ME Year : I Year Semester: I

Subject: Linear Algebra and Function Approximation Faculty Name: Ch.Phani Rama Krishna

S.No	Item	Feed back
1.	Material presented	Excellent
2.	Teaching Clarity	Excellent
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 I year, 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

Branch	TOTAL ATTENDED	PASSED	TRANSITION RATE(%)
CE			
EEE			
ME			



Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous)

Subject: Programming for Problem Solving Phase II, 2023-24 Attendance and Result table

Attenuance and Kesun

Branch: CE,ME,EEE

ROLL NO.	11-06-2024	12-06-2024	13-06-2024	14-06-2024
23241A0102	P	P	P	P
23241A0117	P	AB	P	P
23241A0118	P	P	P	P
23241A0125	P	AB	P	P
23241A0129	P	P	P	AB
23241A0131	AB	P	P	P
23241A0133	P	P	AB	P
23241A0134	P	AB	P	P
23241A0136	P	P	P	P
23241A0138	AB	P	P	P
23241A0143	P	AB	P	P
23241A0144	P	P	P	P
23241A0145	P	P	AB	P
23241A0147	P	P	P	AB
23241A0148	P	P	P	AB
23241A0209	AB	P	P	P
23241A0214	P	AB	P	P
23241A0216	P	P	P	P
23241A0218	P	P	AB	P
23241A0219	P	AB	P	P
23241A0225	P	P	P	AB
23241A0234	AB	P	P	P
23241A0241	P	AB	P	P
23241A0243	P	P	P	P
23241A0244	AB	P	AB	P
23241A0249	P	AB	P	P
23241A0250	P	AB	P	AB
23241A0251	AB	P	P	P
23241A0252	AB	AB	P	P
23241A0254	P	P	P	AB
23241A0257	AB	P	P	P
23241A0301	P	P	P	P
23241A0305	P	P	AB	P
23241A0306	P	AB	P	P
23241A0307	P	P	P	AB
23241A0308	AB	P	P	P
23241A0310	P	P	P	P
23241A0311	P	P	P	AB
23241A0312	P	P	P	P

23241A0313	AB	P	P	P
23241A0317	P	P	P	AB
23241A0319	P	AB	P	P
23241A0322	AB	P	P	P
23241A0323	AB	P	AB	P
23241A0324	P	P	P	P
23241A0326	AB	P	P	P
23241A0328	P	P	AB	P
23241A0329	P	P	P	AB
23241A0332	P	P	P	P
23241A0335	P	AB	P	P
23241A0337	P	P	P	P
23241A0338	P	P	AB	P
23241A0340	Р	AB	P	P
23241A0341	Р	Р	P	P
23241A0347	P	P	AB	P



Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous) Remedial School Faculty Report on Subject

GR22A1007: 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, 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, 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: Strings: Introduction to strings, operations on characters, Basic string functions available in C - strlen, streat, strepy, strrev, stremp, String operations without string handling functions, Arrays of strings.

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.

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 datatype.

- I. Previous Question papers are discussed
- II. Material Shared with students
- III. Classes are conducted for doubts clarification

IMAGES OF CLASSES TAKEN (OFFLINE MODE) Phase-II, 2023-24











Gokaraju Rangaraju Institute of Engineering and Technology Remedial School Student's Feedback on Remedial classes

Branch: CE,EEE,ME Year : I Year Semester: I

Subject: Programming for Problem Solving Faculty Name: M.Mounica

S.No	Item	Feed back
1.	Material presented	Excellent
2.	Teaching Clarity	Excellent
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 I year, 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

Branch	TOTAL ATTENDED	PASSED	TRANSITION
			RATE(%)
CE			
EEE			
CCC			
ME			



Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous)

