Discipline :Mechanical Engg.	Semester : 1st	Name of the Teaching Faculty : Shri Asit Ranjan Prust	
Subject : Computer Application	No.of days/Per weeks Class Alloted Weeks :4	Semester:1st No.of Weeks: ‡5	
Weeks	Class day	Tř	neory
1st(Nov- 2021)	1st	Introductio	n to Computer
	2nd	Evolution of Computer	Generation Of Computer
	3rd		n Of Computer
	4th		
2nd(Nov- 2021)	1st		er With Functional Block Diagram
	2nd		Devices, Memory Classification
	3rd		oftware, Application software
	4th	Function Types of Operating System: Batch	ling System Objectives ons of O.S., Processing, Multiprogramming, Time ring OS
3rd(Nov- 2021)	1st		Windows and UNIX
	2nd		piler, interpreter Computer Virus
	3rd		of computer virus
	4th		revention of Virus
4th(Nov- 2021)	1st		ters in different Domain
	2nd		ecting Media, Date Transmission Mod
	3rd		es, Types of Network
	4th	Networking Devices like Hub, Repea	ter, Switch, Bridge, Router, Gateway &
1st(Dec- 2021)	1st		Mail, WWW, FTP, Chatting
	2nd		onferencing,
	3rd		er & Online Shopping
	4th		net connectivity and ISP
2nd(Dec- 2021)	1st		net connectivity and ISP
	2nd		ile and Folder
	3rd		nods. Sequential, Direct, ISAM
	4th	File Access and Storage meth	nods. Sequential, Direct, ISAM
3rd(Dec- 2021)	1st		, Data storage
	2nd		ng and Retrieval
	3rd	Algorithm, Pseudo code and Flowchart	
4th/Dec 2021)	4th	Algorithm, Pseudo code and Flowchart	
4th(Dec- 2021)	1st	Structured Progra	amming Language
	2nd	Examples of Problem so	olving through Flowchart
	3rd	Examples of Problem so	olving through Flowchart
1st(Jan-2022)	4th	Constants, Variable	s and Data types in C
zarpan-zozzy	1st 2nd	Constants, Variable	s and Data types in C
	3rd	Managing Input and	Output operations.
	4th	Managina Managina i	e conversion & Typecasting
2nd(Jan-2022)	1st	Operators Factorian	Output operations.
	2nd	Decision Control and	e conversion & Typecasting
	3rd	(If, If-else If-else	Looping Statements if, Switch, While)
	4th		hile,
3rd(Jan-2022)	1st		ntinue & Goto
	2nd	Programming Assignment	s using the above features
	3rd	Programming Assignment	s using the above features
444	4th	Programming Assignment	s using the above features
4th(Jan-2022)	1st	Programming Assignment	s using the above features
	2nd	Programming Assignment	Susing the shows fact
	3rd	Punctions and Passing Parameter	rs to the Function (Call by Value)
1et/Eab 2022	4th	Call By Ri	eference)
1st(Feb-2022)	1st	Scope of Variables a	and Storage Classes
	2nd 3rd	Recursion Function an	d Types of Resource
	4th	One Dimensional Array an	d Multidian and the comment of the c
2nd(Feb-2022)	1st	operations and pointers, St	ructure and Union Concept Only
1.22.2020	2nd	Revi	100
	3rd	Sample Pap Sample Pap	er Practice
	4th	Sample Pap	er Practice
3rd(Feb-2022)	1st	Sample Pap	er Practice
	2nd	Sample Pap	er Practice
	3rd 4th	Sample Pap	er Practice
			er Practice

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Discipline : Mechanical	Semester: 1st	Name of the Teachnig Facu	lty :Shri Asit Ranjan Prusty
Subject : Computer No.of days/Per weeks Application Class Alloted Weeks		Semester :1st	No.of Weeks: 45
Weeks	Class day	Practical	
1st(Nov 2021)	1st	Identification of different components of Computer Switch on and Booting	
23(1104 2022)	2nd	Study of device and power supply form factor of Personal Computer System Identification of various Mother Board components Identificat	
	3rd	Identification o	f different ports
	4th		, and their purpose
2nd(Nov-2021)	1st	Case Identification	and Study of ROM
Ziid(itot Zozz)	2nd		pter Cards
	3rd		SATA connectors
No.	· · 4th		rs and Converters
3rd(Nov-2021)	1st	Study of various types of LAB Safety me	
314(1404-2021)	2nd	Analysis of various Power Fluctuation 1	
	3rd		pressor, UPS, Standby power supply)
	4th	Procedures for proper disposal or recyc	
4th(Nov-2021)	1st .		, Cartridges
4(1(100-2021)	2nd		and Aerosol Cans)
	3rd		Hand tools,
4.000	4th		tools,
1st(Dec-2021)	1st		Diagnostic tools),
15((Dec-2021)	2nd		ement Tools
-	3rd		, DIR, DATE, TIME, VERSION
	4th		CD, RD,
2-4/0 2021)	1st		DPYREN,
2nd(Dec-2021)	2nd		CARDS, PATH),
	3rd		OPERATIONS, Utilities and Accessories
	4th		ocessing Package. (MS-Word)
3rd(Dec-2021)	· . 1st		ocessing Package. (MS-Word)
370(Dec-2021)	2nd		ocessing Package. (MS-Word)
	3rd		ocessing Package. (MS-Word)
	4th	Basic operations of Word Pr	ocessing Package. (MS-Word)
4th(Dec-2021)	1st	Basic operations of Word Pr	ocessing Package. (MS-Word)
4111000 2023	2nd	Basic operations of Electronic S	pread Sheet Package. (MS-Excel),
	3rd	Basic operations of Electronic S	pread Sheet Package. (MS-Excel),
	4th	Basic operations of Electronic S	pread Sheet Package. (MS-Excel),
1st(Jan-2022)	1st		pread Sheet Package. (MS-Excel),
1211	2nd		pread Sheet Package. (MS-Excel),
1	3rd		pread Sheet Package. (MS-Excel),
-	4th	Format, Save, Print/View i	ckage (MS- Power point) (Create, Edit, n the above three packages)
2nd(Jan-2022)	1st	Format, Save, Print/View i	ckage (MS- Power point) (Create, Edit, n the above three packages)
-	2nd	Format, Save, Print/View i	ckage (MS- Power point) (Create, Edit, n the above three packages)
	3rd	Format, Save, Print/View i	ckage (MS- Power point) (Create, Edit, n the above three packages)
	4th	Format, Save, Print/View i	ckage (MS- Power point) (Create, Edit, n the above three packages)
3rd(Jan-2022	) 1st	Getting acquainted with Intern	et connection, Browser, website

	2nd	URL, webpage, http, WWW, net browsing
	3rd	URL, webpage, http, WWW, net browsing
	4th	Creating E-Mail Id, sending and receiving E-mail Chatting
4th(Jan-2022)	1st	to the find the greatest number among three many
4(11()411-2022)	2nd	a to the December in City find the average of Il Illuminous of
	3rd	2 White a Decessor in C to find the average of I full details of
	4th	2 Write a program in C to determine whether a number is printed
1st(Feb-2022)	1st	3. Write a program in C to determine whether a number is prime or not
131(1:00 2027)	2nd	A Write a program in C to check whether a given number is pallidrome of not
	3rd	4. Write a program in C to check whether a given number is paintaining of the
	4th	5 Write a program in C to compute the sine series?
2nd(Feb-2022)	1st	Write a program in C to accept row wise and column wise element in a two
	2nd	7. Write a program in C to find the vowels in a given string.
	3rd	8. Write a program in C to find the factorial of a number, by using recursion
	4th	<ol> <li>Write a program in C to find the sum of Fibonacci series, by using function.</li> <li>Write a program in C to accept a number from keyboard and print it in rever</li> </ol>

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Discipline :Civil Engg.	Semester : 1st	Name of the Teaching Faculty: Miss Bidyut Prabha Pradhan	
Subject : Computer Application	No.of days/Per weeks Class Alloted Weeks :4	Semester :1st No.of Weeks : 15	
Weeks	Class day	Theory	
1st(Nov- 2021)	1st	Introduction to Computer	
	2nd	Evolution of Computer, Generation Of Computer	
	3rd	Classification Of Computer	
2-4/8 2024)	4th	Basic Organisation of Computer With Functional Block Diagram	
2nd(Nov- 2021)	1st	Input Devices ,CPU ,Output Devices,Memory Classification	
	2nd	Software concept, System software, Application software	
	3rd	Overview of Operating System Objectives	
3rd(Nov- 2021)	4th 1st	Functions of O.S , Features of DOS, Windows and UNIX	
314[1404-2021]	2nd	Programming Languages Compiler, interpreter Computer Virus	
	3rd	Different Types of computer virus	
	4th	Detection and prevention of Virus	
4th(Nov- 2021)	1st	Application of computers in different Domain	
THE PARTY OF THE P	2nd	Networking concept, Protocol, Connecting Media, Date Transmission Mode	
	3rd	Network Topologies, Types of Network	
	4th	Networking Devices like Hub, Repeater, Switch, Bridge, Router, Gateway & NIC	
1st(Dec- 2021)	1st	Internet Services like E-Mail, WWW, FTP, Chatting	
	2nd	Internet Conferencing,	
	3rd	Electronic Newspaper & Online Shopping	
	4th	Different types of Internet connectivity and ISP	
2nd(Dec- 2021)	1st	Different types of Internet connectivity and ISP	
	2nd	Concept of File and Folder	
	3rd	File Access and Storage methods. Sequential, Direct, ISAM	
	4th	File Access and Storage methods. Sequential, Direct, ISAM	
3rd(Dec- 2021)	1st	Data Capture, Data storage  Data Processing and Retrieval	
	2nd	Algorithm, Pseudo code and Flowchart Generation of Programming Languages	
	3rd 4th	Algorithm, Pseudo code and Flowchart Generation of Programming Languages	
4th(Dec- 2021)	1st	Structured Programming Language	
4(11)000-2021)	2nd	Examples of Problem solving through Flowchart	
	3rd	Examples of Problem solving through Flowchart	
	4th	Constants, Variables and Data types in C	
1st(Jan-2022)	1st	Constants, Variables and Data types in C	
astipuit rozzy	2nd	Managing Input and Output operations.	
	3rd	Operators, Expressions, Type conversion & Typecasting	
	4th	Managing Input and Output operations.	
2nd(Jan-2022)	1st	Operators, Expressions, Type conversion & Typecasting	
	2nd	Decision Control and Looping Statements	
	3rd	(If, If-else, If-else-if, Switch, While)	
	4th	Do while, For, Break, Continue & Goto	
3rd(Jan-2022)	1st		
3rd(Jan-2022)	1st 2nd	Programming Assignments using the above features	
3rd(Jan-2022)	1st 2nd 3rd	Programming Assignments using the above features Programming Assignments using the above features	
	1st 2nd 3rd 4th	Programming Assignments using the above features	
3rd(Jan-2022) 4th(Jan-2022)	1st 2nd 3rd 4th 1st	Programming Assignments using the above features Programming Assignments using the above features Programming Assignments using the above features	
	1st 2nd 3rd 4th 1st 2nd	Programming Assignments using the above features	
	1st 2nd 3rd 4th 1st 2nd 3rd	Programming Assignments using the above features Functions and Passing Parameters to the Function (Call by Value) Call By Reference)	
4th(Jan-2022)	1st 2nd 3rd 4th 1st 2nd 3rd 4th	Programming Assignments using the above features Functions and Passing Parameters to the Function (Call by Value)  Call By Reference) Scope of Variables and Storage Classes	
	1st 2nd 3rd 4th 1st 2nd 3rd 4th 1st	Programming Assignments using the above features Functions and Passing Parameters to the Function (Call by Value)  Call By Reference) Scope of Variables and Storage Classes Recursion Function and Types of Recursion	
4th(Jan-2022)	1st 2nd 3rd 4th 1st 2nd 3rd 4th	Programming Assignments using the above features Functions and Passing Parameters to the Function (Call by Value) Call By Reference) Scope of Variables and Storage Classes Recursion Function and Types of Recursion One Dimensional Array and Multidimensional Array	
4th(Jan-2022)	1st 2nd 3rd 4th 1st 2nd 3rd 4th 1st 2nd	Programming Assignments using the above features Functions and Passing Parameters to the Function (Call by Value) Call By Reference) Scope of Variables and Storage Classes Recursion Function and Types of Recursion One Dimensional Array and Multidimensional Array String Operations and pointers, Structure and Union Concept Only	
4th(Jan-2022) 1st(Feb-2022)	1st 2nd 3rd 4th 1st 2nd 3rd 4th 1st 2nd 3rd	Programming Assignments using the above features Functions and Passing Parameters to the Function (Call by Value) Call By Reference) Scope of Variables and Storage Classes Recursion Function and Types of Recursion One Dimensional Array and Multidimensional Array String Operations and pointers, Structure and Union Concept Only Revision	
4th(Jan-2022)	1st 2nd 3rd 4th 1st	Programming Assignments using the above features Functions and Passing Parameters to the Function (Call by Value) Call By Reference) Scope of Variables and Storage Classes Recursion Function and Types of Recursion One Dimensional Array and Multidimensional Array String Operations and pointers, Structure and Union Concept Only Revision Sample Paper Practice	
4th(Jan-2022) 1st(Feb-2022)	1st 2nd 3rd 4th	Programming Assignments using the above features Functions and Passing Parameters to the Function (Call by Value) Call By Reference) Scope of Variables and Storage Classes Recursion Function and Types of Recursion One Dimensional Array and Multidimensional Array String Operations and pointers, Structure and Union Concept Only Revision Sample Paper Practice Sample Paper Practice	
4th(Jan-2022) 1st(Feb-2022)	1st 2nd 3rd 4th 1st 4th 1st 4th 1st 4th 1st 4th	Programming Assignments using the above features Functions and Passing Parameters to the Function (Call by Value) Call By Reference) Scope of Variables and Storage Classes Recursion Function and Types of Recursion One Dimensional Array and Multidimensional Array String Operations and pointers, Structure and Union Concept Only Revision Sample Paper Practice Sample Paper Practice Sample Paper Practice	
4th(Jan-2022) 1st(Feb-2022)	1st 2nd 3rd 4th 1st 1st 2nd 3rd 4th 1st	Programming Assignments using the above features Functions and Passing Parameters to the Function (Call by Value)  Call By Reference) Scope of Variables and Storage Classes Recursion Function and Types of Recursion One Dimensional Array and Multidimensional Array String Operations and pointers, Structure and Union Concept Only Revision Sample Paper Practice Sample Paper Practice Sample Paper Practice Sample Paper Practice	
4th(Jan-2022)  1st(Feb-2022)  2nd(Feb-2022)	1st 2nd 3rd 4th 1st 4th 1st 4th 1st 4th 1st 4th	Programming Assignments using the above features Functions and Passing Parameters to the Function (Call by Value) Call By Reference) Scope of Variables and Storage Classes Recursion Function and Types of Recursion One Dimensional Array and Multidimensional Array String Operations and pointers, Structure and Union Concept Only Revision Sample Paper Practice Sample Paper Practice Sample Paper Practice	



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		LESSON PLAN	
Discipline : Civil	Semester: 1st	Name of the Teachnig Faculty: Miss Bidyut Prabha Pradhan	
Subject : Computer	No.of days/Per weeks	Semester :1st No.of Weeks : 15	
Application	Class Alloted Weeks :4		
Weeks	Class day	Practical	
1st(Nov 2021)	1st	Identification of different components of Computer Switch on and Booting	
	2nd	Study of device and power supply form factor of Personal Computer	
	2110	System Identification of various Mother Board components Identification	
	3rd	Identification of different ports	
	4th	type of connectors, and their purpose	
2nd(Nov-2021)	1st	Case Identification and Study of ROM	
	2nd	RAM, Adapter Cards	
	3rd	Expansion Slots, SATA connectors	
	· . 4th	Study of Adapters and Converters	
3rd(Nov-2021)	1st	Study of various types of LAB Safety measures (General Safety, Electrical Safety	
	2nd	Analysis of various Power Fluctuation Types (Blackout, Brownout, Noise, Spike	
	3rd	Power Protection Devices (Surge suppressor, UPS, Standby power supply)	
	4th	Procedures for proper disposal or recycling of hazardous computer component	
4th(Nov-2021)	1st	Toner Kits, Cartridges	
411(1104-2022)	2nd	Chemical Solvents and Aerosol Cans)	
	3rd	ESD tools, Hand tools,	
	4th	cable tools,	
1st(Dec-2021)	1st	Cleaning tools, Diagnostic tools),	
15((Dec-2021)	2nd	Disk Management Tools	
	3rd	Basic DOS commands (CLS, DIR, DATE, TIME, VERSION	
	4th	MD, CD, RD,	
		DEL, COPYREN,	
2nd(Dec-2021)	1st	USE OF WILD CARDS, PATH),	
	2nd	Basic Windows OS operations, MOUSE OPERATIONS, Utilities and Accessories,	
	3rd	Basic operations of Word Processing Package. (MS-Word)	
	4th	Basic operations of Word Processing Package. (MS-Word)	
3rd(Dec-2021)	1st	Basic operations of Word Processing Package. (MS-Word)	
	2nd	Basic operations of Word Processing Package. (MS-Word)	
	3rd	Basic operations of Word Processing Package. (MS-Word)	
	4th	Basic operations of Word Processing Package. (MS-Word)	
4th(Dec-2021)	1st	Basic operations of Electronic Spread Sheet Package. (MS-Excel),	
	2nd	Basic operations of Electronic Spread Sheet Package. (MS-Excel),	
	3rd	Basic operations of Electronic Spread Sheet Package. (MS-Excel),	
	4th	Basic operations of Electronic Spread Sheet Package. (MS-Excel),	
1st(Jan-2022)	1st	Basic operations of Electronic Spread Sheet Package. (MS-Excel),	
	2nd	Basic operations of Electronic Spread Sheet Package. (MS-Excel),	
	3rd	Basic operations of Presentation Package (MS- Power point) (Create, Edit,	
	4th	Format, Save, Print/View in the above three packages)	
2-4/1 2022)	1st	Basic operations of Presentation Package (MS- Power point) (Create, Edit, Format, Save, Print/View in the above three packages)	
2nd(Jan-2022)	201	Basic operations of Presentation Package (MS- Power point) (Create, Edit,	
	2nd	Format, Save, Print/View in the above three packages)	
		Basic operations of Presentation Package (MS- Power point) (Create, Edit,	
	3rd	Format, Save, Print/View in the above three packages)	
	Ash	Basic operations of Presentation Package (MS- Power point) (Create, Edit, Format, Save, Print/View in the above three packages)	
	4th	Getting acquainted with Internet connection, Browser, website	
3rd(Jan-2022)	1st	URL, webpage, http, WWW, net browsing	
Ji aliani asaay	2nd	URL, webpage, http, WWW, net browsing	
	3rd	Creating E-Mail Id, sending and receiving E-mail Chatting	
	4th	Creating c-ivial to, sending and receiving c-man chatting	

