# HAJEE KARUTHA ROWTHER HOWDIA COLLEGE

(An Autonomous Institution Affiliated to Madurai Kamaraj University, Madurai.) Re-Accredited with A++ Grade by NAAC (3<sup>rd</sup> Cycle) Uthamapalayam - 625 533.



# DEPARTMENT OF COMPUTER SCIENCE

# **PART IV - COMPUTER SCIENCE**

# **SYLLABUS**

# **Choice Based Credit System – CBCS**

(As per TANSCHE)

With

# **Outcome Based Education (OBE)**

(Academic Year 2023 - 2026)

#### Semester-I

Course Category	Course Code	Course Title	Hrs	CIAE	TEE	Max Marks	Credits
Part – IV	23UCSSE11	Fundamentals of Information Technology (NME)	2	25	75	100	2
	23UCSFN11	Problem Solving Techniques	2	25	75	100	2

# Semester-II

Course Category	Course Code	Course Title	Hrs	CIAE	TEE	Max Marks	Credits
Part – IV	23UCSSE21	Office Automation (NME)	2	25	75	100	2
	23UCSSE2P	Advanced Excel Lab	2	40	60	100	2

#### Semester-III

Course Category	Course Code	Course Title	Hrs	CIAE	TEE	Max Marks	Credits
Part – IV	23UCSSE31	Introduction to HTML	1	25	75	100	1
	23UCSSE32	Office Automation	2	25	75	100	2
	23UGEVS41	<b>Environmental Studies</b>	1	-	-	-	-

#### Semester-IV

Course Category	Course Code	Course Title	Hrs	CIAE	TEE	Max Marks	Credits
Part – IV	23UCSSE41	Web Designing	2	25	75	100	2
	23UCSSE42	Quantitative Aptitude	2	25	75	100	2
	23UGEVS41	Environmental Studies	1	25	75	100	2

#### Semester-V

Course Category	Course Code	Course Title	Hrs	CIAE	TEE	Max Marks	Credits
	23UGVED51	Value Education	2	25	75	100	2
Part – IV	23UCSIS51	Internship / Industrial Training	-	-	-	-	2

# Semester-VI

Course Category	Course Code	Course Title	Hrs	CIAE	TEE	Max Marks	Credits
Part - IV	2311CSSE61	PHP Programming	2	25	75	100	2
1 alt – Iv	230033101		2	23	75	100	2

_			S	S	Marks		
Course Code	Course Title	Category	Credit	Hours	CIAE	TEE	Total
23UCSSE11	FUNDAMENTALS OF INFORMATION TECHNOLOGY (NME)	NME	2	2	25	75	100

Learning Objectives								
L1	Understand basic concepts and terminology of information Te	echnolog	у.					
L2	Have a basic understanding of personal computers and their	operation	n					
L3	Be able to identify data storage and its usage							
L4	Get great knowledge of software and its functionalities							
L5	Understand about operating system and their uses							
UNIT	Contents		No. of Hours					
I	Introduction to Computers: Introduction, Definition, Characteristics of computer, Evoluti Computer, Block Diagram Of a computer, Generations of Com Classification Of Computers, Applications of Computer, Capab and limitations of computer	on of puter, ilities	6					
II	Daske computer organization.Role of I/O devices in a computer system. Input Units: Keyboard, Terminals and its types. Pointing Devices, Scanners and its types,IIVoice Recognition Systems, Vision Input System, Touch Screen, Output Units: Monitors and its types. Printers: Impact Printers and its types. Non Impact Printers and its types, Plotters, types of plotters, Sound cards, Speakers.Storage Fundamentals:							
Storage Fundamentals:         Primary Vs Secondary Storage, Data storage & retrieval methods.         III       Primary Storage: RAM ROM, PROM, EPROM, EEPROM. Secondary         Storage: Magnetic Tapes, Magnetic Disks. Cartridgetape, hard disks,         Floppy disks Optical Disks. Compact Disks. Zip Drive. Flash Drives								
IV	IVSoftware: Software and its needs, Types of S/W. System Software: Operating System, Utility Programs Programming Language: Machine Language, Assembly Language, High Level Language their advantages & disadvantages. Application S/W and its types: Word Processing Spread Sheets Presentation, Graphics, DBMS s/w							
V         Operating System: Functions, Measuring System Performance, Assemblers, Compilers and Interpreters. Batch Processing, Multiprogramming, Multi Tasking, Multiprocessing, Time Sharing, DOS, Windows, Unix/Linux.								
Course Outcomes Knowle								
СО	On completion of this course, students will		0					