Subject:Engineering Chemistry Phase II, 2023-24 Attendance and Result table

Branch: CE,ME,EEE

					I
S.No	Roll Number	6/15/2024	6/18/2024	6/19/2024	6/20/2024
1	23241A0102	Р	Р	AB	Р
2	23241A0107	Р	AB	AB	AB
3	23241A0112	AB	Р	Р	Р
4	23241A0113	Р	Р	Р	АВ
5	23241A0115	AB	AB	AB	Р
6	23241A0117	Р	Р	AB	Р
7	23241A0118	AB	Р	Р	Р
8	23241A0121	AB	AB	Р	AB
9	23241A0122	Р	Р	Р	АВ
10	23241A0125	Р	Р	AB	Р
11	23241A0129	AB	AB	Р	АВ
12	23241A0131	AB	Р	Р	Р
13	23241A0133	Р	AB	AB	АВ
14	23241A0134	Р	Р	Р	АВ
15	23241A0136	AB	Р	AB	AB
16	23241A0138	Р	Р	Р	AB
17	23241A0141	AB	Р	Р	Р
18	23241A0142	Р	Р	AB	Р
19	23241A0143	Р	Р	Р	AB
20	23241A0144	Р	Р	AB	Р
21	23241A0145	AB	AB	Р	AB
22	23241A0148	Р	Р	AB	Р
23	23241A0150	АВ	Р	Р	Р

S.No	Roll Number	6/15/2024	6/18/2024	6/19/2024	6/20/2024
1	23241A0209	AB	Р	Р	Р
2	23241A0225	Р	AB	AB	AB
3	23241A0234	Р	Р	AB	Р
4	23241A0241	Р	Р	Р	AB
5	23241A0249	AB	Р	AB	AB
6	23241A0250	AB	Р	Р	Р
7	23241A0257	Р	Р	AB	Р
8	23241A0258	Р	Р	Р	AB

S.No	Roll Number	6/15/2024	6/18/2024	6/19/2024	6/20/2024
1	23241A0305	AB	P	Р	Р
2	23241A0306	Р	AB	Р	Р
3	23241A0307	P	Р	Р	AB
4	23241A0308	Р	AB	Р	Р
5	23241A0310	P	Р	AB	Р
6	23241A0311	P	Р	AB	Р
7	23241A0313	P	Р	Р	AB
8	23241A0314	AB	Р	Р	Р
9	23241A0317	P	Р	AB	Р
10	23241A0319	P	Р	Р	AB
11	23241A0324	AB	Р	Р	Р
12	23241A0326	AB	Р	Р	Р
13	23241A0328	AB	AB	Р	AB
14	23241A0329	P	Р	Р	AB
15	23241A0330	AB	AB	AB	Р
16	23241A0332	Р	Р	AB	Р
17	23241A0337	AB	Р	Р	Р
18	23241A0346	AB	Р	Р	Р



GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(AUTONOMOUS)

Subject: ENGINEERING CHEMISTRY GR22 SYLLABUS

I B.Tech SEM I&II (Common to all branches)

Unit I: Atomic and Molecular Structure

(8 Lectures)

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

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

Theories of Metallic bonding – Free electron theory, Resonance theory, Molecular orbital theory, Valence Bond Theory – Postulates and Limitations, Bonding in $[Ni(CO)_4]$, $[Ni(CI)_4]^{2-}$, $[Ni(CN)_4]^{2-}$

, $[Co(NH_3)_6]^{3+}$, and $[CoF_6]^{3-}$. Crystal Field Theory, Crystal Field Splitting of transition metal ion d-orbitals in octahedral, tetrahedral and square planar geometries.

Unit II: Spectroscopic Techniques and Applications

(10 Lectures)

Regions of Electromagnetic spectrum. Molecular spectroscopy: Rotational Spectroscopy: Rotation of molecules, 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), Basic concepts and Principle of ¹H NMR spectroscopy, Chemical shift- Shielding and Deshielding. Magnetic Resonance Imaging.

Unit III: Batteries and Corrosion

(12 Lectures)

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, Theories of chemical and electro chemical corrosion with mechanism, Differential metal corrosion - Galvanic corrosion, Differential aerationcorrosion - pitting corrosion, Factors affecting corrosion - Nature of metal (Position of metal,

Relative areas, Purity and Passivity), N

ature of Environment (pH, Temperature and Humidity), 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

(8 Lectures)

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 – 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

(8 Lectures)

Stereochemistry: Elements of symmetry-plane of symmetry, centre of symmetry, alternating axis of symmetry. Chirality, Enantiomers – tartaric acid, Diastereomers- 2,3-dichloropentane, Conformational analysis of n-butane. 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, Knocking and its mechanism in Internal Combustion engine, Octane rating, Hydrogen gas generation by Electrolysis process.

