### VIVEKANANDA DEGREE COLLEGE RAJAJINAGAR, BANGALORE-55

### Department of Computer Science Lesson Plan 2021

Course: CS III: SOFTWARE ENGINEERING AND DBMS

Total Teaching Hours: 60 No of Hours / Week: 04

Faculty Member: Prof. Aruna Nagarajan

### Objectives of the Course:

To equip the students to have the glimpses of fundamentals of SQL (DBMS) programming.

To Understand the basic concepts and the applications of database systems

To Master the basics of SQL and construct queries using SQL

To understand the relational database design principles

The course starts with basics and then discusses every keyword in DBMS. It concludes with some of SoftwareEngineering Concepts.

The term software engineering is composed of two words, software and engineering.

Software is more than just a program code.

A program is an executable code, which serves some computational purpose.

Software is considered to be a collection of executable programming code, associated libraries and documentations.

Software, when made for a specific requirement is called software product.

Engineering on the other hand, is all about developing products, using well-defined, scientific principles and methods.

So, we can define software engineering as a branch associated with the development of software product using well-defined scientific principles, methods and procedures. The outcome of software engineering is an efficient and reliable software product. IEEE defines software engineering as: The application of a systematic, disciplined, quantifiable approach to the development, operation and maintenance of software. We can alternatively view it as a systematic collection of past experience. The experience is arranged in the form of methodologies and guidelines. A small program can be written without using software engineering principles. But if one wants to develop a large software product, then software engineering principles are absolutely necessary to achieve a good quality software cost effectively.

Module	Course Description	Duration	Taught	Teaching
		From To	Hours	Methods
1	Unit – I: INTRODUCTION:	12/10/2021	TWELVE	
		to 5/11/2021		
1.1		12/10/2021	THREE	Lecture.
	Introduction: Data, Database, DBMS,	to		
	Characteristics of Database Approach,	15/10/2021		
	Database			
	Users, Advantages of DBMS. Database			
	System Concepts and Architecture: Data			
	Models, Schemas, and Instances.			
1.2	DBMS Architecture and Data	16/10/2021	THREE	Case study
	Independence, Database	to		
	languages and interfaces, The Database	20/10/2021		*
	system Environment, Classification of		-	
	Database Management Systems.			
1.3	Data Modeling Using the Entity-	23/10/2021	THREE	Lecture
	Relationship Model: High level	to	, we - 1	
	Conceptual Data Models for Database	28/10/2021		
	Design with an example	20/10/2021		

1.4	Entity types, Entity sets, Attributes, and Keys, ER Model Concepts, Notation for ER Diagrams, Proper naming of Schema Constructs	30/10/2021 to 5/11/2021	THREE	Assignment on E-R Diagrams
2	Unit -II: RDBMS	6/11/2021 to 20/11/2021	TWELVE	
2.1	RDBMS: Relational database concepts attribute, tuple, types of attributes—single, multi-valued, stored, derived etc., keys primary, index, candidate, alternate, foreign, Relationships	6/11/2021 to 11/11/2021	FOUR	Lecture case study Assignment
2.2	Relational algebra operations— UNION, INTERSECTION, DIFFERENCE, CARTESIAN PRODUCT, SELECTION, PROJECTION, JOIN, DIVISION, relational calculus, Domain, Domain integrity	12/11/2021 to 15/11/2021	FOUR	Lecture case study Assignment Quiz
2.3	Integrity rules – Entity integrity, referential integrity, Normalization and its properties, I, II and III Normal forms.	16/11/2021 to 20/11/2021	FOUR	Examples on Normalization
3	Unit – III : SQL	22/11/2021 to 11/12/2021	TWELVE	
3.1	DDL and DML in SQL: DDL commands - create table/views/index, drop, alter, DML commands - select, insert, delete, update, etc	23/11/2021 to 29/11/2021	FOUR	Lecture With examples
3.2	DCL commands – grant, revoke, commit, TCL commands, SQL – query, sub-query, nested query, Joins – natural, inner, outer join	01/12/2021 to 6/12/2021	FOUR	Lecture with Examples
3.3	Aggregate functions in SQL. PL / SQL: Introduction, Exceptions & Cursor Management, Database Triggers, Functions,	7/12/2021 to 11/12/2021	FOUR	Lab set Demo.
	Unit-IV:SOFTWARE ENGINEERING	12/12/2021 to 26/12/2021	TWELVE	
	Software and Software Engineering: Defining Software, Software Application Domains, Software Engineering, Software Process, Software Engineering Practice, Software Myths Understanding	12/12/2021 to 15/12/2021	FOUR	Lecture case study