		Write a Program in C to find the greatest number among three numbers.
4th(Jan-2022)	1st	Write a Program in C to find the greatest numbers by using for loop     Write a Program in C to find the average of n numbers by using for loop
4(11()311-2022)	2nd -	Write a Program in C to find the average of n numbers by using for loop      Write a Program in C to find the average of n numbers by using for loop
	3rd	1- C to determine whether a number is printe or not
	4th	t or determine whether a number is prime or not
1st(Feb-2022)	1st	
Ist(reb-2022)	2nd	4. Write a program in C to check whether a given number is palindrome or not?  4. Write a program in C to check whether a given number is palindrome or not?
	3rd	
	4th	in Citio account row wise and column wise element
2nd(Feb-2022)	1st	
Ziid(i co zozz)	2nd	to take factorial of a number, by using
	3rd	Write a program in C to find the factorial or a find the sum of Fibonacci series, by using function.      Write a program in C to find the sum of Fibonacci series, by using function.
	4th	<ol> <li>Write a program in C to find the sum of Piboliaces school and print it in rever</li> <li>Write a program in C to accept a number from keyboard and print it in rever</li> </ol>

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Bopraduan 5/11/21 Leit(CSE)

Pindello - Fi 1-1	1	Name of the Teaching Faculty: Miss Bidyut Prabha Pradhan/Mr.A
Discipline :Electrical Engg.	Semester : 2nd	Name of the Teaching Faculty : Miss Bloyde Flading Flading Faculty : Miss Bloyde Flading Fladi
Subject : Computer Application	No.of days/Per weeks Class Alloted Weeks :4	Semester :2nd No.of Weeks ::. 13
Weeks	Class day	Theory
3rd(March- 2022)	1st	Introduction to Computer
Stafmarch Edecy	2nd	Evolution of Computer, Generation Of Computer
	3rd	Classification Of Computer
	4th	Basic Organisation of Computer With Functional Block Diagram
4th(March- 2022)	1st	Input Devices .CPU ,Output Devices,Memory Classification
4th(Warth- 2022)	2nd	Software concept, System software, Application software
	3rd	Overview of Operating System Objectives
	4th	Functions of O.S., Types of Operating System: Batch Processing, Multiprogramming, Time Sharing OS
1st(April-2022)	1st	Features of DOS, Windows and UNIX
1st(April 2022)	2nd	Programming Languages Compiler, interpreter Computer Virus
	3rd	Different Types of computer virus
	4th	Detection and prevention of Virus
2nd(April-2022)	1st	Application of computers in different Domain
Lindings	2nd	Networking concept, Protocol, Connecting Media, Date Transmission Mo
	3rd	Network Topologies, Types of Network
		Networking Devices like Hub, Repeater, Switch, Bridge, Router, Gateway
	4th	NIC
3rd(April- 2022)	1st	Internet Services like E-Mail, WWW, FTP, Chatting
Sid/April 2022/	2nd	Internet Conferencing,
	3rd	Electronic Newspaper & Online Shopping
	4th	Different types of Internet connectivity and ISP
4th(April-2022)	1st	Different types of Internet connectivity and ISP
4th/April 2022/	2nd	Concept of File and Folder
	3rd	File Access and Storage methods. Sequential, Direct, ISAM File Access and Storage methods. Sequential, Direct, ISAM
	4th	File Access and Storage methods. Sequential, Director Data Capture, Data storage
1st(May-2022)	1st	Data Processing and Retrieval
	2nd	Algorithm, Pseudo code and Flowchart Generation of Programming
	3rd	Languages  Algorithm, Pseudo code and Flowchart Generation of Programming
	4th	Languages
2nd(May-2022)	1st	Structured Programming Language
Ziid(inay zozz)	2nd	Examples of Problem solving through Flowchart Examples of Problem solving through Flowchart
	3rd	Constants, Variables and Data types in C
	4th	Constants, Variables and Data types in C
3rd(May-2022)	1st	Managing Input and Output operations.
Stuling Estay	2nd	Operators, Expressions, Type conversion & Typecasting
	3rd	Managing Input and Output operations.
	4th	Operators, Expressions, Type conversion & Typecasting
4th(May-2022)	1st	Decision Control and Looping Statements
4th(may 2000)	2nd	(If, If-else, If-else-if, Switch, While)
	3rd	Do while,
	4th	For Break Continue & Goto
1st(June-2022)	1st	Programming Assignments using the above features
	2nd	Programming Assignments using the above leatures
	3rd	Broggamming Assignments using the above reactives
	4th	Breesamming Assignments using the above reactives
2nd(June-2022)	1st	Assignments using the above reactives
	2nd	Functions and Passing Parameters to the Function (Call by Value)
	3rd	Call By Reference)
	4th	Scope of Variables and Storage Classes
3rd(June-2022)	1st	Pagursion Function and Types of Recursion
Jidpane Edel	2nd	and Multidimensional Array
	3rd	One Dimensional Array and Union Concept Only String Operations and pointers, Structure and Union Concept Only
	4th	Offing Obergrand

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Discipline : Electrical	Semester : 2nd No.of days/Per weeks		
Subject : Computer	Class Alloted Weeks :4	Semester: 1std	No.of Weeks: \$3
Application		Pra	ctical
Weeks	Class day	Identification of different components of	Computer Switch on and Booting Proces
3rd (March 2022)	1st		
		Study of device and power supply for	m factor of Personal Computer System
	2nd	Identification of various Mother	Board components Identification
	3rd		of different ports
	4th		s, and their purpose
4th(March-2022)	1st		n and Study of ROM
-tinjinaren zozzy	2nd		apter Cards
	3rd	Expansion Slots, SATA connectors	
	4th	Study of Adapte	ers and Converters
1-1/0	1st		easures (General Safety, Electrical Safety, Fire
1st (April-2022)			Types (Blackout, Brownout, Noise, Spike,
	2nd	Powe	r surge),
	3rd	Power Protection Devices (Surge su	ppressor, UPS, Standby power supply)
	4th	Procedures for proper disposal or recy	cling of hazardous computer components
	1st	Toner Kit	s, Cartridges
2nd(April-2022)		Chemical Solvent	ts and Aerosol Cans)
	2nd 3rd	ESD tools	, Hand tools,
		cab	le tools,
	4th	Cleaning tools,	, Diagnostic tools),
3rd(April-2022)	1st		gement Tools
	2nd	Basic DOS commands (CL	S, DIR, DATE, TIME, VERSION
	3rd	MD,	CD, RD,
	4th		OPYREN,
4th(April-2022)	1st	USE OF WILL	CARDS, PATH),
	2nd	Basic Windows OS operations, MOUS	E OPERATIONS, Utilities and Accessories,
	3rd	Basic operations of Word P	rocessing Package. (MS-Word)
	4th	Basic operations of Word P	Processing Package. (MS-Word)
1st(May-2022)	1st	Basic operations of Word P	rocessing Package. (MS-Word)
	2nd	Basic operations of Word P	Processing Package. (MS-Word)
	. 3rd	Basic operations of Word P	Processing Package. (MS-Word)
	4th	Basis operations of Word F	Processing Package. (MS-Word)
2nd(May-2022)	1st	Pasis operations of Electronic	Spread Sheet Package. (MS-Excel),
	2nd	Davis apprations of Electronic	Spread Sheet Package. (M3-Excer),
	3rd	Paris assertions of Electronic	Spread Sheet Package. (NIS-Excer),
	4th	note assertions of Electronic	Spread Sheet Package. (MS-Excer),
3rd(May-2022)	1st	a in acceptions of Electronic	Spread Sheet Package. (Mis-Excer),
	2nd		Spread Sheet Package, [Wis-cacen,
	3rd	- Presentation Packa	ge (MS- Power point) (create, care,
	4th		he above three packages) age (MS- Power point) (Create, Edit, Form. be above three packages)
4th(May-2022)	1st	Presentation Packa	age (MS- Power point) (Create, Edic, Form
	2nd		
	2	a is assertions of Presentation Packa	age (MS- Power point) (Create, Edit, Form
	3rd		
		Presentation Packa	age (MS- Power point) (Create, Edit, Form
	. 4th	Cause Drint/View in I	he above three packages) rnet connection, Browser, website
1st(June-2022)	1st	Getting acquainted with Inte	mer connection, and and

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April De Madhan 14/3/23 E

	2nd	URL, webpage, http, WWW, net browsing
	3rd	URL, webpage, http, WWW, net browsing
	4th	Creating E-Mail Id, sending and receiving E-mail Chatting
2nd(June-2022)	1st	Write a Program in C to find the greatest number among three numbers.
	2nd	2. Write a Program in C to find the average of n numbers by using for loop
	3rd	3. Write a program in C to determine whether a number is prime or not?
	4th	4. Write a program in C to check whether a given number is palindrome or not
3rd(June-2022)	1st	5. Write a program in C to compute the sine series?
	2nd	6. Write a program in C to accept row wise and column wise element in a two
	3rd	<ol><li>Write a program in C to find the vowels in a given string.</li></ol>
	4th	8. Write a program in C to find the factorial of a number, by using recursion
2nd(Feb-2022)	1st	9. Write a program in C to find the sum of Fibonacci series, by using function.
	2nd	9. Write a program in C to find the sum of Fibonacci series, by using function.
	3rd	10.Write a program in C to accept a number from keyboard and print it in revers order of entry?
	4th	10.Write a program in C to accept a number from keyboard and print it in revers order of entry,?

Discipline: Civil & Mechanical	Semester: 1st	Name of the teaching faculty: Shri Chinmmaya Ku. Panda
Subject: Engg, Physics(Th.2a)	No. of days/week class allotted: 04	Semester From date: 25/10/2021 To date:31/01/2022 No. of weeks:14
Week	Class Day	Theory Topics
	Įsi	Introduction to: Engg. Physics (Th.2a) and its syllabus, Question paper
1st	2 <sup>nd</sup>	
	3rd	Unit-1: UNIT & DIMENSIONS  Physical quantities, Units, types of units and system of units
101	4 <sup>th</sup>	Unit-1: UNIT & DIMENSIONS  Dimension and dimensional formulae of physical quantities
	] st	Unit-1: UNIT & DIMENSIONS Principle of homogeneity and application of dimensional analysis: Checking the correctness of physical relations and
2 <sup>nd</sup>	2 <sup>nd</sup>	Unit-2:SCALARS AND VECTORS Concept of scalar and vector quantities with definition,types of vectors, Rules of vector addition: Statements of Triangle law of vectoraddition
	3rd	Unit-2: SCALARS AND VECTORS Parallelogram law of vector addition and simplenumericals. Concept on Resolution of vectors with simple numerical on Horizontal and vertical components
	4 <sup>th</sup>	Unit-2: SCALARS AND VECTORS  Vector multiplication: Dot product and Cross Product with simple numericals on dot and cross products
	1 <sup>st</sup> & 2 <sup>nd</sup>	Unit-3: KINEMATICS Concept of Rest and Motion with examples, Fundamental ideas on distance, displacement, speed, velocity, acceleration and force, equations of motion under gravity both for upward and downward motion
3rd	3 <sup>rd</sup>	Unit-3: KINEMATICS Circular motion: Conceptual idea on circular motion and terms related to circular motion such as angular displacement, angular velocity and angular acceleration.
	4 <sup>th</sup>	Unit-3: Kinematics Derivations of Relation between- (i) Linear & angular velocity, (ii) Linear & Angular acceleration
4 <sup>th</sup>	1 <sup>st</sup> & 2 <sup>nd</sup>	Unit-3: KINEMATICS Projectile motion: Definition and examples, Expression for equation of Trajectory, Time of Flight, Maximum Height and Horizontal Range for a projectile fired at an angel, condition for maximum horizontal range with simple numericals
	3rd	Unit-4: WORK AND FRICTION Definition of work, its formula and SI unit with simple numericals
	4th	Unit-4: WORK AND FRICTION  Concept of friction with definition and simple examples,  Types of friction

	1st	Unit-4: WORK AND FRICTION Definition with concept on limiting friction, and laws of limiting friction (statement only)
		Unit-4: WORK AND FRICTION
	2 <sup>nd</sup>	Theory on Coefficient of Friction and simple numericals
5 <sup>th</sup>	3rd	TILL 4: WORK AND FRICTION
	3	Methods to reduce friction with practical examples
		TIGHTS: GRAVITATION
	4 <sup>th</sup>	Introduction, a detail explanation on Newton's Laws of
		Gravitation (1 <sup>st</sup> and 2 <sup>st</sup> law)
		Unit-5: GRAVITATION A detail explanation on Newton's Laws of Gravitation (3rd
	1 st	law) and Definition of Universal Gravitational Constant (G)
		with its unit and dimensions
1.5	2 <sup>nd</sup>	Unit-5: GRAVITATION
6 <sup>th</sup>	&	Definition and concept of acceleration due to gravity (g),
0	3rd	Relation between 'g' and 'G' and definition of mass and
		weight
	4 <sup>th</sup>	Unit 5: GRAVITATION
	&	Explanation (No derivation) on variation of 'g' with altitude
	1 <sup>st</sup>	and depth, statements on Kepler's Laws of Planetary motion
	2 <sup>nd</sup>	Unit-6: OSCILLATIONS AND WAVES
	. &	Definition and examples on Simple Harmonic Motion
	3rd	(SHM), expressions for displacement, velocity and
7 <sup>th</sup>		acceleration of a body or particle in SHM
	4 <sup>th</sup>	Unit-6: OSCILLATIONS AND WAVES
	&	Wave Motion (Definition & Concept), Transverse and
	1 st	Longitudinal wave motion (Definition, examples and
	and	Comparison)
	2 <sup>nd</sup>	Unit-6: OSCILLATIONS AND WAVES Wave parameters and Establish a relation between velocity,
8 <sup>th</sup>	& 3rd	
8	3	frequency and Time period, Ultrasonics-Definition, properties & Applications
		Unit-7: HEAT AND THERMODYNAMICS
	4 <sup>th</sup>	Heat & temperature-Definition and difference, Units of Hea
	,	(FPS, CGS, MKS & SI)
	1 st	Unit-7: HEAT AND THERMODYNAMICS
	&	Fundamental ides on Specific heat, Change of State and
9th	2nd	Latent Heat with simple numericals
9	3rd, 4th	Unit-7: HEAT AND THERMODYNAMICS
	&	Concept on Thermal expansion and Coefficient of linear (a
	1 st	superficial (β) and cubical (γ) expansions of Solids, Relation
	and	between α, β and γ
	2 <sup>nd</sup>	Unit-7: HEAT AND THERMODYNAMICS
10 <sup>th</sup>	&	Definition and Relation between Work and Heat, Joule
	3rd	Mechanical Equivalent of Heat, Statement and explanation
		on 1st law of thermodynamics
	4 <sup>th</sup>	Unit-8: OPTICS
	&1	Concept of Reflection and laws of Reflection, Concept of
	& <sub>1</sub>	Concept of Reflection and laws of Reflection, Concept of Refraction and laws of Refraction and Refractive index

	2 <sup>nd</sup>	Unit-8: OPTICS  Concept and Explanation of Total Internal Reflection and Critical angle
11 <sub>t</sub>	3rd	Unit-8: OPTICS Definition, Properties and Applications on Fiber Optics
	4 <sup>th</sup>	Unit-9: ELECTROSTATICS AND MAGNETOSTATICS Concept of Electric field and Electric field intensity Statement and Explanation of Coulomb's law and definition
	1 st	of Unit charge, Absolute & Relative Permittivity(Definition, Relation & Unit),
12 <sup>th</sup>	2nd & 3rd	Unit-9: ELECTROSTATICS AND MAGNETOSTATICS Electric potential & Electric potential difference(Definition formula & SI units), Concept of capacitor and capacitance Series and parallel combination of capacitors: Formula for equivalent capacitance and simple numericals
	4 <sup>th</sup>	Unit-9: ELECTROSTATICS AND MAGNETOSTATICS Fundamental idea on magnet, Coulomb's law in magnetism and definition of Unit pole
13 <sup>th</sup>	1**	Unit-9 ELECTROSTATICS AND MAGNETOSTATICS Definition of magnetic field and Magnetic field Intensity (II with its formula and SI unit, Magnetic lines of force- Definition and Properties, ELECTROSTATICS AND MAGNETOSTATICS Magnetic flux(\$\phi\$) and Magnetic flux density (B)
	2 <sup>nd</sup>	Unit-10: CURRENT ELECTRICITY Introduction to Electric Current, Ohm's law and its applications, Series and parallel combination of resistors: Formula for equivalent resistance and simple numericals
	3 <sup>rd</sup> & 4 <sup>th</sup>	Unit-10: CURRENT ELECTRICITY Kirchhoff's laws: Statements & Explanation with diagram, Application of Kirchhoff's laws to Wheatstone bridge- Derivation of balance condition of Wheatstone bridge
14 <sup>th</sup>	1 <sup>st</sup> & 2 <sup>nd</sup>	Unit-11: ELECTROMAGNETISM AND FLECTROMAGNETIC INDUCTION Introduction, Force acting on a current carrying conductor placed in a uniform magnetic field, Fleming's left hand rule, Statement on Faraday's Laws of Electromagnetic Induction & Lenz's law, Fleming's Right Hand Rule, Comparison between Fleming's RHR & LHR
	3rd & 4th	Unit-12: MODERN PHYSICS Introduction to LASER and laser beam, its principle: Population inversion & Optical Pumping, Concept on Wireless Transmission- Ground waves, Sky waves & Space Waves