1	Learn the basics of computer, Construct the structure of	K1,K2,K3,K4					
	the required things incomputer, learn how to use it.	, , ,					
2	Develop organizational structure using for the devices	K1 K2 K3 K4 K5 K6					
2	present currently underinput or output unit.	K1,K2,K3,K4,K3,K0					
	Concept of storing data in computer using two header						
3	namely RAM and ROM with different types of ROM with	K1,K2,K3,K4,K5,K6					
	advancement in storage basis.						
4	Work with different software, Write program in the						
4	software and applications of software.	K1,K2,K3,K4,K5,Kt					
-	Usage of Operating system in information technology which						
5	really acts as ainterpreter between software and hardware.	K1,KZ,K3,K4,K5					
	Textbooks						
1	Anoop Mathew, S. KavithaMurugeshan (2009), " Fundamer	ntal of					
1.	InformationTechnology", Majestic Books.						
2	Alexis Leon, Mathews Leon," Fundamental of Information Technology", 2 <sup>nd</sup>						
۷.	Edition.						
3.	S. K Bansal, "Fundamental of Information Technology".						
	<b>Reference Books</b>						
1.	BhardwajSushilPuneet Kumar, "Fundamental of Information '	Technology"					
2.	GG WILKINSON, "Fundamentals of Information Technology",	Wiley-Blackwell					
3.	A Ravichandran, "Fundamentals of Information Technology	", Khanna					
	Web Resources						
1	https://testbook.com/learn/computer-fundamentals						
	https://www.tutorialsmate.com/2020/04/computer-fundam	nentals-					
2.	tutorial.html						
3.	https://www.javatpoint.com/computer-fundamentals-tutori	al					
4.	https://www.tutorialspoint.com/computer_fundamentals/in	idex.htm					
5.	https://www.nios.ac.in/media/documents/sec229new/Less	on1.pdf					

CO /PO		PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1		3	3	3	3	3	3
CO 2		3	3	3	3	3	3
CO 3		3	3	3	3	3	3
CO 4		3	3	3	3	2	3
CO 5		3	3	2	3	3	2
Strong_2	Modiu	m_? I	ow-1				

Strong-3 Medium-2 Low-1

#### Level of Correlation between PSO's and CO's

CO /PSO		<b>PSO 1</b>	PSO 2	PSO 3	PSO 4	<b>PSO 5</b>	<b>PSO 6</b>
CO 1		3	3	3	3	3	3
CO 2		3	3	3	3	3	3
CO 3		3	3	3	3	3	3
CO 4		3	3	3	3	2	3
CO 5		3	3	2	3	3	2
Strong-3	Mediu	m-2	Low-1				

			Credits	Hours	Marks		
Course Code	Course Title	Category			CIAE	TEE	Total
23UCSFN11	PROBLEM SOLVING TECHNIQUES	FC	2	2	25	75	100