4.2	Process Models: A Generic Process Model, Process Assessment and Improvement, Prescriptive Process Models, Specialized Process Models, Agile Development: Agility, Agility and the cost of change,	16/12/2021 to 19/12/2021	FOUR	Lecture case study
4.3	Agile Process, Extreme Programming, Other Agile Process Models Requirements: Requirements Engineering,	20/12/2021	FOUR	Lecture
	Establishing the Groundwork, Eliciting Requirements, Developing the use cases, Building the Requirements Model, Negotiating Requirements, Validating Requirements.	to 26/12/2021		
4.4	DBMS LAB			Practical Lab

Date of Submission! October 2021

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VIVERANANDA DEGREE COLLEGE BENGALURU-55

### Vivekananda Degree College Department of Computer Science Lesson Plan, 2021-2022

Course: CS V: JAVA PROGRAMMING

Total Teaching Hours: 52 No of Hours / Week: 03

Faculty Member: Sumathi.G.K

Objectives of the Course:

To equip the students to have the glimpses of fundamentals of java programming. The course starts with basics and then discusses every keyword in the java language. It concludes with some of advanced features such as multithreaded programming, exception handling and applets.

Module	Course Description	Duration From To	Taught Hours	Teaching Methods
1	Unit – I: Introduction to JAVA:		TWELVE	
1.1	JAVA Evolution: Java History, Java Features, How Java Differs from C and C++, Java and Internet, Java and World Wide Web, Web Browsers, Hardware and Software Requirements, Java Support Systems, Java Environment. Overview of JAVA Language: Introduction, Simple Java program. More of Java Statements, Implementing	12/10/2021 to 16/10/2021	THREE	Demonstration on compiling and executing a simple java program.
	a Java Program, Java Virtual Machine, Command Line Arguments,			
1.2	Programming Style.  Constants, Variables, and Data Types: Introduction, Constants, Variables, Data Types, Declaration of Variables, Giving Values to Variables, Scope of Variables, Symbolic Constants, Type Casting, Getting Values of Variables, Standard Default Values, Operators and Expressions: Introduction. Arithmetic Operators, Relational Operators Logical Operators, Assignment Operators, Increment and Decrement Operators, Conditional Operators, Bitwise Operators, Special Operators, Arithmetic Expressions, Evaluation of Expressions, Precedence of Arithmetic Operators	18/10/2021 to 23/10/2021	THREE	Case study on OOPL
1.3	Type Conversion and Associativity. Mathematical Functions. Decision Making and Branching: Introduction, Decision Making with if Statement, Simple if Statement, The ifelse Statement, Nesting of ifElse Statements, The else if Ladder,	25/10/2021 to 30/10/2021	THREE	Assignment on if else constructs