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Discipline: Civil/Electrical Mechanical	Semester: 1st	Name of the Teaching Faculty: MONALISA SAHOO PTGF
Subject: Engg. Mathematics	No. of days/week class allotted: 6	Semester from date: 25/10/2021 To date:31/01/2022 No. of weeks:14
Th 3) Week	Class Day	Theory Topics
st	1 <sup>st</sup>	Chapter 2: LIMITS and CONTINUITY:  a) Definition of afunction (Based on set theory) b) Types offunctions i) Constantfunction, ii) Identityfunction iii) Absolute valuefunction iv) The Greatest Integer Function
	2 <sup>nd</sup>	v) Trigonometric function withexample vi) Exponentialfunction vii) Logarithmic function Withexamples
	3 <sup>rd</sup>	c) Introduction of limit: definition ,example d) Existence of limit withexample
	4 <sup>th</sup>	e) Methods of evaluation of limit
	5 <sup>th</sup>	Methods of evaluation of limit continues with some examples
	6 <sup>th</sup> (Tutorial class)	Problems on existence of limit and evaluation of limit
2 <sup>nd</sup>	1st	i) $\lim_{x \to a} \frac{x^n - a^n}{x - a} = na^{n-1}$ ii) $\lim_{x \to 0} \frac{a^x - 1}{x} = \ln a = \log_e a$ Some problems using these formulae
	2 <sup>nd</sup>	iii) $\lim_{x\to 0} \frac{e^x-1}{x} = 1$ iv) $\lim_{x\to 0} (1+x)^{\frac{x}{x}} = e$ Some problems using these formulae  v) $\lim_{x\to 0} (1+x)^{\frac{x}{x}} = e$
	4 <sup>th</sup>	vi) $\lim_{x\to 0} \frac{x}{\log(1+x)}$ vii) $\lim_{x\to 0} \frac{x}{x}$ Some problems using these formulae  viii) $\lim_{x\to 0} \frac{x}{x}$ viii) $\lim_{x\to 0} \frac{x}{\tan x}$ viii) $\lim_{x\to 0} \frac{x}{\tan x}$ = 1 Some problems using these

		formulae 6 formulae at apoint
	5th	f) Definition of continuity of a function at apoint,
-	,	Existence of continuity with example Problems on limit and continuity
	6 <sup>th</sup> (Tutorial class	
3rd	1st	Chapter 3: DERIVATIVES:  a) Derivative of a function at apoint
3		b) Algebra ofderivative
		c) Derivative of standard functions:
	2 <sup>nd</sup>	$x^n$ , $a^x$ , $\log x$ , $e^x$
		Derivative of standard functions continues:
	3 <sup>rd</sup>	$\sin x$ , $\cos x$ , $\tan x$
		Derivative of standard functions continues:
	4 <sup>th</sup>	cot x, secx, csc x, $\sin^{-1}x$
	5 <sup>th</sup>	Derivative of standard functions continues:
	-	$\cos^{-1}x$ , $\tan^{-1}x$ , $\cot^{-1}x$
	6 <sup>th</sup> (Tutorial class)	Problem solving on trigonometric functions
4 <sup>th</sup>	1 <sup>st</sup>	Derivative of standard functions continues:
-		$sec^{-1}x$ , $csc^{-1}x$ ,
		d) Derivatives of composite function
	2 <sup>nd</sup>	Derivatives of composite function(Chain rule) continues with
	_	examples
1	3 <sup>rd</sup>	Derivatives of composite function(Chain rule) continues with
		examples
	4 <sup>th</sup>	e) Methods of differentiationof
		i) Parametric function withexamples
	5 <sup>th</sup>	Methods of differentiation of
		ii) Implicit function withexamples
	6 <sup>th</sup> (Tutorial class)	Solving problems on derivatives of parametric function and implicit function
		Methods of differentiation of
5 <sup>th</sup>	1 <sup>st</sup>	iii) Logarithmic function withexample
	201	Methods of differentiation of
	2 <sup>nd</sup>	iv) A function wrt another function withexample
	3 <sup>rd</sup>	f) Applications ofderivatives:
	. 3."	i) Successive differentiation (up to second order
		Some problems on successive differentiation
	4 <sup>th</sup>	Solving problems on successive differentiation
	5 <sup>th</sup>	ii) Partial differentiation (function oftwo
	3"	variables up to second order)
	cth (Tutorial class)	Problems on derivative of logarithmic function
	6 <sup>th</sup> (Tutorial class)	and successive differentiation.
	1 <sup>st</sup>	Partial differentiation continues
	2nd	Some more problems on partial differentiation
		Revision of derivative
	3rd	
	4 <sup>th</sup>	Chapter 4: INTEGRATION:

		<ul><li>a) Definition of integration as inverse of differentiation</li><li>b) Integral of standard functions</li></ul>
	5 <sup>th</sup>	c) Methods ofintegration: i) Integration by substitution withexamples
	6 <sup>th</sup> (Tutorial class)	Problems on integration by substitution
7 <sup>th</sup>	1 <sup>st</sup>	ii) Integration by parts withexamples
	2 <sup>nd</sup>	Problems on integration by parts
	3rd	d) Integration of the following forms i) $\int_{x^2+a^2} iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii$
	4 <sup>th</sup>	A TU V
		Integration of the following forms $dx$
		$r = q$ v) $\int \frac{d^2y}{\sqrt{y^2 + y^2}} \cdot vi \int \frac{1}{\sqrt{y^2 + y^2}} vii$
	*	$\int \frac{dx}{x\sqrt{x^2+a^2}} \text{viii)} \sqrt{a^2-x^2} dx \text{ with}$
77	5 <sup>th</sup>	examples
		Integration of the following forms ix) $\sqrt{a^2+x^2dx}$ x) $\sqrt{x^2-a^2dx}$ with problems
	6 <sup>th</sup> (Tutorial class)	Problems on integration by parts
8 <sup>th</sup>	1 <sup>st</sup>	e) Definite integrals and properties
		a a
		i) $\int f(x)dx = \int f(a-x)dx$
		i) $\int_{0}^{\infty} f(x)dx = \int_{0}^{\infty} f(a-x)dx$
		b a
		ii) $\int f(x)dx = -\int f(x)dx$
		и ь
	2 <sup>nd</sup>	With problems
		iii) $\int_{a}^{b} f(x)dx = \int_{a}^{b} f(x)dx + \int_{a}^{c} f(x)dx, a < b < c$
	35	
		$\int_{a}^{f}(x)dx = 0, iff(x) = odd$
		$=2\int f(x)dx, if \qquad f(x)=ever$
	3 <sup>rd</sup>	Solving problem
	4 <sup>th</sup>	Solving problems on properties of definite integration  f) Application ofintegration

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		i) Area enclosed by a curve and X-axisand example
	5 <sup>th</sup>	ii) Area of a circle with centre atorigin
	6 <sup>th</sup> (Tutorial class)	Solving problems on application of integration
gth	1st	Chapter 5: DIFFERENTIAL EQUATION: Definition, ODE, PDE, a) Order and degree of a differential equation
	2 <sup>nd</sup>	Determining Order and degree of a differential equation with examples
	3 <sup>rd</sup>	b) Solution of differential equation Definition i) By method of separation of variable withexamples
	4 <sup>th</sup>	method of separation of variable continues with problem solving
	5 <sup>th</sup>	Some more problems on separation of variables
	6 <sup>th</sup> (Tutorial class)	Problems on determination of degree and order of a differential equation
10 <sup>th</sup>	1 <sup>st</sup>	ii) Linear equation example
	2 <sup>nd</sup>	$\frac{dy}{dx}$ Solvinglinear equation $+Py=Q$ , where P, Qare $\frac{dx}{dx}$ functions of x
	3 <sup>rd</sup>	Problems on linear differential equation
	4 <sup>th</sup> .	Some more Problems on linear differential equation
	5 <sup>th</sup>	Revision of differential equation
	6 <sup>th</sup> (Tutorial class)	Revision of differential equation
1 <sup>th</sup>	1 <sup>st</sup>	Chapter 1: VECTOR ALGEBRA:     a) Introduction: definition of scalar , vector with examples     b) Types of vectors: null vector, parallel vector, collinear vectors withexamples
	2 <sup>nd</sup>	a) Democratation of a sector
	3rd	c) Representation of a vector
	4th	d) Magnitude and direction of vectors with examples
	5 <sup>th</sup>	e) Addition and subtraction of vectors with examples
	6 <sup>th</sup> (Tutorial class)	Properties of vector addition and position vector  Problems on magnitude and f) positionvector
th	1 <sup>st</sup>	g) scalar product of two vectors with examples
	2 <sup>nd</sup> .	h) Geometrical meaning of dot product
	3 <sup>rd</sup>	Problems on dot product
	4 <sup>th</sup>	i) Angle between two vectors withexample
	5 <sup>th</sup>	j) Scalar and vector projection of two vectorswith examples
	6 <sup>th</sup> (Tutorial class)	Problems on Scalar and vector projection of two vectors

13 <sup>th</sup>	1 <sup>st</sup>	k) Vector product and geometrical meaning
	2 <sup>nd</sup>	Problems on vector product
	3rd	
	4 <sup>th</sup>	Revision
	5 <sup>th</sup>	
	6 <sup>th</sup>	
14 <sup>th</sup>	1 <sup>st</sup>	
	2 <sup>nd</sup>	Previous year question discussion
	3rd	
	4 <sup>th</sup>	
	5 <sup>th</sup>	
	6 <sup>th</sup>	

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Discipline:	Semester:	Name of the Teaching Faculty: Swatileena Satapathy
Electrical Engg.	1st	
Subject: ENGG ·	No. of	Semester From date: 25/10/2021 to
CHEMISTRY	days/per week	31/01/2022
CHEMICA	classallotted:	
	04	No. of Weeks: 14
Week	Class Day	Theory
	1 <sup>ST</sup>	Fundamental particles ( electron, proton & neutron), Definition, mass and charge .
1 <sup>ST</sup>	2 <sup>ND</sup>	Rutherford's Atomic model (Experiment, postulates and limitations)
	3 <sup>RD</sup>	Atomic mass and mass number, Definition, examples and properties of Isotopes, isobars and isotones, Bohr's Atomic model
V 154		(Postulates only),
	4 <sup>TH</sup>	Bohr's Atomic model (contd), Bohr-Bury scheme, Aufbau's principle,
aND	IST	Hund's rule, Pauli's Exclusion Principle, Electronic configuration (up toatomic no 30)
2 <sup>ND</sup>	2 <sup>ND</sup>	Chemical Bonding: Definition, Types, Electrovalent bond: NaCl, MgCl <sub>2</sub>
• •	3 <sup>RD</sup>	Covalent Bond wth examples H2,Cl2, O2, N2, H2O, CH4
	4 <sup>TH</sup>	Covalent Bonding in NH <sub>3</sub> ,Coordinate bond NH <sub>4</sub> +, SO <sub>2</sub>
7	1 <sup>ST</sup>	Concept of Arrhenius, Bronsted & Lowry for acidand base with examples ( Postulates and limitations only).
3RD	2 <sup>ND</sup>	Concept of Lewis theory( Postulates and limitations only). Neutralization of acid & base,
	2 <sup>ND</sup>	Types of salts ( Normal, acidic, basic, double, complex and mixedsalts, definitions with 2 examples from each).
	3 <sup>RD</sup>	Definitions of atomic weight, molecular weight, Equivalent Weight, Determination of equivalent weight of Acid
	4 <sup>тн</sup>	Determination of equivalent weight of Acid, Base and Salt, Modes of expression of the concentrations (Molarity with simple problems)
	1 <sup>ST</sup>	Modes of expression of the concentrations (Normality& Molality) with Simple Problems
	2 <sup>ND</sup>	pH of solution ( definition with simple numericals )
4 <sup>TH</sup>	3 <sup>RD</sup>	Problems on pH(contd.), Importance of pH in industry ( sugar, textile, paper industries only)
	4 <sup>тн</sup>	Definition and types (Strong & weak) of Electrolytes with example.
0	1 <sup>ST</sup>	Electrolysis (Principle & process) with example of NaCl (fused
	2 <sup>ND</sup>	and aqueous solution).  Faraday's 1st law of Electrolysis (Statement, mathematical
5 <sup>TH</sup>	3RD	expression, numerical)
	350	Faraday's 1st law of Electrolysis (Statement,mathematical expression)
	4 <sup>TH</sup>	Industrial application of Electrolysis- Electroplating ( Zinc only)

	151	Definition of Corrosion, Types of Corrosion- Atmospheric
		Corrosion
	210	Waterline corrosion. Mechanism of rusting of Iron only.
	No region of	Protection from Corrosion by (i) Alloying and (ii)
6 <sup>TH</sup>	- 115	Galvanization
	3 <sup>ID</sup>	Definition of alloy. Types of alloys ( Ferro, Non Ferro & Amalgam) with example
	4тн	Composition and uses of Brass, Bronze, Alnico, Duralumin
7 <sup>ТН</sup>	1ST	Sources of water, Soft water, Hard water, hardness, types of Hardness (temporary or carbonate andpermanent or non-carbonate)
	2ND	Removal of hardness by lime soda method ( hot lime—Principle, process & advantages )
	3RD	Advantages of Hot lime over cold lime process
	4TH	Organic Ion exchange method ( principle, process)
8 <sup>TH</sup>	1ST	(Regeneration of exhausted resins).
	2ND	Definition of lubricant, Types ( solid, liquid and semisolidwith examples only )
	3RD	Specific uses of lubricants ( Graphite, Oils, Grease), Purpose of lubrication
	4TH	Definition and classification of fuel, Definition of calorific value of fuel, Choice of good fuel
9 <sup>тн</sup>	IST	Liquid: Diesel, Petrol, and Kerosene Composition anduses
	2ND	Gaseous: Producer gas and Water gas (Composition anduses).
	3RD	Elementary idea about LPG, CNG and coal gas (Composition and uses only).
	4TH	Definition of Monomer, Polymer, Homo-polymer, Co- polymer and Degree of polymerization
10 <sup>TH</sup>	1ST	Difference between Thermosetting and Thermoplastic
	2ND	Composition and uses of Polythene, & Poly-Vinyl Chloride and Bakelite
	3RD	Definition of Elastomer ( Rubber). Natural Rubber (it'sdraw backs)
	4TH	Vulcanisation of Rubber. Advantages of Vulcanisedrubber over raw rubber
11 <sup>TH</sup>	1ST	Pesticides: Insecticides, herbicides, fungicides Examples and uses.
	2ND	Bio Fertilizers: Definition, examples and uses
	3RD	Definition of Mineral, ores , gangue with example. Distinction
	4TH	between Ores And Minerals,  Metallurgy(definition) & steps in it .i.Ore Dressing ii) Concentration ( Gravityseparation)

pes of Corrosion- Atmospheric

	187	Definition of Corrosion, Types of Corrosion- Atmospheric Corrosion
	2 <sup>ND</sup>	
	- · · ·	Waterline corrosion. Mechanism of rusting of Iron only.
6 <sup>TH</sup>		Protection from Corrosion by (i) Alloying and (ii)
U	3RD	Galvanization
	3.0	Definition of alloy. Types of alloys ( Ferro, Non Ferro &
+11	4тн	Amaigam) with example
	4	Composition and uses of Brass, Bronze, Alnico, Duralumin
7 <sup>тн</sup>	1ST	Sources of water, Soft water, Hard water, hardness, types of Hardness (temporary or carbonate andpermanent or non-carbo
	2ND	Removal of hardness by lime soda method ( hot lime—Princip process & advantages )
	3RD	Advantages of Hot lime over cold lime process
	4TH	Organic Ion exchange method ( principle, process)
8тн	1ST	(Regeneration of exhausted resins).
	2ND	Definition of lubricant, Types ( solid, liquid and semisolidwith examples only )
	3RD	Specific uses of lubricants ( Graphite, Oils, Grease), Purpose of
		lubrication (unpose of
	4TH	Definition and classification of fuel, Definition of calorific value of fuel, Choice of good fuel
9 <sup>тн</sup>	1ST	Liquid: Diesel, Petrol, and Kerosene Composition anduses
	2ND	Gaseous: Producer gas and Water gas (Composition anduses).
***	3RD	
		Elementary idea about LPG, CNG and coal gas (Composition and uses only).
, a	, 4TH	Definition of Monomer, Polymer, Homo-polymer, Co- polymer and Degree of polymerization
- 10 <sup>TH</sup>	" 1ST	Difference between Thermosetting and
À 14	9	Thermoplastic
*	2ND	Composition and uses of Polythene, & Poly-Vinyl Chloride and Bakelite
	3RD	Definition of Elastomer ( Rubber). Natural Rubber (it'sdraw backs)
	4TH	Vulcanisation of Rubber. Advantages of Vulcanisedrubber over raw rubber
11 <sup>TH</sup>	7.5-	
11	1ST	Pesticides: Insecticides, herbicides, fungicides Examples and uses.
	2ND	Bio Fertilizers: Definition, examples and uses
7	3RD	Definition of Mineral, ores, gangue with example, Distinction
	4TH	between Ores And Minerals,
	41H	Metallurgy(definition) & steps in it
	10	.i.Ore Dressing ii) Concentration ( Gravityseparation)

	181	magnetic separation, Froth floatation & leaching
12TH	2ND	Oxidation (Calcinations, Roasting )
12111	3RD	Reduction (Smelting, Definition & examples of flux, slag)
	4TH	Refining of the metal ( Electro refining, & Distillation only)
	1ST	Hydrocarbons & homologous Series
13111	2ND	Saturated and Unsaturated Hydrocarbons ( Definition with example)
	3RD	Aliphatic and Aromatic Hydrocarbons ( Huckle's ruleonly). Difference between Aliphatic and aromatic hydrocarbons
	4TH	IUPAC system of nomenclature of Alkane (up to 6 carbons) with bond line notation.
	1ST	IUPAC system of nomenclature of Alkene (up to 6 carbons) with bond line notation
	2ND	IUPAC system of nomenclature of Alkyne (up to 6 carbons) with bond line notation
14TH 	3RD	IUPAC system of nomenclature of alkyl halide and alcohol ( up to 6 carbons ) with bond line notation ,Problems on IUPAC Nomenclature
	4TH	Uses of some common aromatic compounds ( Benzene, Toluene, BHC, Phenol, Naphthalene, Anthracene and Benzoic acid) in daily life

Trobado (Tothen Rayon Moharte) Sr. LECT. MATERIO,

Snathura Satpathy (Leet. In cheminy G. P. ANGUL.