	Learning Objectives	
L1	Familiarize with writing of algorithms, fundamentals of C and phyroblem solving.	ilosophy of
L2	Implement different programming constructs and decomposition of into functions.	of problems
L3	Use data flow diagram, Pseudo code to implement solutions.	
L4	Define and use of arrays with simple applications	
L5	Understand about operating system and their uses	
UNIT	Contents	No. of Hours
I	<ul> <li>Introduction: History, characteristics and limitations of Computer. Hardware/Anatomy of Computer: CPU, Memory, Secondary storage devices, Input Devices and Output devices. Types of Computers: PC, Workstation, Minicomputer, Main frame and Supercomputer.</li> <li>Software: System software and Application software. Programming Languages: Machine language, Assembly language, High- level language, 4 GL and 5GL-Features of good programming language. Translators: Interpreters and Compilers.</li> </ul>	6
II	<b>Data:</b> Data types, Input, Processing of data, Arithmetic Operators, Hierarchy of operations and Output. Different phases in Program Development Cycle (PDC). Structured Programming: Algorithm: Features of good algorithm, Benefits and drawbacks of algorithm. <b>Flowcharts:</b> Advantages and limitations of flowcharts, when to use flowcharts, flowchart symbols and types of flowcharts. Pseudocode: Writing a pseudocode. Coding, documenting and testing a program: Comment lines and types of errors. Program design: Modular Programming.	6
III	Selection Structures: Relational and Logical Operators - Selecting from Several Alternatives – Applications of Selection Structures. Repetition Structures: Counter Controlled Loops –Nested Loops– Applications of Repetition Structures.	6
IV	<b>Data:</b> Numeric Data and Character Based Data. <b>Arrays:</b> One Dimensional Array - Two Dimensional Arrays – Strings as Arrays of Characters.	6
v	Data Flow Diagrams: Definition, DFD symbols and types of DFDs.ProgramModules: Subprograms-Value and Referenceparameters-Scope of a variable - Functions – Recursion.Files:File Basics-Creating and reading a sequential file-	6

	Sequential Files.		
	Total		30
	Course Outcomes	Knowl	edge Level
CO	On completion of this course, students will		
1	Study the basic knowledge of Computers.Analyse the programming languages.	K1,K	C2,K3,K4
2	Study the data types and arithmetic operations. Know about the algorithms. Develop program using flow chart and pseudocode.	K1,K2,K	X3,K4,K5,K6
3	Determine the various operators. Explain about the structures.Illustrate the concept of Loops	K1,K2,K	3,K4,K5,K6
4	Study about Numeric data and character-based data. Analyze about Arrays.	K1,K2,K	3,K4,K5,K6
5	Explain about DFD Illustrate program modules. Creating and reading Files	K1,K2	,K3,K4,K5
	Textbooks		
1.	<b>Stewart Venit,</b> "Introduction to Programming: Conc Fourth Edition,2010, Dream Tech Publishers.	epts and	d Design",
	Web Resources		
1.	https://www.codesansar.com/computer-basics/problem- computer.htm	solving-u	sing-
2.	http://www.nptel.iitm.ac.in/video.php?subjectId=106102	067	
3.	http://utubersity.com/?page_id=876		

CO /PO	P01	P02	PO3	P04	P05
C01	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	2	3	3	3
CO4	3	3	2	3	3
C Chroma 2 Madium 2	Larve 1				

S Strong-3 Medium-2 Low-1

# Level of Correlation between PSO's and CO's

3	2			
5	3	3	3	3
3	3	3	3	3
3	2	3	3	3
3	3	2	3	3
3	3	3	3	2
	3 3 3 3	3     3       3     2       3     3       3     3	3       3       3         3       2       3         3       3       2         3       3       2         3       3       3	3       3       3       3         3       2       3       3         3       3       2       3         3       3       2       3         3       3       3       3

			S	5		Mark	S
Course Code	Course Title	Category	Credit	noH	CIAE	TEE	Total
23UCSSE21	<b>OFFICE AUTOMATION (NME)</b>	NME	2	2	25	75	100