1.4 Th	ha Caria I G	and the country between the strict and an account of the strict and the strict an	THREE	Assignment on
1.4   11 D	he Switch Statement, The ?: Operator.	1/11/202	Hilking	looping
	ntroduction. The while Statement, The	6/11/2021		constructs
do	Statement, The for Statement, Jumps			
in	Loops Labeled Loops.			and the second
2	Unit -11: Classes	tal i comme que de la primi para como control descripción de se control de la companya de la companya de la co	TEN	
1 0	and a place of the control of the co	2001 (2021	THREE	Lecture
.1   C	lasses, Arrays, Strings and Vectors: lasses, Objects and Methods	08/11/2021	111111	case study
		to 13/11/2021		Assignment
V	ntroduction, Defining a Class, Adding	13/11/2021		
O	ariables, Adding Methods, Creating Objects, Accessing Class Members,			
C	onstructors, Methods Overloading,			
St	tatic Members, Nesting of Methods			
.2	nheritance: Extending a Class	15/11/2021	THREE	Lecture
	Overriding Methods, Final Variables	to		case study
	nd Methods, Finalizer methods,	20/11/2021		Assignment
	abstract Methods and Classes, Visibility	20/11/20		Quiz
	Control. Arrays.			
	trings and Vectors: Arrays, One-	22/11/2021	FOUR	Demonstration
	imensional Arrays, Creating an Array,	to		on Strings.
	wo -Dimensional Arrays, Creating an	27/11/2021		
	array, Two – dimensional Arrays,			
	strings, Vectors, Wrapper Classes			
	Jnit – III : Interfaces, Packages		TEN	
1	nterfaces, Packages, and Multithreaded	29/11/2021	THREE	Lecture
	Programming: Interfaces: Multiple	to		case study
1	nheritance: Introduction. Defining	04/12/2021		Interfaces.
Ir	nterfaces, Extending Interfaces			
		06/12/2021	THREE	
		to		on Packages
	Packages, Using System Packages.			
	Naming Conventions, Creating			
P	Packages, Accessing a Package, Using a			
P	Package		POVIE	
			FOUR	
1				on compiling and
1				executing a Mult
E	Extending the Thread Class, Stopping			threaded
a	and Blocking a thread, Life Cycle of a			application.
		1		
	Runnable' Interface.			
ı	Unit – IV: Exceptions		TEN	
4.1	Managing Exceptions, Applet	20/12/2021	THREE	Lecture
	Programming: Managing Errors and	to		case study
	Exception: Introduction, Types of			
	Exception Handling Code, Multiple			
	Catch Statements, Using Finally			
		경기를 맞게 되었다. 점점 400 시간을 시간 시간 이렇게 200 다.		일어지 않아야 되었다면 얼마를 보고 있다.
3.2 In In C P P P P P P P P P P P P P P P P P P	Interface Variables. Packages: Putting Classes together: Introduction, Java API Packages, Using System Packages. Naming Conventions, Creating Packages, Accessing a Package, Using a Package Adding a Class to a Package, Hiding Classes. Multithreaded Programming: Introduction Creating Threads, Extending the Thread Class, Stopping and Blocking a thread, Life Cycle of a thread, Using Thread Methods, Thread Exceptions, Thread Priority, Synchronization, Implementing the Runnable' Interface.  Unit – IV: Exceptions  Managing Exceptions, Applet Programming: Managing Errors and Exception: Introduction, Types of Exception Handling Code, Multiple	to 11/12/2021  13/12/2021 to 18/12/2021 to 25/12/2021	100	executing a Nathreaded application.

4.2	Throwing O		and the second	Lecture
1.2	Throwing Our Own Exceptions, Using Exceptions for Debugging	27/12/2021	THREE	case study
	Debugging Applet	to 1/1/2022		case stooy
	B. IIIIIOmetion Have			
	Applets Differ from Applications			
	Preparing to Write Applets, Building Applet Code, Applet Life Cycle,			
	Creating an Executable applet  Designificant Code, Applet Life Cycle,			the state of the s
4.3	Designing a Web Page, Applet Tag,	3/1/2022 to	FOUR	Demonstration
	Adding Applet to HTML File, running	8/1/2022		on compiling and
	the Applet, More About HTML Tags,	8/1/2022		executing an
	Displaying Numerical Values, Getting			applet
	Input from the User.			
5	Unit - V: Graphics Programming			Demonstration
5.1	Graphics Programming, Input/output:	10/1/2022 to	THREE	on compiling and
	Graphics programming: Introduction,	15/1/2022		
	The Graphics Class, Lines and	13,11		executing
	rectangles, circles, and Ellipses,			Graphics in
	Drawing Arcs, Drawing Polygons, Lines			applets
	Graphs		T. E.E.	Lecture
5.2	Using Control Loops in Applets,	17/1/2022 to	THREE	case study
0,2	Drawing Bar Charts. Managing	22/1/2022		Case see
	Input/output Files in JAVA:			
	Introduction, Concept of Streams,			
	Stream Classes, Byte Stream Classes,			
	Character Stream Classes, Using			
	Streams.	- 1/1/2022 1	FOUR	Live Applets
5.3	Other Useful I/O Classes, Using the File	24/1/2022 to	FOOR	Case Study
J	Class, Input / Output Exceptions,	29/1/2022		Case Staa,
	Creation of Files, Reading / Writing			
	Characters, Reading / Writing Bytes,			
	T			
	Thinding			
	Collegionaling and Barrers			
	Interactive Input and output, Other			
	Stream Classes.	,		