Principal Govt. Polytechnic Angul Angul

Discipline: Civil/Electrical /Mechanical	Semester: 1st	Name of the Teaching Faculty: Nayan Kumar Pradhan
Subject: Engg. Mathematics II (Th 3)	No. of days/week class allotted: 6	No. of weeks:14
Week	Class Day	Theory Topics
10		Chapter 2: UMITS and CONTINUITY:  a) Definition of afunction (Based on set theory) b) Types offunctions i) Constantfunction, ii) Identityfunction iii) Absolute valuefunction iv) The Greatest Integer Function
	2 <sup>nd</sup>	v) Trigonometric function withexample vi) Exponentialfunction vii) Logarithmic function Withexamples
	3'8	c) Introduction of limit: definition ,example d) Existence of limit withexample
	4 <sup>th</sup>	e) Methods of evaluation of limit
	5 <sup>th</sup>	Methods of evaluation of limit continues with some examples
	6 <sup>th</sup> (Tutorial class)	Problems on existence of limit and evaluation of limit
Z <sup>red</sup>	1st	i) $\lim_{x \to a} \frac{x^n - a^n}{x - a} = na^{n-1}$ ii) $\lim_{x \to 0} \frac{a^x - 1}{x} = \ln a = \log_e a$ Some problems using these formulae
	2 <sup>nd</sup>	iii) $\lim_{x\to 0} \frac{e^{x}-1}{x} = 1$ iv) $\lim_{x\to 0} (1+x)^{x} = e$ Some problems using these formulae
	310	v) $\lim_{x \to \infty} (1 + \frac{1}{x}) = e$ vi) $\lim_{x \to 0} 1 = 1$ Some problems using these formulae
	4 <sup>th</sup>	vii) $\lim_{x\to 0} \frac{\sin x}{x} = 1$ viii) $\lim_{x\to 0} \frac{x}{x} = 1$ Some problems using these

		formulae
	5 <sup>th</sup>	<ul> <li>f) Definition of continuity of a function at apoint,</li> </ul>
1		Existence of continuity with example
	6 <sup>th</sup> (Tutorial class)	Problems on limit and continuity
3 <sup>rd</sup>	1 <sup>st</sup>	Chapter 3: DERIVATIVES:
		a) Derivative of a function at apoint
	201	b) Algebra ofderivative
	2 <sup>nd</sup>	c) Derivative of standard functions:
		$x^n, a^x, \log x, e^x$
	3 <sup>rd</sup>	Derivative of standard functions continues:
		sin x, cos x, tanx
	4 <sup>th</sup>	Derivative of standard functions continues:
	N 1	$\cot x$ , $\sec x$ , $\csc x$ , $\sin^{-1}x$
	5 <sup>th</sup>	Derivative of standard functions continues:
		$\cos^{-1}x$ , $\tan^{-1}x$ , $\cot^{-1}x$
	6 <sup>th</sup> (Tutorial class)	Problem solving on trigonometric functions
4 <sup>th</sup>	1st	Derivative of standard functions continues:
	- 33	
		$sec^{-1}x, csc^{-1}x$ ,
	and	d) Derivatives of composite function
	2 <sup>nd</sup>	Derivatives of composite function(Chain rule) continues with
	244	examples
	3rd	Derivatives of composite function(Chain rule) continues with
	4 <sup>th</sup>	examples
	4	e) Methods of differentiationof
	5 <sup>th</sup>	i) Parametric function withexamples
	5	Methods of differentiation of
	cth (Table 1 )	ii) Implicit function withexamples
	6 <sup>th</sup> (Tutorial class)	Solving problems on derivatives of parametric function
th	411	and implicit function
	1 <sup>st</sup>	Methods of differentiation of
		iii) Logarithmic function withexample
	2 <sup>nd</sup>	Methods of differentiation of
		iv) A function wrt another function withexample
1.5	3 <sup>rd</sup>	f) Applications ofderivatives:
		<ul> <li>i) Successive differentiation (up to second orde</li> </ul>
1		Some problems on successive differentiation
	4 <sup>th</sup>	Solving problems on successive differentiation
	5 <sup>th</sup>	ii) Partial differentiation (function oftwo
		variables up to second order)
	6 <sup>th</sup> (Tutorial class)	Problems on derivative of logarithmic function
		and successive differentiation.
	1 <sup>st</sup>	Partial differentiation continues
	2 <sup>nd</sup>	Some more problems on partial differentiation
	3rd	Revision of derivative
-	4 <sup>th</sup>	
	4	Chapter 4: INTEGRATION:

		<ul> <li>i) Area enclosed by a curve and X-axisand example</li> </ul>
	5 <sup>th</sup>	ii) Area of a circle with centre atorigin
	6 <sup>th</sup> (Tutorial class)	Solving problems on application of integration
9 <sup>th</sup>	1 <sup>st</sup>	Chapter 5: DIFFERENTIAL EQUATION: Definition, ODE, PDE, a) Order and degree of a differential equation
	2 <sup>nd</sup>	Determining Order and degree of a differential equation with examples
	3 <sup>rd</sup>	b) Solution of differential equation  Definition  i) By method of separation of variable withexamples
	4 <sup>th</sup>	method of separation of variable continues with problem solving
	5 <sup>th</sup>	Some more problems on separation of variables
	6 <sup>th</sup> (Tutorial class)	Problems on determination of degree and order of a differential equation
10 <sup>th</sup>	1 <sup>st</sup> .	ii) Linear equation example
	2 <sup>nd</sup>	$\frac{dy}{dx}$ Solvinglinear equation $+Py=Q$ , where P, Qare $\frac{dx}{dx}$ functions of x
	3 <sup>rd</sup>	Problems on linear differential equation
	4 <sup>th</sup>	Some more Problems on linear differential equation
	5 <sup>th</sup> ·	Revision of differential equation
	6 <sup>th</sup> (Tutorial class)	Revision of differential equation
11 <sup>th</sup>	1 <sup>st</sup>	Chapter 1: VECTOR ALGEBRA:  a) Introduction: definition of scalar, vector with examples  b) Types of vectors: null vector, parallel vector, collinear vectors withexamples
	2 <sup>nd</sup>	c) Representation of a vector
	3rd	d) Magnitude and direction of vectors with examples
	4 <sup>th</sup>	e) Addition and subtraction of vectors with examples
	5 <sup>th</sup>	Properties of vector addition and position vector
	6 <sup>th</sup> (Tutorial class)	Problems on magnitude and f) positionvector
12 <sup>th</sup>	, 1 <sup>st</sup>	g) scalar product of two vectors with examples
	2 <sup>nd</sup>	h) Geometrical meaning of dot product
	3 <sup>rd</sup>	Problems on dot product
	4 <sup>th</sup>	i) Angle between two vectors withexample
	5 <sup>th</sup>	j) Scalar and vector projection of two vectorswith examples
	6 <sup>th</sup> (Tutorial class)	Problems on Scalar and vector projection of two vectors

		Mifferentiation
	1	a) Definition of integration as inverse of differentiation
		b) Integral of standardfunctions
	5 <sup>th</sup>	c) Methods ofintegration:
	3	i) Integration by substitution withexamples
	6 <sup>th</sup> (Tutorial class)	Problems on integration by substitution
7th	1st	ii) Integration by parts withexamples
7 <sup>th</sup>	2 <sup>nd</sup>	Problems on integration by parts
	3 <sup>rd</sup>	d) Integration of the following forms $\frac{dx}{dx}$ $\frac{dx}{dx}$
		$\int_{x^2+a^2} iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii$
		$dx$ Iv) $\int \frac{1}{\sqrt{2} + 2} with examples$
	¥	x + a
	4 <sup>th</sup>	Integration of the followingforms
	90	
		$\int \frac{dx}{x\sqrt{x^2+a^2}} viii) \sqrt{a^2-x^2} dx \text{ with}$
		xx²+a² examples
	5 <sup>th</sup>	Integration of the following forms
		ix) $\sqrt{a^2+x^2dx}$ x) $\sqrt{x^2-a^2dx}$ with problems
	6 <sup>th</sup> (Tutorial class)	Problems on integration by parts
8 <sup>th</sup>	. 1st	e) Definite integrals and properties
		a a
	,	i) $ \int_{b} f(x)dx = \int_{a} f(a-x)dx $ ii) $ \int_{a} f(x)dx = -\int_{b} f(x)dx $
		b a
		ii) $\int f(x)dx = -\int f(x)dx$
		y(x)dx = y(x)dx
		With problems
	2 <sup>nd</sup>	с в с
		iii) $ \int f(x)dx = \int f(x)dx + \int f(x)dx, a < b < c $
		grand grand b
		a .
		$\int_{a}^{b} f(x) dx = 0, if f(x) = odd$
		- <u>-</u> a
23	* 1004	a c
		$=2\int f(x)dx, if \qquad f(x)=even$
		0
	3.	The same of the sa
		With examples
	3rd	Solving problems on properties of definite integration
	4 <sup>th</sup>	f) Application ofintegration

- ath	1 <sup>st</sup>	k) Vector product and geometrical meaning
13 <sup>th</sup>	2 <sup>nd</sup>	Problems on vector product
	3 <sup>rd</sup>	
	4 <sup>th</sup>	Revision
1	5 <sup>th</sup>	
	6 <sup>th</sup>	
	1st	
14 <sup>th</sup>	2 <sup>nd</sup>	At an dissussion
	3 <sup>rd</sup>	Previous year question discussion
	4 <sup>th</sup>	
	5 <sup>th</sup>	
	6 <sup>th</sup>	

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Principal

Govt. Polytechnic

Discipline: Civil & Mechanical Engg.	Semester : 2nd	Name of the Teaching Faculty: Tushar Ranjan Mohanta & Swakleera Satfathy
Subject: ENGG CHEMISTRY	No. of days/per week class	Semester From date : 14/03/2022 to 18/06/2022
	allotted: 04	No. of Weeks: 14
Week	Class Day	Theory
	151	Fundamental particles ( electron, proton & neutron), Definition, mass and charge .
1 <sup>57</sup>	2 <sup>ND</sup>	Rutherford's Atomic model (Experiment, postulates and limitations)
•	3 <sup>RD</sup>	Atomic mass and mass number, Definition, examples and properties of Isotopes, isobars and isotones, Bohr's Atomic model (Postulates only),
	4 <sup>TH</sup>	Bohr's Atomic model (contd), Bohr-Bury scheme, Aufbau's principle,
2 <sup>ND</sup>	157	Hund's rule, Pauli's Exclusion Principle, Electronic configuration (up to atomic no 30)
2	2 <sup>ND</sup>	Chemical Bonding: Definition, Types, Electrovalent bond: NaCl, MgCl <sub>2</sub>
	3 <sup>RD</sup>	Covalent Bond wth examples H <sub>2</sub> ,Cl <sub>2</sub> , O <sub>2</sub> , N <sub>2</sub> , H <sub>2</sub> O, CH <sub>4</sub>
	4 <sup>TH</sup>	Covalent Bonding in NH <sub>3</sub> ,Coordinate bond NH <sub>4</sub> , SO <sub>2</sub>
a	157	Concept of Arrhenius, Bronsted & Lowry for acidand base with example: ( Postulates and limitations only).
3 <sup>RD</sup>	2 <sup>ND</sup>	Concept of Lewis theory( Postulates and limitations only). Neutralization of acid & base,
	2 <sup>ND</sup>	Types of salts ( Normal, acidic, basic, double, complex and mixedsalts, definitions with 2 examples from each).
	3 <sup>RD</sup>	Definitions of atomic weight, molecular weight, Equivalent Weight, Determination of equivalent weight of Acid
	4 <sup>TH</sup>	Determination of equivalent weight of Acid, Base and Salt, Modes of expression of the concentrations ( Molarity with simple problems)
	151	Modes of expression of the concentrations (Normality& Moiality) with Simple Problems
	2 <sup>ND</sup>	pH of solution ( definition with simple numericals )
4 <sup>TH</sup>	3 <sup>RD</sup>	Problems on pH(contd.), Importance of pH in industry ( sugar, textile, paper industries only)
	4 <sup>TH</sup>	Definition and types (Strong &
N N N	1 <sup>5</sup>	weak) of Electrolytes with example.
	1 5	Electrolysis (Principle & process) with example of NaCl (fused and aqueous solution).
	2 <sup>ND</sup>	Faraday's 1st law of Electrolysis (Statement, mathematical
5 <sup>TH</sup>	200	expression, numerical)
,	3 <sup>RD</sup>	Faraday's 1st law of Electrolysis (Statement,mathematical expression)
	4 <sup>TH</sup>	Industrial application of Electrolysis- Electroplating ( Zinc only)

٠.,	1 <sup>ST</sup>	Definition of Corrosion, Types of Corrosion- Atmospheric Corrosion
	2 <sup>ND</sup>	Waterline corrosion. Mechanism of rusting of Iron only.Protection from Corrosion by (i) Alloying and (ii) Galvanization
6 <sup>TH</sup>	3 <sup>RD</sup>	Definition of alloy. Types of alloys ( Ferro, Non Ferro & Amalgam) with example
	4 <sup>TH</sup>	Composition and uses of Brass, Bronze, Alnico, Duralumin
7 <sup>†H</sup>	1ST	Sources of water, Soft water, Hard water, hardness, types of Hardness (temporary or carbonate andpermanent or non-carbonate)
167.78	2ND	Removal of hardness by lime soda method ( hot lime—Principle, proces & advantages )
	3RD	Advantages of Hot lime over cold lime process
	4TH	Organic Ion exchange method ( principle, process)
8 <sup>тн</sup>	1ST	(Regeneration of exhausted resins).
	2ND	Definition of lubricant, Types ( solid, liquid and semisolidwith examples only )
	3RD	Specific uses of lubricants ( Graphite, Oils, Grease), Purpose of lubrication
	4TH	Definition and classification of fuel, Definition of calorific value of fuel, Choice of good fuel
9 <sup>TH</sup>	1ST	Liquid: Diesel, Petrol, and Kerosene Composition and uses
	2ND	Gaseous: Producer gas and Water gas (Composition anduses).
A	3RD	Elementary idea about LPG, CNG and coal gas(Composition and uses only).
	4TH	Definition of Monomer, Polymer, Homo-polymer, Co-polymer and Degree of polymerization
10 <sup>TH</sup>	1ST	Difference between Thermosetting and Thermoplastic
*	2ND	Composition and uses of Polythene, & Poly-VinylChloride and Bakelite
	3RD	Definition of Elastomer ( Rubber). Natural Rubber (it'sdraw backs)
	4TH	Vulcanisation of Rubber. Advantages of Vulcanised rubber over raw rubber
11 <sup>TH</sup>	1ST	Pesticides: Insecticides, herbicides, fungicides Examplesand uses.
	2ND	Bio Fertilizers: Definition, examples and uses
	3RD	Definition of Mineral, ores , gangue with example. Distinction between Ores And Minerals,
• .	4TH	Metallurgy(definition) & steps in it ,i.Ore Dressing ii) Concentration ( Gravityseparation)
	1 <sup>ST</sup>	magnetic separation, Froth floatation & leaching

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	2ND	Oxidation (Calcinations, Roasting)	
12TH	3RD	Reduction (Smelting, Definition & examples of flux, slag)	_
	4TH	Refining of the metal ( Electro refining, & Distillationonly)	
	1ST	Hydrocarbons & homologous Series	
13TH	2ND	Saturated and Unsaturated Hydrocarbons ( Definitionwith example)	
	3RD	Aliphatic and Aromatic Hydrocarbons ( Huckle's rule only). Difference between Aliphatic and aromatic hydrocarbons	
	4TH	IUPAC system of nomenclature of Alkane (up to 6 carbons) with bond line notation.	
	1ST	IUPAC system of nomenclature of Alkene (up to 6 carbons) with bond line notation	
	2ND	IUPAC system of nomenclature of Alkyne (up to 6carbons) with bond line notation	
14TH	3RD	IUPAC system of nomenclature of alkyl halide and alcohol ( up to 6 carbons ) with bond line notation, Problems on IUPAC Nomenclature	,
	4TH.	Uses of some common aromatic compounds ( Benzene, Toluene, BHC, Phenol, Naphthalene, Anthracene and Benzoic acid) in daily life	