- I. Previous Question papers are discussed
- II. Material Shared with students
- III. Classes are conducted for doubts clarification

IMAGES OF CLASSES TAKEN (OFLINE MODE) Phase-II, 2023-24









Gokaraju Rangaraju Institute of Engineering and Technology Remedial School

Student's Feedback on Remedial classes

Branch: CE,EEE,ME Year : I Year Semester: I

Subject: Engineering Chemistry Faculty Name: M.Haritha Kiranmai

S.No	Item	Feed back
1	Material presented	Excellent
2	Teaching Clarity	Excellent
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 I 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

Branch	TOTAL ATTENDED	PASSED	TRANSITION
			RATE(%)
CE			
EEE			
CCC			
ME			
1		I	



Gokaraju Rangaraju Institute of Engineering and Technology

(Autonomous)

Introductory To Statistics Probability Calculus Phase- II, 2023-24 Attendance and Result table

Branch: CSBS

S.No	Roll Number	6/5/2024	6/6/2024	6/7/2024	6/10/2024
1	23241A3202	Α	Р	Р	Р
2	23241A3203	Р	Р	Р	Р
3	23241A3206	Α	Р	Α	Р
4	23241A3209	Р	Р	Р	Р
5	23241A3213	Р	Р	Р	Α
6	23241A3215	Р	Α	Р	Р
7	23241A3216	Р	Р	Р	Р
8	23241A3219	Р	Р	Р	Р
9	23241A3221	Р	Р	Р	Α
10	23241A3225	Р	Р	Р	Р
11	23241A3227	Α	Р	Α	Р
12	23241A3228	Р	Р	Р	Р
13	23241A3229	Р	Р	Р	Р
14	23241A3231	Α	Α	Р	Р
15	23241A3235	Р	Р	Α	Α
16	23241A3238	Р	Р	Р	Р
17	23241A3239	Р	Α	Р	Р
18	23241A3246	Р	Р	Р	Р
19	23241A3248	Р	Р	Α	Р
20	23241A3251	Р	Р	Р	Р
21	23241A3254	А	А	Р	Р
22	23241A3255	Р	Р	Р	Р
23	23241A3257	Р	Р	Р	Р
24	23241A3258	Р	Р	Р	Α
25	23241A3260	Р	Р	Р	Р



GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY INTRODUCTORY TOPICS IN STATISTICS, PROBABILITY AND CALCULUS

Remedial school

Faculty Report on subject

Unit-I: Introduction to Statistics and Descriptive Statistics

Definition of Statistics, 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

Conceptofexperiments, samplespace, 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.

Unit-III: Probability Distributions

Discrete distributions: Binomial, Poisson and Geometric distribution. Continuous distributions: Uniform, Exponential, Normal distributions.

Unit-IV: Differential Calculus

Limitoffunctions, continuity, derivatives. Taylor's and McLaurin's series expansions, Partial derivatives of first and second order, Maxima and minima of function of two variables without constraints.

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 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.

I. Previous Question papers are discussed

II. Material Shared with students

III. Classes are conducted for doubts clarification

IMAGES OF CLASSES TAKEN (OFFLINE MODE) Phase-II, 2023-24







Gokaraju Rangaraju Institute of Engineering and Technology Remedial School Student's Feedback on Remedial classes

Branch: CSBS Year: I year Semester: I

Subject: ITSPC Faculty Name: Dr. G. REVATHI

S.No	Item	Feed back
1.	Material presented	Excellent
2.	Teaching Clarity	Excellent
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 I 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

