

ENGINEERING MATHEMATICS - II  
2nd Semester

Sl No	Lect No	Module	Lecture details	Last date	Status
1	1/1	Vector	Introductory	20/3/23	complete
		Algebra			
2	1/2	- do -	Types of vector	21/3/23	complete
3	1/3	- do -	Representability of vector	22/3/23	complete
4	1/4	- do -	Magnitude and direction of vectors	23/3/23	complete
5	1/5	- do -	Magnitude and direction of vector	25/3/23	complete
6	1/6	- do -	Add <sup>n</sup> and subtraction of vectors	27/3/23	part complete
7	1/7	- do -	Add <sup>n</sup> and subtraction of vector	28/3/23	complete
8)	1/8	- do -	position vector	29/3/23	part complete
9	1/9	- do -	position vector	31/3/23	complete
10	1/10	- do -	Scalar product of two vectors	3/4/23	complete
11	1/11	- do -	Geometrical meaning of dot product	4/4/23	part complete
12	1/12	- do -	Geometrical meaning of dot product	5/4/23	part complete
13	1/13	- do -	Angle between two vectors	6/4/23	complete
14	1/14	- do -	Scalar and vector products of two vectors	8/4/23	complete

Sl. No	Lect. No	Module	Lesson details	Lect details	Status
15	1/15	-do-	Vector product and geometry	9/4/23	Complete
			Meaning		
16	2/1	LIMITS & CONTINUITY	Definition of Function based on set theory	10/4/23	Complete
17	2/2	-do-	Types of Function	11/4/23	
18	2/3	-do-	Identity Function	12/4/23	
19	2/4	-do-	Absolute value function	13/4/23	
20	2/5	-do-	The greatest Integer Function	15/4/23	
21	2/6	-do-	Trigonometric Function	17/4/23	
22	2/7	-do-	Exponential function	18/4/23	
23	2/8	-do-	Logarithmic function	19/4/23	
24	2/9	-do-	Introduction of limits	20/4/23	
25	2/10	-do-	Existence of limit	24/4/23	
26	2/11	-do-	Methods of evaluation of limit	25/4/23	
27	2/12	-do-	Methods of evaluation of limit	26/4/23	
28	3/1	Derivative	Derivative of a function at a point	27/4/23	

Sl. No.	Less. No.	Master	Less details	Less dt	Sl. No.
29	3/2	-do-	Derivative of Function at a point	28/4/23	
30	3/3	-do-	Algebra of Derivator	01/05/23	
31	3/4	-do-	Algebra of Derivator	02/05/23	
32	3/5	-do-	Derivative of Standard Funct $x^2, a^x, \log a^x$	03/05/23	
33	3/6	-do-	$e^x, \sin x, \cos x, \tan x$	06/05/23	
34	3/7	-do-	$\cot x, \sec x, \csc x$	08/05/23	
35	3/8	-do-	$\sinh x, \cosh x, \tanh x$	09/05/23	
36	3/9	-do-	$\cot^{-1} x, \sec^{-1} x, \csc^{-1} x$	10/05/23	
37	3/10	-do-	Derivative of Composite Function	13/05/23	
38	3/11	-do-	Methods of differentiation I parametric Functions	15/5/23	
39	3/12	-do-	parametric Funct	16/5/23	
40	3/13	-do-	Implicit Function	17/5/23	
41	3/14	-do-	Implicit Function		
42	3/15	-do-	Logarithmic Function		
43	3/16	-do-	A Function maps to another Function		

Sl. No.	Lecture No.	Chapter No.	Lecture Details	Date	Status
1.	1/1	unit of and Dimension	Physical quantities and its types	20/03/23	81
2.	1/2	-do-	System of unit & Dimension	21/03/23	81
3.	1/3	-do-	Dimension and its analysis (Application)	22/03/23	81
4.	2/1	Scalor and Vector	Defen concept types of vectors scalor.	24/03/23	81
5.	2/2	-do-	Triangle Law and Parallel gram law of vector addition numericals	27/03/23	81
6.	2/3	-do-	Resolution of vector and vector multiplication numericals based on triangle	28/03/23	81
7.	3/1	-kinematics	Concept of Rest and motion	29/03/23	81
8.	3/2	-do-	Displacement Speed Velocity force	31/03/23	81
9.	3/3	-do-	Equation of motion. Circular motion.	3/4/23	81
10.	3/4	-do-	-do-	4/4/23	81
11.	3/5	kinematic	Concept of motion and Projectile motion.	5/4/23	81
12.	3/6	-do-	-do-	10/4/23	81