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(Tushan Raijan Mohanta) Co. Lect. (Mata & Se)

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Discipline: Electrical	Semester: 2nd	Name of the teaching faculty: Shri Chinmmaya Ku. Panda
Subject: Engg. Physics(Th.2a)	No. of days/week class allotted: 04	Semester From date: 14/03/2022 To date:18/06/2022 No. of weeks:14
Week	Class Day	Theory Topics
	1 <sup>st</sup>	Introduction to:
1 st	2 <sup>nd</sup>	Engg. Physics (Th.2a) and its syllabus, Question paper pattern and motivation
	3rd	Unit-1: UNIT & DIMENSIONS Physical quantities, Units, types of units and system of units
	4 <sup>th</sup>	Unit-1: UNIT & DIMENSIONS  Dimension and dimensional formulae of physical quantities
	1 <sup>st</sup>	Unit-1: UNIT & DIMENSIONS  Principle of homogeneity and application of dimensional analysis: Checking the correctness of physical relations and Numerical
2 <sup>nd</sup>	2 <sup>nd</sup>	Unit-2:SCALARS AND VECTORS  Concept of scalar and vector quantities with definition, types of vectors, Rules of vector addition: Statements of Triangle
	3rd	law of vectoraddition Unit-2: SCALARS AND VECTORS Parallelogram law of vector addition and simplenumericals. Concept on Resolution of vectors with simple numerical on Horizontal and vertical components
	4 <sup>th</sup>	Unit-2: SCALARS AND VECTORS Vector multiplication: Dot product and Cross Product with simple numericals on dot and cross products
3 <sup>rd</sup> .	1st & 2nd	Unit-3: KINEMATICS  Concept of Rest and Motion with examples, Fundamental ideas on distance, displacement, speed, velocity, acceleration and force, equations of motion under gravity both for upward and downward motion
	3rd	Unit-3: KINEMATICS  Circular motion: Conceptual idea on circular motion and terms related to circular motion such as angular displacement, angular velocity and angular acceleration.
	4 <sup>th</sup>	Unit-3: Kinematics Derivations of Relation between- (i) Linear & angular velocity, (ii) Linear & Angular acceleration
4 <sup>th</sup>	1 <sup>st</sup> & 2 <sup>nd</sup>	Unit-3: KINEMATICS Projectile motion: Definition and examples, Expression for equation of Trajectory, Time of Flight, Maximum Height and Horizontal Range for a projectile fired at an angel condition for maximum horizontal range with simple numericals
	3rd	Unit-4: WORK AND FRICTION  Definition of work, its formula and SI unit with simple numericals
	4 <sup>th</sup>	Unit-4: WORK AND FRICTION  Concept of friction with definition and simple examples,  Types of friction

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	1st	Unit-4: WORK AND FRICTION  Definition with concept on limiting friction, and laws of
		limiting friction (statement only)
	2 <sup>nd</sup>	Unit-4: WORK AND FRICTION
5 <sup>th</sup>		Theory on Coefficient of Friction and simple numericals
	3rd	Unit-4: WORK AND FRICTION
		Methods to reduce friction with practical examples
		Unit-5: GRAVITATION
	4 <sup>th</sup>	Introduction, a detail explanation on Newton's Laws of
		Gravitation (1st and 2nd law)
		Unit-5: GRAVITATION
	1 st	A detail explanation on Newton's Laws of Gravitation (3rd
		law) and Definition of Universal Gravitational Constant (G)
	2.1	with its unit and dimensions
6 <sup>th</sup>	2 <sup>nd</sup>	Unit-5: GRAVITATION
0	&	Definition and concept of acceleration due to gravity (g),
	3rd	Relation between 'g' and 'G' and definition of mass and
	446	weight
	4 <sup>th</sup>	Unit-5: GRAVITATION
	&	Explanation (No derivation) on variation of 'g' with altitude
	1 st	and depth, statements on Kepler's Laws of Planetary motion
	2 <sup>nd</sup>	Unit-6: OSCILLATIONS AND WAVES
	. &	Definition and examples on Simple Harmonic Motion
7th	3rd	(SHM), expressions for displacement, velocity and
/	44	acceleration of a body or particle in SHM
	4 <sup>th</sup>	Unit-6: OSCILLATIONS AND WAVES
	&	Wave Motion (Definition & Concept), Transverse and
	1st	Longitudinal wave motion (Definition, examples and
	0::1	Comparison)
	2 <sup>nd</sup>	Unit-6: OSCILLATIONS AND WAVES
8 <sup>th</sup>	&	Wave parameters and Establish a relation between velocity,
8	3rd	frequency and Time period, Ultrasonics-Definition
		properties & Applications
		Unit-7: HEAT AND THERMODYNAMICS
	4 <sup>th</sup>	Heat & temperature-Definition and difference. Units of Heat
		(FFS, CGS, MKS & SI)
	1 <sup>st</sup>	Unit-7: HEAT AND THERMODYNAMICS
Oth	&	Fundamental ides on Specific heat, Change of State and
9	2 <sup>nd</sup>	Latent Heat with simple numericals
	3rd, 4th	Unit-7: HEAT AND THERMODYNAMICS
4 8	&	Concept on Thermal expansion and Coefficient of linear (a)
	1 st	superficial (β) and cubical (γ) expansions of Solids Relation
582		between a, p and y
ANSO 12	2 <sup>nd</sup>	Unit-7: HEAT AND THERMODYNAMICS
10 <sup>th</sup>	. &	Definition and Relation between Work and Heat Joule's
	3rd	Mechanical Equivalent of Heat, Statement and explanation
		on 1st law of thermodynamics
02.50	4 <sup>th</sup>	Unit-8: OPTICS
	&1	Concept of Reflection and laws of Reflection, Concept of
	st	Refraction and laws of Refraction and Refractive index
	94	(Definition formula and Simula and Refractive index
		(Definition, formula and Simple numericals)

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	2 <sup>nd</sup>	Unit-8: OPTICS Concept and Explanation of Total Internal Reflection and Critical angle
11 <sup>th</sup>	3rd	Unit-8: OPTICS Definition, Properties and Applications on Fiber Optics
	4 <sup>th</sup> &	Unit-9: ELECTROSTATICS AND MAGNETOSTATICS Concept of Electric field and Electric field intensity Statement and Explanation of Coulomb's law and definition
	1 <sup>st</sup>	of Unit charge, Absolute & Relative Permittivity(Definition Relation & Unit),
12 <sup>th</sup>	2 <sup>nd</sup> & 3 <sup>rd</sup>	Unit-9: ELECTROSTATICS AND MAGNETOSTATICS Electric potential & Electric potential difference(Definition formula & SI units), Concept of capacitor and capacitance Series and parallel combination of capacitors: Formula for equivalent capacitance and simple numericals
	4 <sup>th</sup>	Unit-9: ELECTROSTATICS AND MAGNETOSTATICS Fundamental idea on magnet, Coulomb's law in magnetism and definition of Unit pole
	l st	Unit-9: ELECTROSTATICS AND MAGNETOSTATICS Definition of magnetic field and Magnetic field Intensity (H with its formula and SI unit, Magnetic lines of force-
13 <sup>th</sup>		Definition and Properties, ELECTROSTATICS AND MAGNETOSTATICS  Magnetic flux(φ) and Magnetic flux density (Β)
	2 <sup>nd</sup>	Unit-10: CURRENT ELECTRICITY Introduction to Electric Current, Ohm's law and its
37	(4)	applications, Series and parallel combination of resistors: Formula for equivalent resistance and simple numericals
	3rd & 4 <sup>th</sup>	Unit-10: CURRENT ELECTRICITY Kirchhoff's laws: Statements & Explanation with diagram, Application of Kirchhoff's laws to Wheatstone bridge- Derivation of balance condition of Wheatstone bridge
	1 <sup>st</sup> & 2 <sup>nd</sup>	Unit-11: ELECTROMAGNETISM AND ELECTROMAGNETIC INDUCTION Introduction, Force acting on a current carrying conductor
14 <sup>th</sup> ·		placed in a uniform magnetic field, Fleming's left hand rule Statement on Faraday's Laws of Electromagnetic Induction & Lenz's law, Fleming's Right Hand Rule, Comparison between Fleming's RHR & LHR
	3rd & 4 <sup>th</sup>	Unit-12: MODERN PHYSICS Introduction to LASER and laser beam, its principle: Population inversion & Optical Pumping, Concept on Wireless Transmission- Ground waves, Sky waves & Space Waves

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Cor. Lect. Math Ese
H.O.D. Nelk Lee,

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Chinmaya Kumar Panda. Lecturer in Physics Gover Poly rechair, Angal

Discipline: Civil/Electrical /Mechanical	Semester: 2 <sup>nd</sup>	Name of the Teaching Faculty: MONALISA SAHOO
Subject: Engg. Mathematics II (Th 3)	No. of days/week class allotted: 5+1	Semester from date: 14/03/2022 To date:18/06/2022 No. of weeks:14
Week	Class Day	Theory Topics
1st	151	Chapter 2: LIMITS and CONTINUITY:  a) Definition of afunction (Based on set theory) b) Types offunctions i) Constantfunction, ii) Identityfunction iii) Absolute valuefunction iv) The Greatest Integer Function
	2 <sup>nd</sup>	v) Trigonometric function withexample vi) Exponentialfunction vii) Logarithmic function Withexamples
	. 3 <sup>rd</sup>	c) Introduction of limit: definition ,example d) Existence of limit withexample
	4 <sup>th</sup>	e) Methods of evaluation of limit
	5 <sup>th</sup>	Methods of evaluation of limit continues with some examples
	6 <sup>th</sup> (Tutorial class)	Problems on existence of limit and evaluation of limit
2 <sup>nd</sup>	1st	i) $\lim_{x \to a} \frac{x^n - a^n}{x - a} = na^{n-1}$ ii) $\lim_{x \to 0} \frac{a^x - 1}{x} = \ln a = \log_e a$ Some problems using these formulae
	2 <sup>nd</sup>	$\lim_{x\to 0} \lim_{x\to 0} \frac{e^x-1}{x} = 1$
	Silve 1	iv) $\lim_{x\to 0} (1+x)^{\frac{1}{x}} = e$ Some problems using these formulae
	3 <sup>rd</sup>	v) $\lim_{x\to\infty} (1+\frac{1}{x}) = e$ vi) $\lim_{x\to\infty} 1$ $\lim_{x\to\infty} 1$
	4 <sup>th</sup>	Some problems using these formulae
		vii) $\lim_{x\to 0}                                   $

		formulae
	eth	f) Definition of continuity of a function at apoint,
	5 <sup>th</sup>	Existence of continuity with example
	6 <sup>th</sup> (Tutorial class)	Problems on limit and continuity
	1st	Chapter 3: DERIVATIVES:
3rd	1"	a) Derivative of a function at apoint
		b) Algebra ofderivative
	2 <sup>nd</sup>	c) Derivative of standard functions: $x^n$ , $a^x$ , $log x$ , $e^x$
	3rd	Derivative of standard functions continues:  sin x, cos x, tanx
	4 <sup>th</sup>	Derivative of standard functions continues:  cot x, secx, csc x, sin <sup>-1</sup> x
	5 <sup>th</sup>	Derivative of standard functions continues: $\cos^{-1}x, \ \tan^{-1}x, \ \cot^{-1}x$
	6 <sup>th</sup> (Tutorial class)	Problem solving on trigonometric functions
4 <sup>th</sup>	1 <sup>st</sup>	Derivative of standard functions continues: $sec^{-1}x$ , $csc^{-1}x$ ,
		d) Derivatives of composite function
	2 <sup>nd</sup>	Derivatives of composite function(Chain rule) continues with examples
	3rd	Derivatives of composite function(Chain rule) continues with examples
	. 4 <sup>th</sup>	e) Methods of differentiationof     i) Parametric function withexamples
	5 <sup>th</sup>	Methods of differentiation of ii) Implicit function withexamples
·	6 <sup>th</sup> (Tutorial class)	Solving problems on derivatives of parametric function and implicit function
5 <sup>th</sup>	1 <sup>st</sup>	Methods of differentiation of iii) Logarithmic function withexample
	2 <sup>nd</sup>	Methods of differentiation of iv) A function wrt another function withexample
	3rd	f) Applications ofderivatives: i) Successive differentiation (up to second order) Some problems on successive differentiation
1	4 <sup>th</sup>	Solving problems on successive differentiation
	5 <sup>th</sup>	ii) Partial differentiation (function oftwo variables up to second order)
	6 <sup>th</sup> (Tutorial class)	Problems on derivative of logarithmic function and successive differentiation.
6 <sup>th</sup>	1 <sup>st</sup>	Partial differentiation continues
	2 <sup>nd</sup>	Some more problems on partial differentiation
	3 <sup>rd</sup>	Revision of derivative
	4 <sup>th</sup>	Chapter 4: INTEGRATION:

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	44	<ul> <li>a) Definition of integration as inverse of differentiation</li> <li>b) Integral of standard functions</li> </ul>
	5 <sup>th</sup>	c) Methods ofintegration: i) Integration by substitution withexamples
	6 <sup>th</sup> (Tutorial class)	Problems on integration by substitution
7 <sup>th</sup>	1 <sup>st</sup>	ii) Integration by parts withexamples
	2 <sup>nd</sup>	Problems on integration by parts
	3 <sup>rd</sup>	d) Integration of the following forms
	• .	i) $\int_{x^2+a^2} iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii$
	4 <sup>th</sup>	Integration of the followingforms
		$\int_{x-a}^{dx} vi \int_{a-x^2}^{dx} vii \int_{x-a}^{x} vii \int_{x-a}^{x} viii$
		$\int \frac{dx}{x\sqrt{2+a^2}} \text{viii)} \sqrt{a^2-x^2} dx \text{ with}$
	5 <sup>th</sup>	examples
	3	Integration of the following forms  ix) $\sqrt{a^2+x^2dx}$ x) $\sqrt{x^2-a^2dx}$ with problems
	6 <sup>th</sup> (Tutorial class)	Problems on integration by parts
8 <sup>th</sup>	1 <sup>st</sup>	e) Definite integrals and properties
	*	i) $\int_{b}^{a} f(x)dx = \int_{0}^{a} f(a-x)dx$
8.		ii) $\int_{0}^{\infty} f(x)dx = -\int_{0}^{\infty} f(x)dx$
		With problems
	2 <sup>nd</sup>	c b c.
		iii) $ \int_{a} f(x)dx = \int_{a} f(x)dx + \int_{b} f(x)dx, a < b < c $
		$\int_{0}^{a} f(x)dx = 0, if f(x) = odd$
		J ( x / ux = 0 , y ) ( x / = uu
		a
		$=2\int f(x)dx, if \qquad f(x)=ever$
	* (	
-		With examples
	3 <sup>rd</sup>	Solving problems on properties of definite integration
	4 <sup>th</sup>	f) Application ofintegration

		<ol> <li>Area enclosed by a curve and X-axisand</li> </ol>
		, susmala
		ii) Area of a circle with centre atorigin
	5 <sup>th</sup>	Solving problems on application of integration
	6 <sup>th</sup> (Tutorial class)	Chapter 5: DIFFERENTIAL EQUATION:
9 <sup>th</sup>	1 <sup>st</sup>	005 005
		a) Order and degree of a differential equation
	2 <sup>nd</sup>	Determining Order and degree of a differential equation with
		examples
	3 <sup>rd</sup>	b) Solution of Contract
		Definition
		i) By method of separation of variable withexamples
	4 <sup>th</sup>	method of separation of variable continues with problem
		solving
	5 <sup>th</sup>	Some more problems on separation of variables
	6 <sup>th</sup> (Tutorial class)	Problems on determination of degree and order of a differential equation
10 <sup>th</sup>	1 <sup>st</sup>	ii) Linear equation
		example
	2 <sup>nd</sup>	$\frac{dy}{dy}$ Solvinglinear equation $-+Py=Q$ , where P, Q are
		$\frac{1}{dx}$
		functions of x
	3 <sup>rd</sup>	Problems on linear differential equation
	4 <sup>th</sup>	Some more Problems on linear differential equation
	5 <sup>th</sup>	Revision of differential equation
11 <sup>th</sup>	6 <sup>th</sup> (Tutorial class)	Revision of differential equation
11.	1 <sup>st</sup>	Chapter 1: VECTOR ALGEBRA:
		a) Introduction: definition of scalar , vector with
		examples
		<ul> <li>Types of vectors: null vector, parallel vector, collinear vectors withexamples</li> </ul>
		vectors withexamples
	2 <sup>nd</sup>	c) Representation of a vector
	3 <sup>rd</sup>	d) Magnitude and direction of vectors with examples
	4 <sup>th</sup>	e) Addition and subtraction of vectors with examples
	5 <sup>th</sup>	Properties of vector addition and position vector
	6 <sup>th</sup> (Tutorial class)	Problems on magnitude and
4.011		f) positionvector
12 <sup>th</sup>	1 <sup>st</sup>	g) scalar product of two vectors with examples
	2 <sup>nd</sup>	h) Geometrical meaning of dot product
	3rd	Problems on dot product
	4 <sup>th</sup>	Angle between two vectors withexample
	5 <sup>th</sup>	j) Scalar and vector projection of two vectorswith
	cth /=	examples
	6 <sup>th</sup> (Tutorial class)	Problems on Scalar and vector projection of two
		vectors

13 <sup>th</sup>	1 <sup>st</sup>	k) Vector product and geometrical meaning
	2 <sup>nd</sup>	Problems on vector product
	3 <sup>rd</sup>	
	4 <sup>th</sup>	Revision
	5 <sup>th</sup>	
	6 <sup>th</sup>	
	1 <sup>st</sup>	
14 <sup>th</sup>	2 <sup>nd</sup>	
	3 <sup>rd</sup>	Previous year question discussion
	4 <sup>th</sup>	A COST SIGN FOR FORM A COST OF THE COST OST OF THE COST OST OF THE COST OST OF THE COST OST OF THE COST OF THE COST OST OF THE COST OST OF THE COST OST OST OF THE COST OST OST OST OST OST OST OST OST OST
	5 <sup>th</sup>	
	6 <sup>th</sup>	