Branch	TOTAL ATTENDED	PASSED	TRANSITION
			RATE(%)
CE			
EEE			
ME			



Gokaraju Rangaraju Institute of Engineering and Technology

(Autonomous) FUNDAMENTALS OF COMPUTER SCIENCE

Phase- II, 2023-24 Attendance and Result table

S.No	Roll Number	6/11/2024	6/12/2024	6/13/2024	6/14/2024
1	23241A3203	Р	Р	Р	А
2	23241A3206	Р	Р	Р	Р
3	23241A3209	Р	Р	Р	Р
4	23241A3213	Р	Α	Р	Р
5	23241A3215	Р	Р	Α	Р
6	23241A3216	Р	Р	Р	Р
7	23241A3219	Р	Р	Р	Р
8	23241A3221	Р	Р	Р	А
9	23241A3225	Р	Р	Р	Р
10	23241A3227	Р	Α	Р	Р
11	23241A3228	Р	Р	Α	Р
12	23241A3229	Р	Р	Р	Р
13	23241A3230	Α	Р	Р	Р
14	23241A3235	Р	Р	Р	Α
15	23241A3237	Р	Р	Р	Р
16	23241A3238	Р	Р	Р	Р
17	23241A3239	Р	Р	Α	Р
18	23241A3246	Α	Р	Р	Р
19	23241A3251	Р	Р	Р	Р
20	23241A3255	Р	Р	Α	Р
21	23241A3257	Р	Р	Р	Р
22	23241A3258	Α	Р	Р	Р
23	23241A3261	Р	Р	Р	Р



Gokaraju Rangaraju Institute of Engineering and Technology

(Autonomous) Remedial school

Faculty Report on subject

GR22A1026: FUNDAMENTALS OF COMPUTER SCIENCE

Course Code: GR22A1026 L/T/P/C: 3/0/0/3

I Year I Semester

UNIT I

General problem Solving concepts: Algorithm, and Flowchart for problem solving with Sequential Logic Structure.

Imperative languages: Introduction to imperative language; syntax and constructs of aspecific language (ANSI C)

Types Operator and Expressions with discussion of variable naming and Hungarian Notation: Variable Names, Data Type and Sizes (Little Endian Big Endian), Constants, Declarations, Arithmetic Operators, Relational Operators, Logical Operators, Increment Decrement Operators, Bitwise Operators, Assignment Operators and Expressions, Precedence and Order of Evaluation, proper variable naming and Hungarian Notation, Type Conversion.

UNIT II

Decisions and Loops: Control Flow with discussion on structured and unstructured programming: Statements and Blocks, If-Else-If, Switch, Loops – while, do, for, break and continue, goto labels, structured and unstructured programming.

Input and Output: Standard I/O, Formatted Output – printf, Formatted Input – scanf, **Arrays:** One Dimensional, Two Dimensional and Multi-dimensional array and Row/columnmajor formats.

UNIT III

Functions and Program Structure with discussion on standard library: Basics of functions, parameter passing and returning type, C main return as integer, External, Auto, Local, Static, Register Variables, Scope Rules, Block structure, Initialisation, Recursion, Standard Library Functions and return types.

Programming Method: Pre-processor, Debugging, Macro, User Defined Header, User Defined Library Function, make file utility

UNIT IV

Structures: Basic Structures, Structures and Functions, Array of structures, Table look up, typedef, unions, Bit-fields

Pointers: Pointers and address, Pointer to functions, Pointers and Function Arguments, Pointers and Arrays, Address Arithmetic, character Pointers and Functions, Pointer Arrays, Pointer to Pointer, Initialisation of Pointer Arrays, Pointer of structures, Self-referral structures.

UNIT V

Files: Variable length argument list, file access including FILE structure, fopen, stdin, sdtout and stderr, Error Handling including exit, perror and error.h, Line I/O(related miscellaneous functions). Command line arguments, complicated declarations and how they are evaluated.

Unix system Interface: File Descriptor, Low level I/O – read and write, open, create, close and unlink, Random access – lseek, Discussions on Listing Directory, Storage allocator.

- I. Previous Question papers are discussed
- II. Material Shared with students
- III. Classes are conducted for doubts clarification

IMAGES OF CLASSES TAKEN (OFFLINE MODE) Phase-II, 2023-24







Gokaraju Rangaraju Institute of Engineering and Technology Remedial School Student's Feedback on Remedial classes

Branch: CSBS Year: I year Semester: I Subject: FCS Faculty Name: K.Shoban Babu

S.No	Item	Feed back
1	Material presented	Excellent
2	Teaching Clarity	Excellent
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 I 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

Branch	TOTAL ATTENDED	PASSED	TRANSITION RATE(%)
CSBS	23		