	Learning Objectives				
L1	Understand the basics of computer systems and its com	ponents.			
L2	Understand and apply the basic concepts of a word processing package.				
L3	Understand and apply the basic concepts of electronic s	preadsheet	software.		
L4	Understand and apply the basic concepts of database m	anagement	system.		
L5	Understand and create a presentation using PowerPoin	t tool.			
UNIT	Contents		No. of Hours		
I	<b>Introductory concepts:</b> Memory unit– CPU-Input Dev board, Mouse and Scanner. Output devices: Monitor Introduction to Operating systems & its features: DO Windows. Introduction to Programming Languages.	vices: Key r, Printer. S– UNIX–	6		
II	<b>Word Processing:</b> Open, Save and close word d Editingtext – tools, formatting, bullets; Spell Checker - I formatting – Paragraph alignment, indentation, hea footers, numbering; printing–Preview ,options, merge.	locument; Document iders and	6		
III	<b>Spreadsheets:</b> Excel– opening, entering text and data, formatting, navigating; Formulas– entering, handling and copying; Charts–creating, formatting and printing, analysis tables, preparation of financial statements, introduction to data analytics				
IV	<b>Database Concepts:</b> The concept of data base management system; Data field, records, and files, Sorting and indexing data; Searching records. Designing queries, and reports; Linking of datafiles; Understanding Programming environment in DBMS; Developing menu drive applications inquiry language(MS-				
V	VPower point: Introduction to Power point - Features - Understanding slide typecasting &viewing slides - creating slide shows. Applying special object - including objects & pictures- Slide transition-Animation effects, audio inclusion, timers.				
	Total		30		
<u> </u>	Lourse Uutcomes	Knowl	eage Level		
	Possess the knowledge on the basics of computers and				
1	its components	K1,K	C2,K3,K4		
2	Gain knowledge on Creating Documents, spreadsheet and presentation.	K1,K2,K3,K4,K5,K6			
3	Learn the concepts of Database and implement the Query in Database.	K1,K2,K	X3,K4,K5,K6		
4	Demonstrate the understanding of different automation tools.	K1,K2,K	X3,K4,K5,K6		

5	Utilize the automation tools for documentation, calculation and presentation purpose.	K1,K2,K3,K4,K5			
Textbooks					
1.	1. PeterNorton, "IntroductiontoComputers" – TataMcGraw-Hill.				
Reference Books					
1.	Jennifer Ackerman Kettel, Guy Hat-Davis, Curt Simmo TataMcGrawHill.	ons, "Microsoft 2003",			
Web Resources					
1. https://www.udemy.com/course/office-automation-certificate-course/					
2.	https://www.javatpoint.com/automation-tools				

CO /PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	3	2	2	3	3	3
CO 2	3	3	3	3	3	3
CO 3	3	3	3	3	3	3
CO 4	3	3	3	3	3	3
CO 5	3	3	3	3	3	3

Strong-3 Medium-2 Low-1

#### Level of Correlation between PSO's and CO's

CO /PSO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	3	2	2	3	3	3
CO 2	3	3	3	3	3	3
CO 3	3	3	3	3	3	3
CO 4	3	3	3	3	3	3
CO 5	3	3	3	3	3	3
Chrone 2 Mediu		( a 1				

			S	s	Marks			
Course Code	Course Title	Category	Credit	Hour	CIAE	TEE	Total	
23UCSSE2P	ADVANCED EXCEL LAB	SEC	2	2	40	60	100	