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Discipline: Civil/Electrical /Mechanical	Semester: 2 <sup>nd</sup>	Name of the Teaching Faculty: Nayan Kuma Proofho  Semester from date: 14/03/2022 To date:18/06/2022  No. of weeks:14		
Subject: Engg. Mathematics II (Th 3)	No. of days/week class allotted: 5+1			
Week	Class Day	Theory Topics		
lat	1st	Chapter 2: LIMITS and CONTINUITY:  a) Definition of afunction (Based on set theory) b) Types offunctions i) Constantfunction, ii) Identityfunction iii) Absolute valuefunction iv) The Greatest Integer Function		
	2 <sup>nd</sup>	v) Trigonometric function withexample vi) Exponentialfunction vii) Logarithmic function Withexamples		
	. 3rd	<ul> <li>c) Introduction of limit: definition ,example</li> <li>d) Existence of limit withexample</li> </ul>		
	4 <sup>th</sup>	e) Methods of evaluation of limit		
	5 <sup>th</sup>	Methods of evaluation of limit continues with some examples		
	6 <sup>th</sup> (Tutorial class)	Problems on existence of limit and evaluation of limit		
2 <sup>nd</sup>	1st	i) $\lim_{x \to a} \frac{x^n - a^n}{x - a} = na^{n-1}$ ii) $\lim_{x \to 0} \frac{a^x - 1}{x} = \ln a = \log_e a$ Some problems using these formulae		
	2 <sup>nd</sup>	$\lim_{x\to 0} \lim_{x\to 0} \frac{e^x-1}{x} = 1$		
	14	$\lim_{x\to 0} (1+x)^{\bar{x}} = e$		
	3rd	Some problems using these formulae  v) $\lim_{x\to\infty} (1+\int_{z\to\infty}^{+} e^{-it}) = e$		
		vi) $\lim_{x\to 0} =1$ $\lim_{x\to 0} =1$ Some problems using these formulae		
	, 4 <sup>th</sup>	vii) $\lim_{x \to 0} \frac{\sin x}{x} = 1$		
		viii) $\lim_{x\to 0} = 1$ Some problems using these		

		formulae
	5 <sup>th</sup>	f) Definition of continuity of a function at apoint,
		Existence of continuity with example
	6 <sup>th</sup> (Tutorial class)	Problems on limit and continuity
3rd	18	Chapter 3: DERIVATIVES:
	3	a) Derivative of a function at apoint
		b) Algebra ofderivative
	2114	c) Derivative of standard functions: $x^n$ , $a^x$ , $\log x$ , $e^x$
	3 <sup>rd</sup>	Derivative of standard functions continues: sin x, cos x, tanx
	4th	Derivative of standard functions continues: $cot x$ , $secx$ , $csc x$ , $sin^{-1}x$
	5 <sup>th</sup>	Derivative of standard functions continues: $cos^{-1}x$ , $tan^{-1}x$ , $cot^{-1}x$
	6 <sup>th</sup> (Tutorial class)	Problem solving on trigonometric functions
4 <sup>th</sup>	1 <sup>st</sup>	Derivative of standard functions continues:
		$sec^{-1}x$ , $csc^{-1}x$ ,
1	- ond	d) Derivatives of composite function
	2nd	Derivatives of composite function(Chain rule) continues with examples
	3 <sub>u</sub>	Derivatives of composite function(Chain rule) continues with examples
	4 <sup>th</sup>	e) Methods of differentiationof     i) Parametric function withexamples
	5 <sup>th</sup>	Methods of differentiation of ii) Implicit function withexamples
	6 <sup>th</sup> (Tutorial class)	Solving problems on derivatives of parametric function and implicit function
5 <sup>th</sup>	1 <sup>st</sup>	Methods of differentiation of iii) Logarithmic function withexample
	2 <sup>nd</sup>	Methods of differentiation of iv) A function wrt another function withexample
	3rd	f) Applications ofderivatives: i) Successive differentiation (up to second order) Some problems on successive differentiation
1	4 <sup>th</sup>	Solving problems on successive differentiation
	5 <sup>th</sup>	ii) Partial differentiation (function oftwo variables up to second order)
	6 <sup>th</sup> (Tutorial class)	Problems on derivative of logarithmic function and successive differentiation.
6 <sup>th</sup>	1 <sup>st</sup>	Partial differentiation continues
	2 <sup>nd</sup>	Some more problems on partial differentiation
	3rd	Revision of derivative
1	4 <sup>th</sup>	Chapter 4: INTEGRATION:

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		A Solution of integration as inverse addifferentiation
		<ul><li>a) Definition of integration as inverse of differentiation</li><li>b) Integral of standard functions</li></ul>
		b) Integral of standard districtions
	5 <sup>th</sup>	a) Mathods of integration:
	,	c) Methods ofintegration: i) Integration by substitution withexamples
T.	6 <sup>th</sup> (Tutorial class)	Problems on integration by substitution
rth	1 <sup>st</sup>	
	2 <sup>nd</sup>	
	3rd	Problems on integration by parts
	3.0	d) Integration of the following forms $dx$ $dx$ $dx$
		i) $\int_{x^2+a^2} iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii$
	* 4	
		dx
		$ v\rangle \int \frac{1}{\sqrt{2}} \frac{1}{2} with examples$
- !		x + a $v$
	4 <sup>th</sup>	Integration of the followingforms
		$dx$ $\int dx$
		$\begin{vmatrix} dx \\ x-a \end{vmatrix} v) \int \frac{dx}{a\sqrt{-x^2-2}} vii \int \frac{1}{\sqrt{2-2}} vii $
		$\int \frac{dx}{x\sqrt{x^2+a^2}} \text{viii)} \sqrt{a^2-x^2} dx \text{ with}$
, .		$\int \frac{dx}{\sqrt{a^2-x^2}dx}$ with
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	5 <sup>th</sup>	examples
	3	Integration of the following forms
		ix) $\sqrt{a^2+x^2}dx$ x) $\sqrt{x^2-a^2}dx$ with problems
	6 <sup>th</sup> (Tutorial class)	Problems on integration by parts
th	1 <sup>st</sup>	e) Definite integrals and properties
		a- a
		i) $ \int f(x)dx = \int f(a-x)dx $
1.0		i) $\int_{0}^{\infty} f(x)dx = \int_{0}^{\infty} f(a-x)dx$
	1.0	b a
		ii) $\int f(x)dx = -\int f(x)dx$
	and the second	b b
		With problems
	2 <sup>nd</sup>	с ь с.
		iii) $ \int f(x)dx = \int f(x)dx + \int f(x)dx, a < b < c $
		y(x)ax - y(x)ax + y(x)ax, a < b < c
	200	
		a a
		$\int_{-a}^{a} f(x)dx = 0, iff(x) = odd$
		$\int_{-a}^{b} (x)dx = 0, \text{ if } f(x) = 0da$
		a
		$=2\int f(x)dx, if \qquad f(x)=even$
(*)		$-2y(x)ax,y \qquad f(x)=ever$
- 1		
	1.00	
-	and	With examples
	3rd	Solving problems on properties of definite integration
	4 <sup>th</sup>	f) Application ofintegration

		<ul> <li>i) Area enclosed by a curve and X-axisand</li> </ul>
4.7		evample
		f toda with centre atorigin
	5 <sup>th</sup>	ii) Area of a circle with centre design.  Solving problems on application of integration
	6 <sup>th</sup> (Tutorial class)	Chapter 5: DIFFERENTIAL EQUATION:
9 <sup>th</sup>	1 <sup>st</sup>	Definition, ODE, PDE,
	2 <sup>nd</sup>	Determining Order and degree of a differential equation with examples
	3 <sup>rd</sup>	b) Solution of differential equation  Definition  i) By method of separation of variable withexamples
	4 <sup>th</sup>	method of separation of variable continues with problem solving
	5 <sup>th</sup>	Some more problems on separation of variables
	6 <sup>th</sup> (Tutorial class)	Problems on determination of degree and order of a differential equation
10 <sup>th</sup>	1st	ii) Linear equation example
	2 <sup>nd</sup>	dy Solvinglinear equation $-+Py=Q$ , where P, Qare $dx$ functions of x
	3 <sup>rd</sup>	Problems on linear differential equation
	4 <sup>th</sup>	Some more Problems on linear differential equation
	5 <sup>th</sup>	Revision of differential equation
	6 <sup>th</sup> (Tutorial class)	Revision of differential equation
11 <sup>th</sup>	1 <sup>st</sup>	Chapter 1: VECTOR ALGEBRA:
11-		a) Introduction: definition of scalar , vector with examples     b) Types of vectors: null vector, parallel vector, collinear vectors withexamples
	2 <sup>nd</sup>	c) Representation of a vector
	3rd	d) Magnitude and direction of vectors with examples
	4 <sup>th</sup>	e) Addition and subtraction of vectors with examples
	5 <sup>th</sup>	Properties of vector addition and position vector
	6 <sup>th</sup> (Tutorial class)	Problems on magnitude and  f) positionvector
12 <sup>th</sup>	1 <sup>st</sup>	g) scalar product of two vectors with examples
	2 <sup>nd</sup>	h) Geometrical meaning of dot product
	3rd	Problems on dot product
	4 <sup>th</sup>	i) Angle between two vectors withexample
	5 <sup>th</sup>	j) Scalar and vector projection of two vectorswith examples
	6 <sup>th</sup> (Tutorial class)	Problems on Scalar and vector projection of two vectors

13 <sup>th</sup>	1 <sup>st</sup>	k) Vector product and geometrical meaning
	2 <sup>nd</sup>	Problems on vector product
	3 <sup>rd</sup>	
	4 <sup>th</sup>	Revision
	5 <sup>th</sup>	
	6 <sup>th</sup>	
100 104 1	1 <sup>st</sup>	
14 <sup>th</sup>	2 <sup>nd</sup>	
	3rd	Previous year question discussion
	4 <sup>th</sup>	
	5 <sup>th</sup>	
	6 <sup>th</sup>	

(Tuchan Rayon Moharta) 85. Lect. Math & Sc.) CHO.D. Meth & Sc.)

PTGF MATHEMATICS

Nayan Kuman Pradhan

Govt. Polytechnic

		LESSON PLAN
iscipline : lectrical Engg.	Semester : 1st	Name of the Teaching Faculty: Miss Meerarani Parida
Subject : Communicative English	No.of days/Per weeks Class Alloted Weeks :4	Semester :1st No.of Weeks : = 15
Neeks	Class day	Theory
Lst(NOV-2021)	1st	Sub skills of reading- skimmimg, scnning,
,	2nd	close reading, main idea & supporting ponts
	3rd	Guessing the meaning of unfamiliar words & note making
	4th	Note making, summerizing, supplying suitsble title
2nd(NOV-2021)	1st	Standing Up for yourself.
2114(1404-2021)	2nd	Standing Up for yourself.
	3rd	Standing Up for yourself.
	4th	To my true friend
3rd(NOV-2021)	1st	To my true friend
314(1404-2021)	2nd	synonyms, antonyms
	3rd	countable & uncountable nouns
	4th	ARTICLE, Determiers, Modal verbs
4th(NOV-2021)	1st	The magic of Teamwork
4(11(1404-2022)	2nd	The magic of Teamwork
	3rd	The magic of Teamwork
	4th	The magic of Teamwork
1st(DEC-2021)	1st	Tense- Present Tense
130(020 2022)	2nd	Tense- Past Tense
1	3rd	Inchcape Rock
	4th	Inchcape Rock
2nd(DEC-2021)	1st	Inchcape Rock
	2nd	Paragraph Writing
	3rd	Notice & Agenda
	4th	Report Writing
3rd(DEC-2021)		Writing Personal Letter
	2nd	Letter to Principal, Librarian, HOD, Hostel Superintendent
	3rd	Business Letters- Letter of Enquiry
	4th	Letter for Placing Order Letter of Complaint
4th(DEC-2021		Execution of order, cancellation of order
	2nd	Job Application
	3rd	Job Application
	4th	voice change
1st(JAN-2022)	1st 2nd	voice change
	3rd	voice change
	4th	subject veb agreement
2nd(JAN-202		subject veb agreement

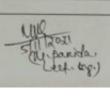
	2nd	subject veb agreement
	3rd	Meaning definition, concept of communication
	4th	Good and Bad Communication
3rd(JAN-2022)	1st	Communication Models
oralismic zee/	2nd	Process of Communication
	3rd	Meaning of Professional Communication
	4th	Formal Communication- Upward Communication
4th(JAN-2022)	1st	Down ward communication
4thjanit 2022)	2nd	Parallel Communication
	3rd	In-formal communication-Grapevine Communication
	4th	Non-verbal Communication
1st(FEB-2022)	1st	Non-verbal Communication
131(120 2022)	2nd	Non-verbal Communication
	3rd	Non-verbal Communication
	4th	Non-verbal Communication
2nd(FEB-2022)	1st	Grammar Practice
Ziidii Eb Zozzy	2nd	Grammar Practice
	3rd	Grammar Practice
	4th	Grammar Practice
3rd(FEB-2022)	1st	Writing of Letters
Sid(i Eb Zozz)	2nd	Writing of Letters
	3rd	Writing of Letters
	4th	Writing of Letters

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		LESSON PLAN
Discipline : Electrical Engg.	Semester : 1st	Name of the Teaching Faculty : Miss Meerarani Parida
Subject : Communicative English	No.of days/Per weeks Class Alloted Weeks :4	Semester :1st No.of Weeks : 15
Weeks	Class day	Practical
1st(NOV-2021)	1st	Listening text & reading aloud- Practice
	2nd	Listening, fill in blanks by students
	3rd	Listening, fill in blanks by students
	4th	Choose a suitable title & making summary of given text
2nd(NOV-2021)	1st	Choose a suitable title & making summary of given text
	2nd	Choose a suitable title & making summary of given text
	3rd	Supplying required information & answering comphrehension question
	4th	Supplying required information & answering comphrehension question
3rd(NOV-2021)	1st	Supplying required information & answering comphrehension question
	2nd	Reading aloud text, poem, speech
	3rd	Reading aloud text, poem, speech
	4th	Reading aloud text, poem, speech
4th(NOV-2021)	1st	Reading aloud text, poem, speech
	2nd	Self introduction
	3rd	Self introduction- Practice
	4th	Self introduction- Practice
1st(DEC-2021)	1st	Role play by students
	2nd	Role play by students
	3rd	Role play by students
	4th	Role play by students
2nd(DEC-2021)	1st	Telephonic conversation
	2nd	Telephonic conversation
	3rd	Telephonic conversation
	4th	Telephonic conversation
3rd(DEC-2021)	1st	Initiation by teacher

	2nd	Participants of the second of
	3rd	Initiation by students
	4th	Physical appearance
4th(DEC-2021)	1st	Audience Purpose
	2nd	Audience Purpose
	3rd	Audience Purpose
	4th	Non-verbal skill in face to face communication
1st(JAN-2022)	1st	involverbal skill in face to face communication via
	2nd	reconversal skill in face to face communication via assuration
	3rd	Terodi skill ill lace to lace communication via CD
	4th	Non-verbal skill in face to face communication via GDe
2nd(JAN-2022)		Non-verbal skill in face to face communication via GDs
2022)	1st	Non-verbal skill in face to face communication via Seminars
	2nd	Non-verbal skill in face to face communication via Seminars
	3rd	Non-verbal skill in face to face communication via Seminars
	4th	Non-verbal skill in face to face communication via Seminars
3rd(JAN-2022)	1st	Leadership quality
	2nd	Leadership quality
	3rd	Leadership quality
	4th	Time management
th(JAN-2022)	1st	Time management
	2nd	Time management
	3rd	Achieving the target
	4th	
t(FEB-2022)	1st	Achieving the target
,	2nd	Achieving the target
	3rd	Achieving the target
		Achieving the target
J/FFP POPPI	4th	Achieving the target
d(FEB-2022)	1st	Practice
	2nd	Practice
	3rd	Practice
	4th	Practice





+		LESSON PLAN	
Discipline : Civil & Mechanical Engg.	Semester : 2nd	Name of the Teaching Faculty: Miss Meerarani Parida	
Subject : Communicative English	No.of days/Per weeks Class Alloted Weeks :4	Semester :2nd No.of Weeks : 13	
Weeks	Class day	Practical	
3rd(March 2022)	1st	Listening text & reading aloud- Practice	
	2nd	Listening, fill in blanks by students	
	3rd	Listening, fill in blanks by students	
	4th	Choose a suitable title & making summary of given text	
4th(March 2022)	1st	Choose a suitable title & making summary of given text	
	2nd	Choose a suitable title & making summary of given text	
	3rd	Supplying required information & answering comphrehension question	
	4th	Supplying required information & answering comphrehension question	
1st(April-2022)	1st	Supplying required information & answering comphrehension question	
	2nd	Reading aloud text, poem, speech	
	3rd	Reading aloud text, poem, speech	
	4th	Reading aloud text, poem, speech	
2nd(April-2022)	1st	Reading aloud text, poem, speech	
Zilo(riprii zzzz)	2nd	Self introduction	
	3rd	Self introduction- Practice	
	4th	Self introduction- Practice	
3rd(April-2022)	1st	Role play by students	
Sid(Apin-2022)	2nd	Role play by students	
	3rd	Role play by students	
	4th	Role play by students	
44h/Amril 2022)	1st	Telephonic conversation	
4th(April-2022)	2nd	Telephonic conversation	
	3rd	Telephonic conversation	
	4th	Telephonic conversation	