Date of Submission: October 2021

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VIVERANANDA DEGREE COLLEGE BENGALURU-55

## Vivekananda Degree College Rajajinagar, Bangalore-55

# Lesson Plan, October 2021

Taught Course: Paper V CS5T2: Visual Programming: Bsc. V Semester

## Objectives of the Course:

To equip the students to have the glimpses of Event driven programming and object oriented programming. To make students understand the standard way of Writing VB program and programming in VC++. Giving basic training in Visual studio.

Module	Course Description	Duration	Taught	Teaching
	UNIT I	From To	Hours	Methods
1	Introduction to Visual p		Thirteen	The same of the sa
-	Introduction to Visual Programming:  The integrated Development  Environment – menu bar, tool bar, from designer, project explorer, properties window, from layout window,  The form object explorer	12-Oct-21 to 15-Oct-21	TWO	Lecture
1.1	The form object: Properties, events and methods pf forms; Properties – Name, Captain, Backcolor, Borderstyle, controlbox, maxbutton, minbutton, moveable, startup position, height, width, left, top, scalemode, window, state;.	16-Oct-21 to 20-Oct-21	THREE	Lecture & Practical Demo
1.2	Events -load, unload, Clerk, Activate, Deactivate, Resize, methods - Show, hide, cls, Unload, print, Controls - Properties and events of different controls such as command buttons, labels, textboxes image controls, timer, horizontal and vertical scroll bars, option buttons, check boxes, frames lists and combo boxes	21-Oct-21 to 23-Oct-21	FIVE	Lecture & Practical Demo
1.3	Predefined Dialog Boxes – MsgBox and InputBO	24-Oct-21 to 29-Oct-21	THREE	Lecture & Practical Demo
2	UNIT II		THIRTEEN	
	Programming: Data types, variables; declaration and scope arithmetic operations	30-Oct-21 to 5-Nov-21	TWO	Lecture

2.2	Study of form and code modules, private	06-Nov-21 to	TWO	Lecture & Practical
	and public procedures, Main procedure, Sub and Functions	11-Nov-21		Demo
2.3	Mathematical and string Functions;	12-Nov-21 to	TWO	Lecture &
	and string runctions;	15-Nov-21		Practical Demo
		13.110		Demo
2.4	Branching and I	77 17 - 21 40	THREE	Lecture &
2.4	Branching and Looping Statement; If – Then, if –Then –Else and Nested If	16-Nov-21 to 21-Nov-21	111111111111111111111111111111111111111	Practical
	Statements; Select Case –different forms;	21-1404-21		Demo
	For – Next, While – Wend and Do –			
	Loops statements;			Lecture &
2.5	Arrays- declaration. Static and dynamic	22-Nov-21 to	TWO	Practical
	arrays. Array Function, menus and	27-Nov-21		Demo
	toolbars-Creating menus and toolbars			
2.5	Working with the menu editor,	28-Nov-21 to	TWO	Lecture &
2.3	Designing Multiple Document interface	30-Nov-21		Practical Demo
	forms. Microsoft common controls			50,110
			THIRTEEN	
3	UNIT III	01-Dec-21 to	THREE	Lecture &
3.1	OOP methods and properties of an	01-Dec-21 to 05 – Dec- 21	111122	Practical
	object, class Modules, Encapsulation and	05 – Dec- 21		Demo
	Inheritance characteristics			Lecture &
2.2	Dynamic Link Libraries (DLLs) and	06-Dec-21 to	THREE	Practical
3.2	Windows API. Designing Help files;	11 – Dec- 21		Demo
		21.45	THREE	Lecture &
3.3	File handling - Sequential ,Random	12-Dec-21 to	THEE	Practical
J.J	access and Binary files	20 – Dec- 21		Demo
				2
	DAO and ADO	21-Dec-21 to	FOUR	Lecture & Practical
	Database connectivity – DAO and ADO			Demo
3.4	Tables and Queries, ActiveX Data			Demo
	objects.			
			THIRTEEN	
4	UNIT IV	02-Jan-22 to	TWO	Lecture
4.1	Visual C++ Programming: Objects-	08-Jan-22		
	Classes VC++Components - K	09-Jan-22 to	THREE	Lecture
1.2	Event Handling - Menus -			PROBLEM
/1 /	Dialog Boxes – Importing VBX Controls	13-3811-22		SOLVING
4.2		Į.		
4.2	_			
4.2	_			
4.2				