SNO	Lecture NO	Chapter	Lecture Details	Date	Score
13	4/1	work and friction	concept of work formula type of numerical.	11/4/23	
14	4/2	-do-	concept of friction types and numerical based on it.	12/4/23	
15	4/3	-do-	numerical.	17/4/23	
16	4/4	-do-	Laws of limiting friction co-efficient of friction.	18/4/23	
17	4/5	-do-	method of measuring friction.	19/4/23	
18	5/1	gravitation	newton's law of gravitation concept and statement.	21/4/23	
19	5/2	-do-	(explanation) -do-	24/4/23	
20	5/3	-do-	definition, unit & Dimension of Gravity	25/4/23	
21	5/4	-do-	concept - unit & acceleration to gravity Newton. Kepler's law.	26/4/23	
22	6/1	oscillation and waves	Simple harmonic motion (SHM). Definition and concept Simple numerical with formula.	28/4/23	

S. NO	Lecture NO	Chop tum	Lecture Details	Date	Stakey
23	6/2	-do-	wave motion & its types transverse and longitudinal wave motion.	1/5/23	
24	6/3	-do-	1) Different wave Parameters and their Reduction	2/5/23	
25	6/4	-do-	Numerical based on different wave Parametric Reaction.	3/5/23	
26	6/5	-do-	ULTRASONICS and Numerical Applications	8/5/23	
27	7/1	Heat and Thermo dynamics	Concept of heat and temp and units.	9/5/23	
28	7/2	-do-	Specific heat latent heat change of state concept & formulae)	10/5/23	
29	7/3	-do-	- do -	12/5/23	
30	7/4	-do-	Thermal expansion exten- sion of solid.	15/5/23	
31	7/5	Heat and Ther- modyna- mics	Relation bet <sup>n</sup> $\alpha$ , $\beta$ , $V$ , and numerical work heat concept Joule's mechanical equivalent of heat.	15/5/23	

Engg Mechanics

2nd Semester



Lecture No.	Chapter	Lecture Details	Date	Status
01	1/1	Definition of mechanics, Statics, Dynamics, Rigid Bodies.	22/03/23	
	1/2	-do- Force system, Definition, Classification of force, System according to plane & line of action.	23/03/23	
	1/3	-do- Characteristic of force & effect of force.	24/03/23	
	1/4	-do- Principles of Transmissibility & Principle of Superposition.	25/03/23	
05	1/5	-do- Action & Reaction forces & concept of free body diagram.	29/03/23	
06	1/6	-do- Resolution of a force, Definition, method of Resolution.	31/03/23	
07	1/7	-do- Types of component forces, perpendicular components & non-perpendicular components.	5/4/23	
08	1/8	-do- Composition of forces, Definition, Resultant force method of composition of forces.	6/4/23	

SL NO	Lecture NO	Chapter	Lecture Details	Date	Status
09	1/9	-do-	Analytical method Parallelogram of forces & method of Resolution.	8/4/23	
10	1/10	-do-	Graphical method. Space diagram vector diagram.	12/4/23	
11	1/11	-do-	Polygon Law of forces	13/4/23	
12	1/12	-do-	Resultant of concurrent non-concurrent. & parallel force system by analytical & graphical method.	15/4/23	
13	1/13	-do-	Moment of force Geometrical meaning of moment of a force	19/4/23	
14	1/14	-do-	Measurement of moment of a force & its S.I units classification of moments according to direction of rotation.	20/4/23	
15	1/15	-do-	Sign convention Law. of moment Varignon's theorem.	21/4/23	
16	1/16	-do-	Couple - S.I units Measurement of couple	26/4/23	

S No	Lecture No	Chapter	Lecture Details	Date	Status
17	1/14	-do-	Properties of couple	27/4/23	
18	2/1	Equilibrium	Definition condition of equilibrium.	28/4/23	
19	2/2	-do-	Analytical condition of equilibrium for concurrent	29/4/23	
20	2/3	-do-	Graphical condition of equilibrium for concurrent non-concurrent & free body	3/5/23	
21	2/4	-do-	free body Diagram	4/5/23	
22	2/5	-do-	Lami's Theorems	6/5/23	
23	2/6	-do-	Application for solving various engineering	10/5/23	
24	2/7	-do-	- do -	11/5/23	
25	3/1	friction	Defn of friction & frictional forces.	12/5/23	
26	3/2	-do-	Limiting frictional force.	13/5/23	
27	3/3	-do-	co-efficient of friction.	17/5/23	
28	3/4	-do-	Angle of friction & repose.		