1st(May-2022)	1st	Initiation by teacher
	2nd	Initiation by students
	3rd	Physical appearance
	4th	Audience Purpose
2nd(May-2022)	1st	Audience Purpose
	2nd	Audience Purpose
	3rd	Non-verbal skill in face to face communication
	4th	Non-verbal skill in face to face communication via voice
3rd(May-2022)	1st	Non-verbal skill in face to face communication via group interviews
	2nd	Non-verbal skill in face to face communication via GDs
	3rd	Non-verbal skill in face to face communication via GDs
	4th	Non-verbal skill in face to face communication via GDs
4th(May-2022)	1st	Non-verbal skill in face to face communication via Seminars
-tilling roce	2nd	Non-verbal skill in face to face communication via Seminars
	3rd	Non-verbal skill in face to face communication via Seminars
	4th	Non-verbal skill in face to face communication via Seminars
1st(June-2022)	1st	Leadership quality
1st(June-2022)	2nd	Leadership quality
	3rd	Leadership quality
	4th	Time management
2022	1st	Time management
2nd(June-2022)	2nd	Time management
	3rd	Achieving the target
	4th	Achieving the target
		Achieving the target
3rd(June-2022)	1st	Achieving the target
	2nd	Achieving the target
	3rd	Achieving the target
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Discipline : Civil & Semester : 2nd		Name of the Teaching Faculty: Miss Meerarani Parida	
Mechanical Engg. Subject:	No.of days/Per weeks	Semester :2nd No.of Weeks : 13	
Communicative English	Class Alloted Weeks :4		
Weeks	Class day	Theory	
3rd(March 2022)	1st	Sub skills of reading- skimmimg, scnning,	
	2nd	close reading, main idea & supporting ponts	
a*	3rd	Guessing the meaning of unfamiliar words & note making	
	4th	Note making, summerizing, supplying suitsble title	
4th(March 2022)	1st ·	Standing Up for yourself.	
	2nd	Standing Up for yourself.	
	3rd	Standing Up for yourself.	
	4th	To my true friend	
1st(April-2022)	1st	To my true friend	
	2nd	synonyms, antonyms	
	3rd	countable & uncountable nouns	
	4th	ARTICLE, Determiers, Modal verbs	
	1st	The magic of Teamwork	
	2nd	The magic of Teamwork	
	3rd	The magic of Teamwork	
	4th	The magic of Teamwork	
, ,	1st	Tense- Present Tense	
	2nd	Tense- Past Tense	
	3rd	Inchcape Rock	
	4th	Inchcape Rock	
` ' ' '	1st	Inchcape Rock  Raragraph Writing	
	2nd	Paragraph Writing	
	3rd	Notice & Agenda	
	4th	Report Writing	
	1st	Writing Personal Letter	
	2nd	Letter to Principal, Librarian, HOD, Hostel Superintendent	
	3rd	Business Letters- Letter of Enquiry	
	4th	Letter for Placing Order	
	1st	Letter of Complaint	
	2nd	Execution of order, cancellation of order	
	3rd	Job Application	
	4th	Job Application	
	1st	voice change	
	2nd	voice change	
	3rd	voice change	
	4th	subject veb agreement	
th(May-2022)	1st	subject veb agreement	

	2nd	subject veb agreement
	3rd	Meaning definition, concept of communication
	4th	Good and Bad Communication
1st(June-2022)	1st	Communication Models
Istivante zezzy	2nd	Process of Communication
7.0	3rd	Meaning of Professional Communication
	4th	Formal Communication- Upward Communication
2nd(June-2022)	1st	Down ward communication
Ziidjuiic zozz,	2nd	Parallel Communication
	3rd	In-formal communication-Grapevine Communication
	4th	Non-verbal Communication
3rd(June-2022)	1st	Non-verbal Communication
310()0116-2022/	2nd	Non-verbal Communication
	3rd	Non-verbal Communication
	4th	Non-verbal Communication

(yls M. parida, Leuf english)

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Discipline :Mechanical Engg.	Semester : 1st	Name of the Teaching Faculty : Shri Asit Ranjan Prusty	
Subject : Computer Application	No.of days/Per weeks Class Alloted Weeks :4	Semester :1st No.of Weeks : ‡5	
Weeks	Class day	Tř	neory
1st(Nov- 2021)	1st	Introductio	n to Computer
	2nd	Evolution of Computer	Generation Of Computer
	3rd		n Of Computer
	4th		
2nd(Nov- 2021)	1st		er With Functional Block Diagram
	2nd		Devices, Memory Classification
	3rd		oftware, Application software
	4th	Function Types of Operating System: Batch	ling System Objectives ons of O.S., Processing, Multiprogramming, Time ring OS
3rd(Nov- 2021)	1st		Windows and UNIX
	2nd		piler, interpreter Computer Virus
	3rd		of computer virus
	4th		revention of Virus
4th(Nov- 2021)	1st		ters in different Domain
	2nd		ecting Media, Date Transmission Mod
	3rd		es, Types of Network
	4th	Networking Devices like Hub, Repea	ter, Switch, Bridge, Router, Gateway &
1st(Dec- 2021)	1st		Mail, WWW, FTP, Chatting
	2nd		onferencing,
	3rd		er & Online Shopping
	4th		net connectivity and ISP
2nd(Dec- 2021)	1st		net connectivity and ISP
	2nd		ile and Folder
	3rd		nods. Sequential, Direct, ISAM
	4th	File Access and Storage meth	nods Sequential Direct ISANA
3rd(Dec- 2021)	1st	File Access and Storage methods. Sequential, Direct, ISAM Data Capture, Data storage	
	2nd		ng and Retrieval
	3rd	Algorithm, Pseudo code and Flowchart	
4th/Dec 2021)	4th	Algorithm, Pseudo code and Flowchart	
4th(Dec- 2021)	1st	Structured Progra	amming Language
	2nd	Examples of Problem so	olving through Flowchart
	3rd	Examples of Problem so	olving through Flowchart
1st(Jan-2022)	4th	Constants, Variable	s and Data types in C
zarpan-zozzy	1st 2nd	Constants, Variable	s and Data types in C
	3rd	Managing Input and	Output operations.
	4th	Managina Managina i	e conversion & Typecasting
2nd(Jan-2022)	1st	Operators Factorian	Output operations.
	2nd	Decision Control and	e conversion & Typecasting
	3rd	(If, If-else If-else	Looping Statements if, Switch, While)
	4th		hile,
3rd(Jan-2022)	1st		ntinue & Goto
	2nd	Programming Assignment	s using the above features
	3rd	Programming Assignment	s using the above features
444	4th	Programming Assignment	s using the above features
4th(Jan-2022)	1st	Programming Assignment	s using the above features
	2nd	Programming Assignment	Susing the shows fact
	3rd	Punctions and Passing Parameter	rs to the Function (Call by Value)
1et/Eab 2022	4th	Call By Ri	eference)
1st(Feb-2022)	1st	Scope of Variables a	and Storage Classes
	2nd 3rd	Recursion Function an	d Types of Resource
	4th	One Dimensional Array an	d Multidian and Committee of the Inches
2nd(Feb-2022)	1st	operations and pointers, St	ructure and Union Concept Only
1.22.2020	2nd	Revi	100
	3rd	Sample Pap Sample Pap	er Practice
	4th	Sample Pap	er Practice
3rd(Feb-2022)	1st	Sample Pap	er Practice
	2nd	Sample Pap	er Practice
	3rd 4th	Sample Pap	er Practice
			er Practice

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Discipline : Mechanical	Semester : 1st	er: 1st Name of the Teachnig Faculty: Shri Asit Ranjan Prusty		
Subject : Computer No.of days/Per weeks Application Class Alloted Weeks		Semester :1st	No.of Weeks: 45	
Weeks	Class day	Practical		
1st(Nov 2021)	1st	Identification of different components of Computer Switch on and Booting		
23(1104 2022)	2nd	Study of device and power supply form factor of Personal Computer System Identification of various Mother Board components Identificat		
	3rd	Identification o	f different ports	
	4th		s, and their purpose	
2nd(Nov-2021)	1st	Case Identification and Study of ROM		
Ziid(itot Zozz)	2nd		apter Cards	
	3rd		SATA connectors	
No.	· · 4th		rs and Converters	
3rd(Nov-2021)	1st	Study of various types of LAB Safety me		
314(1404-2021)	2nd	Analysis of various Power Fluctuation		
	3rd		pressor, UPS, Standby power supply)	
	4th	Procedures for proper disposal or recyc		
4th(Nov-2021)	1st .		, Cartridges	
4(1(100-2021)	2nd		and Aerosol Cans)	
	3rd		Hand tools,	
	4th		tools,	
1st(Dec-2021)	1st		Diagnostic tools),	
15((Dec-2021)	2nd		gement Tools	
	3rd		, DIR, DATE, TIME, VERSION	
	4th		CD, RD,	
2-4/0 2021)	1st		OPYREN,	
2nd(Dec-2021)	2nd		CARDS, PATH),	
	3rd		OPERATIONS, Utilities and Accessories	
	4th		ocessing Package. (MS-Word)	
3rd(Dec-2021)	· . 1st		ocessing Package. (MS-Word)	
370(Dec-2021)	2nd		ocessing Package. (MS-Word)	
	3rd		ocessing Package. (MS-Word)	
	4th	Basic operations of Word Pr	ocessing Package. (MS-Word)	
4th(Dec-2021)	1st	Basic operations of Word Pr	ocessing Package. (MS-Word)	
4111000 2023	2nd	Basic operations of Electronic S	pread Sheet Package. (MS-Excel),	
	3rd	Basic operations of Electronic S	pread Sheet Package. (MS-Excel),	
	4th	Basic operations of Electronic S	pread Sheet Package. (MS-Excel),	
1st(Jan-2022)	1st		Spread Sheet Package. (MS-Excel),	
	2nd		Spread Sheet Package. (MS-Excel),	
1	3rd		Spread Sheet Package. (MS-Excel),	
-	4th	Format, Save, Print/View i	ckage (MS- Power point) (Create, Edit, in the above three packages)	
2nd(Jan-2022)	1st	Format, Save, Print/View 1	ckage (MS- Power point) (Create, Edit, in the above three packages)	
-	2nd	Format, Save, Print/View i	ckage (MS- Power point) (Create, Edit, in the above three packages)	
	° 3rd	Format, Save, Print/View i	ckage (MS- Power point) (Create, Edit, in the above three packages)	
	4th	Format, Save, Print/View i	ckage (MS- Power point) (Create, Edit, in the above three packages)	
3rd(Jan-2022	1st	Getting acquainted with Intern	net connection, Browser, website	

	2nd	URL, webpage, http, WWW, net browsing
	3rd	URL, webpage, http, WWW, net browsing
	4th	Creating E-Mail Id, sending and receiving E-mail Chatting
4th(Jan-2022)	1st	to the find the greatest number among three many
4(11()411-2022)	2nd	a to the December in City find the average of Il Illuminous of
	3rd	2 White a Decessor in C to find the average of I nullibers of
	4th	2. Write a program in C to determine whether a number is printed
1st(Feb-2022)	1st	3. Write a program in C to determine whether a number is prime or not
	2nd	A Write a program in C to check whether a given number is paintaining of the
	3rd	4. Write a program in C to check whether a given number is paintaining of well
	4th	5 Write a program in C to compute the sine series?
2nd(Feb-2022)	1st	Write a program in C to accept row wise and column wise element in a two
	2nd	7. Write a program in C to find the vowels in a given string.
	3rd	8. Write a program in C to find the factorial of a number, by using recursion
	4th	<ol> <li>Write a program in C to find the sum of Fibonacci series, by using function.</li> <li>Write a program in C to accept a number from keyboard and print it in rever</li> </ol>

Principal | N Govt. Polytechnic Angul APN-08 5/11/2021 Leif. (CA)

Discipline :Civil Engg.	Semester : 1st	: 1st Name of the Teaching Faculty : Miss Bidyut Prabha Pradhan	
Subject : Computer Application	No.of days/Per weeks Class Alloted Weeks :4	Semester :1st No.of Weeks : 115	
Weeks	Class day	Theory	
1st(Nov- 2021)	1st	Introduction to Computer	
	2nd	Evolution of Computer, Generation Of Computer	
	3rd	Classification Of Computer	
2-4/8 2024)	4th	Basic Organisation of Computer With Functional Block Diagram	
2nd(Nov- 2021)	1st	Input Devices ,CPU ,Output Devices,Memory Classification	
	2nd	Software concept, System software, Application software	
	3rd	Overview of Operating System Objectives	
3rd(Nov- 2021)	4th 1st	Functions of O.S , Features of DOS, Windows and UNIX	
310[1404-2021]	2nd	Programming Languages Compiler, interpreter Computer Virus	
	3rd	Different Types of computer virus	
	4th	Detection and prevention of Virus	
4th(Nov- 2021)	1st	Application of computers in different Domain	
THE PARTY OF THE P	2nd	Networking concept, Protocol, Connecting Media, Date Transmission Mode	
	3rd	Network Topologies, Types of Network	
	4th	Networking Devices like Hub, Repeater, Switch, Bridge, Router, Gateway & NIC	
1st(Dec- 2021)	1st	Internet Services like E-Mail, WWW, FTP, Chatting	
	2nd	Internet Conferencing,	
	3rd	Electronic Newspaper & Online Shopping	
	4th	Different types of Internet connectivity and ISP	
2nd(Dec- 2021)	1st	Different types of Internet connectivity and ISP	
	2nd	Concept of File and Folder	
	3rd	File Access and Storage methods. Sequential, Direct, ISAM	
- W	4th	File Access and Storage methods. Sequential, Direct, ISAM	
3rd(Dec- 2021)	1st	Data Capture, Data storage  Data Processing and Retrieval	
	2nd	Algorithm, Pseudo code and Flowchart Generation of Programming Languages	
	3rd 4th	Algorithm, Pseudo code and Flowchart Generation of Programming Languages	
4th(Dec- 2021)	1st	Structured Programming Language	
4(11000-2021)	2nd	Examples of Problem solving through Flowchart	
	3rd	Examples of Problem solving through Flowchart	
	4th	Constants, Variables and Data types in C	
1st(Jan-2022)	1st	Constants, Variables and Data types in C	
Introduction Court	2nd	Managing Input and Output operations.	
	3rd	Operators, Expressions, Type conversion & Typecasting	
	4th	Managing Input and Output operations.	
2nd(Jan-2022)	1st	Operators, Expressions, Type conversion & Typecasting	
	2nd	Decision Control and Looping Statements	
	3rd	(If, If-else, If-else-if, Switch, While)	
2.02.0000000000000000000000000000000000	4th	Do while, For, Break, Continue & Goto	
3rd(Jan-2022)	1st	Programming Assignments using the above features	
	2nd	Programming Assignments using the above features	
	3rd 4th	Programming Assignments using the above features	
4+h/1== 2022\	1st	Programming Assignments using the above features	
4th(Jan-2022)	2nd	Programming Assignments using the above features	
	6110	Functions and Passing Parameters to the Function (Call by Value)	
		distributed and a series of the contract of th	
	3rd	Call By Reference)	
1st/Eah-2022\	3rd 4th	Call By Reference) Scope of Variables and Storage Classes	
1st(Feb-2022)	3rd 4th 1st	Call By Reference) Scope of Variables and Storage Classes Recursion Function and Types of Recursion	
1st(Feb-2022)	3rd 4th	Call By Reference) Scope of Variables and Storage Classes Recursion Function and Types of Recursion One Dimensional Array and Multidimensional Array	
1st(Feb-2022)	3rd 4th 1st 2nd	Call By Reference) Scope of Variables and Storage Classes Recursion Function and Types of Recursion One Dimensional Array and Multidimensional Array String Operations and pointers, Structure and Union Concept Only	
	3rd 4th 1st 2nd 3rd	Call By Reference) Scope of Variables and Storage Classes Recursion Function and Types of Recursion One Dimensional Array and Multidimensional Array String Operations and pointers, Structure and Union Concept Only Revision	
1st(Feb-2022) 2nd(Feb-2022)	3rd 4th 1st 2nd 3rd 4th 1st 2nd	Call By Reference) Scope of Variables and Storage Classes Recursion Function and Types of Recursion One Dimensional Array and Multidimensional Array String Operations and pointers, Structure and Union Concept Only Revision Sample Paper Practice	
	3rd 4th 1st 2nd 3rd 4th 1st 2nd 3rd	Call By Reference)  Scope of Variables and Storage Classes  Recursion Function and Types of Recursion  One Dimensional Array and Multidimensional Array  String Operations and pointers, Structure and Union Concept Only  Revision  Sample Paper Practice  Sample Paper Practice	
2nd(Feb-2022)	3rd 4th 1st 2nd 3rd 4th 1st 2nd 3rd 4th	Call By Reference)  Scope of Variables and Storage Classes  Recursion Function and Types of Recursion  One Dimensional Array and Multidimensional Array  String Operations and pointers, Structure and Union Concept Only  Revision  Sample Paper Practice  Sample Paper Practice  Sample Paper Practice	
	3rd 4th 1st 2nd 3rd 4th 1st 2nd 3rd 4th 1st	Call By Reference)  Scope of Variables and Storage Classes  Recursion Function and Types of Recursion  One Dimensional Array and Multidimensional Array  String Operations and pointers, Structure and Union Concept Only  Revision  Sample Paper Practice	
2nd(Feb-2022)	3rd 4th 1st 2nd 3rd 4th 1st 2nd 3rd 4th	Call By Reference)  Scope of Variables and Storage Classes  Recursion Function and Types of Recursion  One Dimensional Array and Multidimensional Array  String Operations and pointers, Structure and Union Concept Only  Revision  Sample Paper Practice  Sample Paper Practice  Sample Paper Practice	