4.3		16-Jan-22 to 22-Jan-22	TWO	
4.4	Document View Architecture – Serialization. Interfacing Other Applications	23-Jan-22 to 29-Jan-22	THREE	
4.5	Multiple Document Interface (MDI) – Splitter Windows – Exception Handling – Debugging – Object Linking and Embedding (OLE) – Database Application – DLL- ODBC	10-Feb-22	FIVE	
	Visual Programming Lab	Feb-Mar		PRACTICAL

Date of Submission: October 2021

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### Vivekananda Degree College Department of Computer Science Lesson Plan, 2021

Course: CS VII: WEB PROGRAMMING

**Total Teaching Hours: 52** No of Hours / Week: 03

Faculty Member: Sumathi.G.K

Objectives of the Course:

To equip the students to code web programs, The course describes history of Internet, web, XHTML including CSS, advanced JavaScript, DHTML and XML.

Module	Course Description	Duration From To	Taught Hours	Teaching Methods
1	Unit – I: Fundamentals of Web:		TWELVE	Demonstration of
1.1	Internet: History of Internet, uses of Internet, protocols. WWW: Web Browsers, and Web Servers	3/05/2021 to 8/05/2021	THREE	how websites work.
1.2	URLs, MIME, HTTP, Security, The Web Programmers Toolbox.	10/05/2021 to 15/05/2021	THREE	Case study on MIME
1.3	XHTML: Origins and evolution of HTML and XHTML, Basic syntax,	17/05/2021 to 22/05/2021	THREE	Assignment on web sites.
1.4	Standard XHTML document structure, Basic text markup, Images, Hypertext Links, Lists, Tables.	24/05/2021 to 29/05/202		Assignment on tags.
2	Unit -II: HTML and XHTML:		TEN	
2.1	Forms, Frames in HTML and XHTML, Syntactic differences between HTML and XHTML.	31/05/202 to 5/06/20	1	Demonstration on tags.
2.2	CSS: Introduction, Levels of styl sheets, Style specification formats, For properties, List properties, Colo Selector forms.	r,   12/06/20	)21	on CSS
2.3	Property value forms, Alignment of tex The Box model, Background image tags, Conflict resolution.	tt, 14/06/20 es to 19/06/2		Demonstration on BOX mode

3	Unit – III : Java Script:  Overview			
3.1	Overview of low	tain standa asa ang asa galagana magati naka nawilikon diginaka	The desired producting places in the most part of the side (the most production).	the property of the state of th
	Orientation OI JavaScring		TEN	and the second s
	between Java and JavaScript; Object General Syntaxic Object  General Syntaxic	21/06/2021 to	THREE	
3.2		to 26/06/2021		
	Primitives of mactic characteristics	28/06/2021	THREE	Demonstration
	Screen output and expressione	to		on control
	Screen output and keyboard input;	03/07/2021		on control statements.
		, sai V kir 1		samements.
3.3	Object creation and Modification	Stiffment mode and are not		
Transport	Arrays: Functions: and Modification:	05/07/2021	FOUR	Demonstration
	matching using expressions; Errors in scripts; Examples	to		on executing
or desirable	scripts; Examples in	10/07/2021		javascript.
4	Unit - IV: Java Script and UTMI		CENET IN	
	2 ocuments.	1	TEN	
4.1	The JavaScript execution environment;	12/07/2021	THREE	Demonstration
	The Boeument Object Model: Flomant	to	LINEL	on Element
	access in JavaScript;	17/07/2021		
	i i	1,,0112021	-	access in
4.2	Events and event 1			JavaScript
1.4	Events and event handling; Handling events from the Body elements. Parts	19/07/2021	1 THREE	Demonstration
	events from the Body elements, Button elements. Text box and Bossward	to		on Events and
	elements, Text box and Password elements;	24/07/202		event handling.
4.3	The DOM 2 event model; The		21 FOUR	Demonstration
	navigator object; DOM tree traversal			on DOM
	and modification.	31/07/202	21	
5	Unit - V: Dynamic Documents with		TEN	
	JavaScript			
5.1	Introduction to dynamic documents;	; 02/08/202	21 THREE	E Demonstration
	Positioning elements; Moving elements;	s; to		on Moving
	Element visibility; Changing colors and		21	elements;
	fonts;			Element
				visibility;
				Changing colors
				and fonts
5.2	Dynamia content: Steeling alements	s: 09/08/20	021 THRE	
5.2	Dynamic content; Stacking elements	, ,	lind	on Stacking
	Locating the mouse cursor; Reacting t	to to	221	
	a mouse click; Slow movement of		021	elements
	elements; Dragging and dropping			
	elements.			