Communicative English 4  
(2nd Semester)

SC No	Lesson No	Chapter	Lesson details	Date	Status
1	1/1	Reading Comprehension	SOCS skills of Reading Comprehension about 200 to 500 words	21/3/23	partially done
2	1/2		SOCS skills of reading summarizing the gist	28/3/23	Completed
3	1/3		scanning the necessary information	31/3/23	Completed
4	2/4		Close reading for Inference and evaluation	3/4/23	
5	2/5		Main idea and supporting points	4/4/23	
6	4/6		Note making summarizing	8/4/23	
7	1/7		Note making summarizing	10/4/23	
8	1/8		Supply the suitable title	11/4/23	
	2/8				

S	SL No	Lect No	Chapter	Lecture details	Date	Status
5	9	119		Standing of your self	15/4/23	
	10	1110		standing of your self	17/4/23	
	11	1111		standing of your self	18/4/23	
5	12	1112		The magic of team work	21/4/23	
5	13	1113		The magic of team work	24/4/23	
	14	1114		The magic of team work	25/4/23	
5	15	1115		the magic of team work	28/4/23	
5	16	1116		In Cape & Rock	29/4/23	
5	17	1117		In Cape Rock	1/5/23	
6	18	1118		To my true friend	2/5/23	
	19	1119		To my true friends	6/5/23	
	20	1120		To my true friends	8/5/23	

Sl No	Sheet No	<del>Sheet</del> Chap	Topic	Date	Sl
21	2/1	Vocabulary	Synonyms	9/5/23	
22	2/2	-do-	Synonyms	12/5/23	
23	2/3	-do-	Antonyms	13/5/23	
24	2/4	-do-	Antonyms	15/5/23	
25	2/5	-do-	Single word replacement	16/5/23	

\* COMPUTER APPLICATION \*  
2nd semester



# COMPUTER APPLICATION

Sl. No.	Lect. No.	Module	Lect. Details	Lect. Date	Status
01	1/1	computer organisation	Introduction to computer evaluation of computer generation of computer classification of computer.	21-03-23	Partially completed
02	1/2	- do -	- do -	24-03-23	completed
03	1/3	- do -	Basic organisation of computer (functional Block diagram) input devices CPU and output devices	24-03-23	Partially completed
04	1/4	- do -	- do -	25-03-23	Completed
05	1/5	- do -	computer memory and class of memory.	28-03-23	completed
06	2/1	computer software	software concept, system software, application software	31-03-23	completed
07	2/2	- do -	over view of operating system objectives and function of OS.	4-04-23	completed
08	2/3	- do -	TYPES of operating system Batch processing, multi program time sharing OS feature of DOS windows & UNIX	08-04-23	completed
09	2/4	- do -	Programming language compiler interpreter computer virus.	11-04-23	completed
10	2/5	- do -	DIFFERENT TYPES of computer viruses	15-04-23	completed
11	2/6	- do -	DETECTION and PREVENTION of viruses	18-04-23	completed

Sl. No.	Lect. No.	Module	Lect. Details	Lect. Date	Status
12	2/1	-do-	Lect. Details, Application of computer in diff domain	21-04-23	Completed
13	3/1	computer network & internet	Networking concept, Protocol connecting media transmission mode	25-04-23	Partially completed
14	3/2	-do-	-do-	-do-	Completed
15	3/3	-do-	Network topologies, types of Network	28-04-23	Completed
16	3/4	-do-	Network devices like hub, Repeater, switch, bridge, Router, gateway & nic	29-04-23	Completed
17	3/5	-do-	Internet services like, E-mail, word	02-05-23	Completed
18	3/6	-do-	www, FTP, Chatting, internet conferencing	06-05-23	Completed
19	3/7	-do-	Electronic News Paper & online shopping	09-05-23	Completed
20	3/8	-do-	diff types of internet connectivity and ISP	12-05-23	Completed
21	4/1	File management & data processing	concept of file and folder.	13-05-23	Completed
22	4/2	-do-	file access	16-05-23	Completed