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		LESSON PLAIN	
Discipline : Civil	Semester: 1st	Name of the Teachnig Faculty: Miss Bidyut Prabha Pradhan	
Subject : Computer	No.of days/Per weeks	Semester :1st No.of Weeks : 15	
Application	Class Alloted Weeks :4		
Weeks	Class day	Practical	
1st(Nov 2021)	1st	Identification of different components of Computer Switch on and Booting	
	24	Study of device and power supply form factor of Personal Computer	
	2nd	System Identification of various Mother Board components Identification	
	3rd	Identification of different ports	
	4th type of connectors, and their purpose		
2nd(Nov-2021)	1st	Case Identification and Study of ROM	
	2nd	RAM, Adapter Cards	
	3rd	Expansion Slots, SATA connectors	
	· . 4th	Study of Adapters and Converters	
3rd(Nov-2021)	1st	Study of various types of LAB Safety measures (General Safety, Electrical Safety	
,	2nd	Analysis of various Power Fluctuation Types (Blackout, Brownout, Noise, Spike	
	3rd	Power Protection Devices (Surge suppressor, UPS, Standby power supply)	
	4th	Procedures for proper disposal or recycling of hazardous computer component	
4th(Nov-2021)	1st	Toner Kits, Cartridges	
411(1101 2022)	2nd	Chemical Solvents and Aerosol Cans)	
	3rd	ESD tools, Hand tools,	
	4th	cable tools,	
1st(Dec-2021)	1st	Cleaning tools, Diagnostic tools),	
151(Dec-2021)	2nd	Disk Management Tools	
	3rd	Basic DOS commands (CLS, DIR, DATE, TIME, VERSION	
	4th	MD, CD, RD,	
- 1/0 2024)	1st	DEL, COPYREN,	
2nd(Dec-2021)	2nd	USE OF WILD CARDS, PATH),	
	3rd	Basic Windows OS operations, MOUSE OPERATIONS, Utilities and Accessories,	
	4th	Basic operations of Word Processing Package. (MS-Word)	
		Basic operations of Word Processing Package. (MS-Word)	
3rd(Dec-2021)	1st	Basic operations of Word Processing Package. (MS-Word)	
	2nd	Basic operations of Word Processing Package. (MS-Word)	
	3rd	Basic operations of Word Processing Package. (MS-Word)	
	4th	Basic operations of Word Processing Package. (MS-Word)	
4th(Dec-2021)	1st	Basic operations of Electronic Spread Sheet Package. (MS-Excel),	
	2nd	Basic operations of Electronic Spread Sheet Package. (MS-Excel),	
	3rd	Basic operations of Electronic Spread Sheet Package. (MS-Excel),	
	4th	Basic operations of Electronic Spread Sheet Package. (MS-Excel),	
1st(Jan-2022)	1st	Basic operations of Electronic Spread Sheet Package. (MS-Excel),	
	2nd	Basic operations of Electronic Spread Sheet Package. (MS-Excel),	
	3rd	Basic operations of Presentation Package (MS- Power point) (Create, Edit,	
	4th	Format, Save, Print/View in the above three packages)	
2-4(1 2022)	1st	Basic operations of Presentation Package (MS- Power point) (Create, Edit, Format, Save, Print/View in the above three packages)	
2nd(Jan-2022)	430	Basic operations of Presentation Package (MS- Power point) (Create, Edit,	
	2nd	Format, Save, Print/View in the above three packages)	
		Basic operations of Presentation Package (MS- Power point) (Create, Edit,	
	3rd	Format, Save, Print/View in the above three packages)	
		Basic operations of Presentation Package (MS- Power point) (Create, Edit,	
	4th	Format, Save, Print/View in the above three packages)	
2-4(1 2022)	1st	Getting acquainted with Internet connection, Browser, website	
3rd(Jan-2022)	2nd	URL, webpage, http, WWW, net browsing	
	3rd	URL, webpage, http, WWW, net browsing	
	4th	Creating E-Mail Id, sending and receiving E-mail Chatting	

		Write a Program in C to find the greatest number among three numbers.
4th(Jan-2022)	1st	Write a Program in C to find the greatest numbers by using for loop     Write a Program in C to find the average of n numbers by using for loop
4th(Jan-2022)	2nd -	Write a Program in C to find the average of n numbers by using for loop      Write a Program in C to find the average of n numbers by using for loop
	3rd	1- C to determine whether a number is printe or not
	4th	t or determine whether a number is prime or not
1st(Feb-2022)	1st	
151(1-60-2022)	2nd	4. Write a program in C to check whether a given number is palindrome or not?  4. Write a program in C to check whether a given number is palindrome or not?
	3rd	
	4th	in Citio account row wise and column wise element
2nd(Feb-2022)	1st	
Ziid(i co zozz)	2nd	to take factorial of a number, by using
	3rd	8. Write a program in C to find the factorial of a find many  9. Write a program in C to find the sum of Fibonacci series, by using function.  9. Write a program in C to find the sum of Fibonacci series, by using function.
	4th	<ol> <li>Write a program in C to find the sum of Piboliaces school and print it in rever</li> <li>Write a program in C to accept a number from keyboard and print it in rever</li> </ol>

Govt. Polytechnic

Bopraduan 5/11/21 Leit(CSE)

Disability of the state of		Name of the Teaching Faculty : Miss Bidyut Prabha Pradhan/Mi
Discipline :Electrical Engg.	Semester : 2nd	Name of the Teaching Faculty : Miss Bruyer Francis Francisco
Subject : Computer Application	No.of days/Per weeks Class Alloted Weeks :4	Semester :2nd No.of Weeks ::, 13
Weeks	Class day	Theory
3rd(March- 2022)	1st	Introduction to Computer
Sidinardi Edeci	2nd	Evolution of Computer, Generation Of Computer
	3rd	Classification Of Computer
	4th	Basic Organisation of Computer With Functional Block Diagram
4th(March- 2022)	1st	Input Devices .CPU ,Output Devices,Memory Classification
4th[Warth- 2022]	2nd	Software concept, System software, Application software
	3rd	Overview of Operating System Objectives
	4th	Functions of O.S.,  Types of Operating System: Batch Processing, Multiprogramming, Till Sharing OS
1st(April-2022)	1st	Features of DOS, Windows and UNIX
13thpin 2022	2nd	Programming Languages Compiler, interpreter Computer Virus
	3rd	Different Types of computer virus
	4th	Detection and prevention of Virus
2nd(April-2022)	1st	Application of computers in different Domain
Zilo(Hpril Zona)	2nd	Networking concept, Protocol, Connecting Media, Date Transmission M
	3rd	Network Topologies, Types of Network
		Networking Devices like Hub, Repeater, Switch, Bridge, Router, Gatew
	4th	NIC
3rd(April- 2022)	1st	Internet Services like E-Mail, WWW, FTP, Chatting
Stuppin 2027	2nd	Internet Conferencing,
	3rd	Electronic Newspaper & Online Shopping
	4th	Different types of Internet connectivity and ISP
4th(April-2022)	1st	Different types of Internet connectivity and ISP
40000000	2nd	Concept of File and Folder
	3rd	File Access and Storage methods. Sequential, Direct, ISAM
	4th	File Access and Storage methods. Sequential, Direct, ISAM Data Capture, Data storage
1st(May-2022)	1st	Data Capture, Bata storage  Data Processing and Retrieval
	2nd	Algorithm, Pseudo code and Flowchart Generation of Programming
	3rd	Languages  Algorithm, Pseudo code and Flowchart Generation of Programming
	4th	Languages
2nd(May-2022)	1st	Structured Programming Language
Ziiu(iviay Zozz)	2nd	Examples of Problem solving through Flowchart Examples of Problem solving through Flowchart
	3rd	Constants, Variables and Data types in C
	4th	Constants, Variables and Data types in C
	1st	Constants, variables and bate types
3rd(May-2022)	131	the residence and Output operations.
3rd(May-2022)	2nd	Managing Input and Output operations.
3rd(May-2022)		Operators, Expressions, Type conversion & Typecasting
3rd(May-2022)	2nd	Operators, Expressions, Type conversion & Typecasting  Managing Input and Output operations.
	2nd 3rd	Operators, Expressions, Type conversion & Typecasting  Managing Input and Output operations.  Operators, Expressions, Type conversion & Typecasting
3rd(May-2022) 4th(May-2022)	2nd 3rd 4th	Operators, Expressions, Type conversion & Typecasting  Managing Input and Output operations.  Operators, Expressions, Type conversion & Typecasting  Decision Control and Looping Statements
	2nd 3rd 4th 1st	Operators, Expressions, Type conversion & Typecasting Managing Input and Output operations.  Operators, Expressions, Type conversion & Typecasting Decision Control and Looping Statements  (If, If-else, If-else-if, Switch, While)
	2nd 3rd 4th 1st 2nd	Operators, Expressions, Type conversion & Typecasting Managing Input and Output operations.  Operators, Expressions, Type conversion & Typecasting Decision Control and Looping Statements  (If, If-else, If-else-if, Switch, While) Do while, For Break, Continue & Goto
4th(May-2022)	2nd 3rd 4th 1st 2nd 3rd 4th 1st	Operators, Expressions, Type conversion & Typecasting Managing Input and Output operations.  Operators, Expressions, Type conversion & Typecasting Decision Control and Looping Statements  (If, If-else, If-else-if, Switch, While) Do while, For, Break, Continue & Goto
	2nd 3rd 4th 1st 2nd 3rd 4th 1st 2nd	Operators, Expressions, Type conversion & Typecasting Managing Input and Output operations.  Operators, Expressions, Type conversion & Typecasting Decision Control and Looping Statements  (If, If-else, If-else-if, Switch, While)  Do while,  For, Break, Continue & Goto  Programming Assignments using the above features
4th(May-2022)	2nd 3rd 4th 1st 2nd 3rd 4th 1st	Operators, Expressions, Type conversion & Typecasting Managing Input and Output operations.  Operators, Expressions, Type conversion & Typecasting Decision Control and Looping Statements  (If, If-else, If-else-if, Switch, While)  Do while,  For, Break, Continue & Goto  Programming Assignments using the above features Programming Assignments using the above features
4th(May-2022)	2nd 3rd 4th 1st 2nd 3rd 4th 1st 2nd	Operators, Expressions, Type conversion & Typecasting Managing Input and Output operations.  Operators, Expressions, Type conversion & Typecasting Decision Control and Looping Statements  (If, If-else, If-else-if, Switch, While)  Do while,  For, Break, Continue & Goto  Programming Assignments using the above features Programming Assignments using the above features  Programming Assignments using the above features
4th(May-2022) 1st(June-2022)	2nd 3rd 4th 1st 2nd 3rd 4th 1st 2nd 3rd 4th 1st	Operators, Expressions, Type conversion & Typecasting Managing Input and Output operations.  Operators, Expressions, Type conversion & Typecasting Decision Control and Looping Statements  (If, If-else, If-else-if, Switch, While)  Do while,  For, Break, Continue & Goto  Programming Assignments using the above features
4th(May-2022)	2nd 3rd 4th 1st 2nd 3rd 4th 1st 2nd 3rd 4th 4th	Operators, Expressions, Type conversion & Typecasting Managing Input and Output operations.  Operators, Expressions, Type conversion & Typecasting Decision Control and Looping Statements  (If, If-else, If-else-if, Switch, While)  Do while,  For, Break, Continue & Goto  Programming Assignments using the above features
4th(May-2022) 1st(June-2022)	2nd 3rd 4th 1st 2nd 3rd 4th 1st 2nd 3rd 4th 1st	Operators, Expressions, Type conversion & Typecasting Managing Input and Output operations.  Operators, Expressions, Type conversion & Typecasting Decision Control and Looping Statements  (If, If-else, If-else-if, Switch, While)  Do while,  For, Break, Continue & Goto  Programming Assignments using the above features
4th(May-2022) 1st(June-2022)	2nd 3rd 4th 1st 2nd 3rd 4th 1st 2nd 3rd 4th 1st 2nd 3rd	Operators, Expressions, Type conversion & Typecasting Managing Input and Output operations.  Operators, Expressions, Type conversion & Typecasting Decision Control and Looping Statements  (If, If-else, If-else-if, Switch, While) Do while, For, Break, Continue & Goto Programming Assignments using the above features
4th(May-2022)  1st(June-2022)  2nd(June-2022)	2nd 3rd 4th 1st 2nd 3rd 4th 1st 2nd 3rd 4th 1st 2nd 3rd 4th 1st	Operators, Expressions, Type conversion & Typecasting Managing Input and Output operations.  Operators, Expressions, Type conversion & Typecasting Decision Control and Looping Statements  (If, If-else, If-else-if, Switch, While) Do while, For, Break, Continue & Goto Programming Assignments using the above features  Programming Assignments using the above features
4th(May-2022) 1st(June-2022)	2nd 3rd 4th 1st 2nd 3rd 4th 1st 2nd 3rd 4th 1st 2nd 3rd 4th 1st	Operators, Expressions, Type conversion & Typecasting Managing Input and Output operations.  Operators, Expressions, Type conversion & Typecasting Decision Control and Looping Statements  (If, If-else, If-else-if, Switch, While)  Do while,  For, Break, Continue & Goto  Programming Assignments using the above features

Principal
Gevt. Polytechnic
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Africol population (2) 22 Cose Level (COA)

		Name of the Teachnin Faculty :Mr A	sit Ranjan Prusty/Miss Bidyut Prabha
Discipline : Electrical	Semester : 2nd No.of days/Per weeks		
Subject : Computer	Class Alloted Weeks :4	Semester: 1std	No.of Weeks: \$3
Application		Pra	ctical
Weeks	Class day	Identification of different components of	f Computer Switch on and Booting Proces
3rd (March 2022)	1st		
		Study of device and power supply for	m factor of Personal Computer System
	2nd	Identification of various Mother	Board components Identification
	3rd	Identification of different ports type of connectors, and their purpose	
	4th		
4th(March-2022)	1st		n and Study of ROM
Till till till till till till till till	2nd		lapter Cards
	3rd		s,SATA connectors
	4th	Study of Adapte	ers and Converters
1st (April-2022)	1st		easures (General Safety, Electrical Safety, Fire
1st (April-2022)	1577		Types (Blackout, Brownout, Noise, Spike,
	2nd	Powe	r surge),
	3rd	Power Protection Devices (Surge su	ppressor, UPS, Standby power supply)
	4th	Procedures for proper disposal or recy	cling of hazardous computer components
	1st	Toner Kit	s, Cartridges
2nd(April-2022)		Chemical Solvent	ts and Aerosol Cans)
	2nd 3rd	ESD tools	, Hand tools,
		cab	le tools,
	4th	Cleaning tools,	, Diagnostic tools),
3rd(April-2022)	1st		agement Tools
	2nd	Basic DOS commands (CL	S, DIR, DATE, TIME, VERSION
	3rd	MD,	, CD, RD,
	4th		COPYREN,
4th(April-2022)	1st	USE OF WILD	CARDS, PATH),
	2nd	Pasis Windows OS operations, MOUS	E OPERATIONS, Utilities and Accessories,
	3rd	Basic operations of Word P	Processing Package. (MS-Word)
	4th	Basic operations of Word P	Processing Package. (MS-Word)
1st(May-2022)	1st	Basic operations of Word P	Processing Package. (MS-Word)
	2nd	Basic operations of Word P	Processing Package. (MS-Word)
	. 3rd	Basic operations of Word P	Processing Package. (MS-Word)
	4th	Paris operations of Word F	Processing Package. (MS-Word)
2nd(May-2022)	1st	Pasis operations of Electronic	Spread Sheet Package. (MS-Excel),
	2nd	Devis approximate of Electronic	Spread Sheet Package. (M3-Excer),
	3rd	Paris assertions of Electronic	Spread Sheet Package. (NIS-Excer),
	4th	note assertions of Electronic	Spread Sheet Package. (M3-Excer),
3rd(May-2022)	1st	a in acceptions of Electronic	Spread Sheet Package, (MS-Excer),
	2nd		Spread Sheet Package, [Wis-cace],
	3rd	- Presentation Packa	age (MS- Power point) (Create, care,
	4th		he above three packages) age (MS- Power point) (Create, Edit, Forma
4th(May-2022)	1st	Presentation Packa	age (MS- Power point) (Create, Edic, Form
	2nd		
	22	a de appearings of Presentation Packa	age (MS- Power point) (Create, Edit, Form
	3rd		
		Basic operations of Presentation Packs	age (MS- Power point) (Create, Edit, Forma
	. 4th	Faun Print/View In I	the above three packages) rnet connection, Browser, website
1st(June-2022)	1st	Getting acquainted with Inte	inet connection,

Principal
Gevi. Polytesbnic

April Bradlan
14/3/22 Bradlan
Lect 25

	2nd	URL, webpage, http, WWW, net browsing
	3rd	URL, webpage, http, WWW, net browsing
	4th	Creating E-Mail Id, sending and receiving E-mail Chatting
2nd(June-2022)	1st	Write a Program in C to find the greatest number among three numbers.
	2nd	2. Write a Program in C to find the average of n numbers by using for loop
	3rd	3. Write a program in C to determine whether a number is prime or not?
	4th	4. Write a program in C to check whether a given number is palindrome or not
3rd(June-2022)	1st	5. Write a program in C to compute the sine series?
31d(3dile-2022)	2nd	6. Write a program in C to accept row wise and column wise element in a two
	3rd	<ol><li>Write a program in C to find the vowels in a given string.</li></ol>
	4th	8. Write a program in C to find the factorial of a number, by using recursion
2nd(Feb-2022)	1st	9. Write a program in C to find the sum of Fibonacci series, by using function.
	2nd	9. Write a program in C to find the sum of Fibonacci series, by using function.
	3rd	10.Write a program in C to accept a number from keyboard and print it in revers order of entry?
	4th	10.Write a program in C to accept a number from keyboard and print it in revers order of entry,?