5.3	XML: Introduction; Syntax; Document structure; Document Type definitions; Namespaces; XML schemas; Displaying raw XML documents; Displaying XML documents with CSS; XSLT style sheets; XML Processors; Web services.	XML Case Study
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Date of Submission: October 2021

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VIVERANANDA DEGREE COLLEC BENGALURU-55

### Vivekananda Degree College Department of Computer Science Lesson Plan 2021

Course: CS VIII: COMPUTER NETWORKS

**Total Teaching Hours: 52** No of Hours / Week: 03

Faculty Member: Prof. Aruna Nagarajan

Technology is fast evolving. Many services and applications of data communications and networking students will be have profound impact on business, manufacturing, commerce, medicine and government. Students will be able to understand the fundamental network architecture concepts and their application in existing and emerging network architecture and will have balanced view of all important concepts of networking

110.5	re and will have balanced vi			Taught	Teaching
Iodule Cou	rse Description	Duration	- 1	Hours	Methods
		1.10	Го	110	
1 Unit – I:	INTRODUCTION	27/12/20	19	HIRTEE	
1		to	1		
		13/01/20			Lecture
T duction: G	rowth of computer	27/12/20	19 7	THREE	
1.1 Introduction. Of	nplexity in network system,	to			
networking, con	Tools: Resource sharing,	29/12/2	019		
Crowth of the i	nternet, probing the internet	,			
Growin or the	ping response, tracing a				
	ping response,				
route.				THREE	Lecture
Tomoriosion	Media: Copper wires, gla	ss 30/12/2	2019	ITIKLL	
m radio	satellite (jeosynciliono	us   w			
fibers, lauto,	earth orbit satellites, Lo	ow 03/01/	2020		
satellites, low	atellite arrays, Microway	ve,			
Infrared, Light	from a laser			THREE	Lecture
	chronous Communication	ns: 04/01	/2020	ITIKLL	
1.5	the need for asynchrone	ous t	.0		
	as using electric current	10 1 00/0	/2020		
communication	andards for communicat	ion,			
send bits, sta	ning and errors, Half and	Full			
baud rate, Fran	ning and errors, riar in-	the			
duplex async	hronous communication,				Lecture &
effect of noise	on communication.	ding 09/0	1/2020	0 FOUR	
1.4 Long distant	ce Communication: Sen	dem	to		Assignment
signals acros	ss long distances, we	40	01/202	0	
1. 1	and for Modulations	itos 13/	01/202	.0	
Demodulation	, Leased analog data circ	intes,			
optical, rad	in trequency and s	ran-L			
Modems,	carrier frequencies	and			
Multiplexing,	baseband and brace	lband			
technologies,	1 4 4	vision			
1		time			
multiplexing,					
division mult	ipiexing				
				1	. 1