\* ENGINEERING  
2nd Semester  
CHEN 151 P.T.\*

ENGG. CHEMISTRY

Sl. No.	Lect. No.	Module	Lect. Details	Lect. Date	Status
01	All	Atomic Structure	Fundamental Particles electron Proton & Neutron Definition mass	20-3-23	Completed
02	A/2	-do-	Rutherford's Atomic model Postulates and failure	21-3-23	Completed
03	A/3	-do-	Atomic mass and mass Number refinement, example and Properties of isotopes isobars and isomers.	22-03-23	Completed
04	A/4	-do-	Bohr's Atomic model Postulates only.	24-03-23	Completed
05	A/5	-do-	Bohr-Bury scheme, Aufbau's Principle	22-03-23	Completed
06	A/6	-do-	Hund's rule Electronic configuration upto atomic No 30	28-03-23	Completed
07	A/7	Chemical Bonding	Definition, types (covalent, ionic, coordinate) and co-ordinate	29-03-23	Completed
08	A/8	-do-	Bond with example Formation of $\text{NaCl}$ , $\text{MgCl}_2$ , $\text{H}_2$ , $\text{Cl}_2$ , $\text{N}_2$ , $\text{O}_2$ , $\text{CH}_4$ , $\text{NH}_3$ , $\text{NH}_4^+$ , $\text{SO}_2$	31-03-23	Completed
09	A/9	-do-	Formation of $\text{NH}_4^+$ & $\text{SO}_2$	03-04-23	Completed
10	A/10	<del>-do-</del> Acid base Theory	Concept of Arrhenius, Lewis, Bronsted and Lewis theory acid and base with example	04-04-23	Completed
11	A/11	-do-	Neutralization of acid and base, Refinement of salt.	05-04-23	Completed

Sl. No.	Lect. No.	Module	Lect. Details.	Lect. Date Status
12	A1122	-do-	Neutralization of acid and base Definition of salt	10-01-23 completed
13	A1123	<del>do</del> solutions	Refination of Atomic weight, molecular weight, Equivalent weight.	11-04-23 completed
14	A114	-do-	uses of expression of the concentration with same problem. pH of salt	12-04-23 completed
15	A115	Electro Chemistry	Definition and types of electrolytes with example	17-04-23 completed
16	A-16	-do-	Electrolysis with example of NaCl, fused and aqueous	18-04-23 completed
17	A/17	-do-	Faraday 1st, 2nd & 3rd law of electrolysis industrial application	19-04-23 completed
18	A-18	Corrosion	Definition of corrosion	21-01-23 completed
19	A-19	-do-	Types of Corrosion - Anomalous Corrosion	24-04-23 completed
20	A-20	-do-	waterline corrosion	25-04-23 completed
21	A/21	-do-	mechanism of rusting of iron only.	26-04-23 completed
22	A-22	-do-	Protection from corrosion by Co Alloying and Cathodic	28-04-23 completed

Sr. No. Lect. No. Module

Lect. Details

Lect. Date

Status

# INORGANIC CHEMISTRY

23	B-1	metallurgy	Definition of mineral ores gangue with example distinguish bel' ones and minerals	01.05.23	Completed
24	B-2	-do-	General method of extraction of metal	02.05.23	Completed
25	B-3	-do-	one Dressing	03.05.23	Completed
26	B-4	-do-	concentration gravity separation magnetic separation, froth flotation.	04.05.23	Completed
27	B-5	-do-	oxidation.	06.05.23	Completed
28	B-6	-do-	Reduction	08.05.23	Completed
29	B-7	-do-	Refining of the metal.	09.05.23	Completed
30	B-8	Alloys	Definition of alloys types of alloys with examples, composition and cause of brass, bronze.	10.05.23	Completed
<u>Organic Chemistry</u>					
31	C-1	Hydrocarbon	Saturated and unsaturated Hydrocarbon	12.05.23	Completed
32	C-2	-do-	Aliphatic & Aromatic Hydrocarbon	15.05.23	Completed
33	C-3	-do-	diff' bet' Aliphatic & Aromatic Hydrocarbon	16-05-23	Completed

BASIC

ELECTRICAL \* ELECTRONICS  
PART 1 / Semester 1 ENERGY

Sl. No	Lecture No	Chapter	Lecture Details	Date	Status
01.	1/1	Fundamen tals	Concept of current flow. Concept of source and load.	20-3-23	Completed
02.	1/2	-do-	State ohm's law and concept of resistance	21-3-23	Completed
03.	1/3	-do-	Relation of $V, I$ & $R$ in Series circuit. Relation of $V, I$ & $R$ in Parallel circuit.	22-3-23	Completed
04.	1/4	-do-	Division of current in Parallel circuit. Effect of Power in Series and Parallel circuit.	24-3-23	Completed
05.	1/5	-do-	Kirchoff's Law. simple Problems on kirchoff's law.	27-3-23	Completed
06.	2/1	A.C. Theory	Generation of alternating emf. Difference between D.C. and A.C.	28-3-23	Completed
07.	2/2	-do-	Define Amplitude, instantaneous value, cycle, time period, frequency Phase angle, Phase difference.	29-3-23	Completed
08.	2/3	-do-	State & Explain RMS value, Average value, Amplitude Factor and Form Factor with simple Problems.	31-3-23	Completed



09.	2/4	-do-	Represent AC values in Phasor diagrams.	03-04-23	Completed
10.	2/5	-do-	AC through Pure resistance Inductance and capacitance.	05-04-23	Completed
11.	2/6	-do-	AC through RL, RC, RLC Series circuits	06-04-23	Completed
12.	2/7	-do-	Simple Problems on RL, RC, & RLC series circuits.	08-04-23	Completed
13.	2/8	-do-	Concept of Power and Power Factor. Impedance triangle and Power triangle.	10-04-23	Completed
14.	3/1	Generation of Electrical Power	Give elementary idea on generation of electricity from thermal.	12-04-23	Completed
15.	3/2	-do-	Hydro and Nuclear	13-04-23	Completed
16.	3/3	-do-	Power station with block diagram.	15-04-23	Completed
17.	4/1	conversion of electrical energy.	Introduction of DC machines. Main parts of DC machines.	17-04-23	Completed
18.	4/2	-do-	Classification of DC generator Classification of DC motor.	19-04-23	Completed

19.	4/3	-do-	uses of different types of DC generators & Motors.	20-04-23	completed
20.	4/4	-do-	Types and uses of single Phase induction motors.	21-04-23	completed
21.	4/5	-do-	Concept of Lumen	26-04-23	Completed
22.	4/6	-do-	Different types of lamps its construction and Principal	27-04-23	completed
23.	4/7	-do-	star rating of home appliances	29-04-23	completed
24.	5/1	wiring and Power Billing	Types of wiring for domestic installations .	01-05-23	completed
25.	5/2	-do-	Layout of house hold electrical wiring.	03-05-23	Completed
26.	5/3	-do-	List out the basic protective devices used in house hold wiring.	04-05-23	Completed
27.	5/4	-do-	Calculate energy consumed in a small electrical installation.	06.05.23	Completed
28.	6/1	Measuring instruments	Introduction to measuring instruments . Torques in instruments.	08.05.23	Completed

29.	6/2	-do-	Different uses of PMMC type of instruments different uses of MI type of Instruments.	10.05.23	Completed
30.	6/3	-do-	Draw the connection diagram of A.C D.C Ammeter, Voltmeter, energy meter and wattmeter.	11.05.23	Completed
31.	1/1	Electronic Devices	Basic concept of Electronics and its application	13.05.23	Completed
32.	1/2	-do-	Basic concept of Electron Emission & its types.	15.05.23	Completed
33.	1/3	-do-	Classification of material according to electrical conductivity with respect to energy band diagram only.	17.05.23	Completed
34.	1/4	-do-	Difference between Intrinsic & Extrinsic Semiconduction.		
35.	1/5	-do-	Difference between vacuum tube and semiconductor.		
36.	1/6	-do-	Principle of working and use of PN junction diode.		
37.	1/7	-do-	Zener diode and Light Emitting Diode.		