2	Unit -II: PACKETS, FRAMES				
	TS, FRAMES				
.1	D	16/01/2020	THIRTEE	The same of the sa	
. 1	Packets, Frames and	to	N	The same of the sa	
	Packets, Frames and Error Detection: Concept of Packets, packets and Time- division Multiplexing, Packets and Time-	31/01/2020	14		
	division Multiplexing, Packets and Time- Hardware Frames, byte Stuff	16/01/2020	Alexandra (management)		
	Hardware Frames, Packets and Time-		TWO	Lecture	
	Hardware Frames, byte Stuffing. transmission errors	to			
		18/01/2020			
2	Parity bits and Parity checking, error detecting errors with checking				
	detection Dotage Parity chook				
	detection, Detecting errors with checksums, frame formats and error detecting errors, mechanism	19/01/2020	TWO	Lecture	
	frame forms with CRC p. checksums,	to	1 440	recture	
	and and errors.	201011000	0		
3	inechanism. detection	20/01/202	V		
	LAN Technologies and Network Topologies: Direct point				
	Topologies: Direct point-to-point	21/01/202	0 THREE	Lecture	-
	communications, Shared Communications channels, LAN Topologies, Ed.	to		200016	1
	channels, LAN Topologies, Ethernet,	24/01/202	20		1
	Carries sense on CSM. Elnernet,	1	20		
	Collision Detection,				
	CSMA/CD. Ring To Backoff wi	h			
	Passing Solett "Opology and Toke	n			
	Passing, Self-Healing Token Passin Networks, ATM	g			
	TICTIVOTAS, ATM				
2.4	11. 1				
	Hardware addressing and Frame Ty	ne			
	identification. Specifying a recipient Lie				
	LAN hardware uses addresses to fi	ler 25/01/2	2020   THE		
	packets, format of a physical address	To		Lecture	
	broadcasting, Multicast addressi	es, 27/01/	1		
		ng, 27/01/	2020		
	identifying packet contents, frame head	ers			
	and frame format				
2.5	LAN Wiring, Physical Topology	and			
	Interface Hardware: speeds of LANs	1			
			1/2020		
	computers, Network Interface Hardy	varc,		TUDEE	
	The connection between a NIC ar			HREE Lecture	е
	network, original thick Ethernet wi		1/2020		
	connection multiplexing, thin Eth	ernet	1		
	Conficultion multiplexing, till Eth	work			
	wiring, twisted pair Ethernet, Net	OW OF R			
	interface cards and wiring sch	emes,			
	categories of wires.				
	CutoBolics of Wilder				
3	Unit - III : EXTENDING LAN	2/0	2/2020 to	THIRTEE	
13	Unit-III: EXTENDING DAM	21	1/02/2020	N	
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3.1	representation of the state of	2020 to ONE 2/2020			
3.2		/2020 to TW	VO		
3.3		2/2020 to TV /02/2020	WO		
3.4	forming a WAN, store and forward, Physical addressing in a WAN, Next-Hop forwarding, Source independence, Routing Table Computation, Shortest path	TO 5/02/2020 F	FOUR		
	routing, like-state routing, Example of MAN technologies	16/02/2020 TO 18/02/2020	TWO		
3.5	Network Characteristics: Network ownership, Network performance characteristics, Jitter.	19/02/2020			
3.6	Protocols and Layering: the need for protocols, the seven layers, Stacks: Layered Software.	TO 21/02/2020	OWT		
	Unit – IV: INTERNETWORKING	23/02/2020 to	0 THIR	RTEE	
1		13/03/2020	20	EE	
.1	Internetworking: internet architecture, A virtual Network, Layering and TCP/IP	to 25/02/202	20		
	protocols  Internet Protocol Addresses, APR	26/02/20 to	)20 TW	V	

4.3	IP Datagram's and Datagram Forwarding. IP Encapsulation, Fragmentation, and Reassembly, IPv6	28/02/2020 to 04/03/2019	FOUR
4.4	ICMP, UDP, TCP, Internet routing	05/03/2020 TO 07/03/2020	тwо
4.5	DNS, WWW, MAIL.	08/03/2020 TO 11/03/2020	TWO

Date of Submission. 27th DECEMBER 2019

Signature of HOD

Signature of Faculty Member

Signature of Principal

PRINCIPAL DEGREE

VWERANANDA DEGREE COLLEGE BENGALURU-55