	Learning Objectives	
L1	Handle large amounts of data	
L2	Aggregate numeric data and summarize into categories and subcate	egories
L3	Filtering, sorting, and grouping data or subsets of data	
L4	Create pivot tables to consolidate data from multiple files	
L5	Presenting data in the form of charts and graphs	
UNIT	Contents	No. of Hours
I	Basics of Excel- Customizing common options- Absolute and relative cells- Protecting and un-protecting worksheets and cells- Working with Functions - Writing conditional expressions - logical functions - lookup and reference functions- VlookUP with Exact Match, Approximate Match- Nested VlookUP with Exact Match- VlookUP with Tables, Dynamic Ranges- Nested VlookUP with Exact Match- Using VLookUP to consolidate Data from MultipleSheets	6
II	Data Validations - Specifying a valid range of values - Specifying a list of valid values- Specifying custom validations based on formula - Working with Templates Designing the structure of a template- templates for standardization of worksheets - Sorting and Filtering Data - Sorting tables- multiple-level sorting- custom sorting- Filtering data for selected view - advanced filter options- Working with Reports Creating subtotals- Multiple-level subtotal.	6
III	Creating Pivot tables Formatting and customizing Pivot tables- advanced options of Pivot tables- Pivot charts- Consolidating data from multiple sheets and files using Pivot tables- external data sources- data consolidation feature to consolidate data- Show Value As % of Row, % of Column, Running Total, Compare with Specific Field- Viewing Subtotal under Pivot- Creating Slicers.	6
IV	More Functions Date and time functions- Text functions- Database functions- Power Functions - Formatting Using auto formatting option for worksheets- Using conditional formatting option for rows, columns and cells- What If Analysis - Goal Seek- Data Tables- Scenario Manager.	6
V	Charts - Formatting Charts- 3D Graphs- Bar and Line Chart together- Secondary Axis in Graphs- Sharing Charts with PowerPoint / MS Word, Dynamically- New Features Of Excel Spark lines, Inline Charts, data Charts- Overview of all the new features.	6
	Total	30

	Knowledge Level			
CO	On completion of this course, students will			
1	Work with big data tools and its analysis techniques.	K1,K2,K3,K4		
2	Analyze data by utilizing clustering and classification algorithms.	K1,K2,K3,K4,K5,K6		
3	Learn and apply different mining algorithms and recommendation systems for large volumes of data.	K1,K2,K3,K4,K5,K6		
4	Perform analytics on data streams.	K1,K2,K3,K4,K5,K6		
5	Learn No-SQL databases and management.	K1,K2,K3,K4,K5		
Textbooks				
1.	Excel 2019 All			
2.	Microsoft Excel 2019 Pivot Table Data Crunching			
	Reference Books			
1.	Excel 2019 All-in-One for Dummies, Greg Harvey, 1st edition			
Web Resources				
1.	https://www.simplilearn.com			
2.	https://www.javatpoint.com			
3.	https://www.w3schools.com			

СО /РО	P01	P02	PO3	P04	P05
C01	3	3	3	3	3
CO2	3	3	1	2	3
CO3	3	3	3	2	3
CO4	3	3	3	2	3
CO5	3	2	3	3	3
CL	I. 4				

Strong-3 Medium-2 Low-1

#### Level of Correlation between PSO's and CO's

CO /PSO	PSO1	PSO2	PSO3	PSO4	PSO5
C01	3	3	3	3	3
CO2	3	3	1	2	3
CO3	3	3	3	2	3
CO4	3	3	3	2	3
C05	3	2	3	3	3

			s		Marks		
Course Code	Course Title	Category	Credit	Hours	CIAE	TEE	Total
23UCSSE31	INTRODUCTION TO HTML	SEC	1	1	25	75	100

	Learning Objectives			
L1	Insert a graphic within a web page.			
L2	Create a link within a web page.			
L3	Create a table within a web page.			
L4	Insert heading levels within a web page.			
L5	Insert ordered and unordered lists within a web page. Crea	te a web	page.	
UNIT	Contents		No. of Hours	
Ι	<b>Introduction:</b> Web Basics: What is Internet–Web browsen is Webpage –HTML Basics: Understanding tags.	rs–What	6	
II	<b>Tags for Document structure (HTML, Head, Body Tag)</b> <b>level text elements:</b> Headings paragraph ( tag) –Fo elements: (bold, italic, font, small, strong, strike, big tags)	<b>). Block</b> ont style	6	
III	Lists: Types of lists: Ordered, Unordered – Nesting Lists tags : Marquee, HR, BR-Using Images – Creating Hyperlinks	– Other	6	
IV	<b>Tables:</b> Creating basic Table, Table elements, Caption – Table and cell alignment–Rowspan, Colspan – Cellpadding.			
V	VFrames : Frameset – Targeted Links – Noframe – Forms : Input, Text area, Select, Option.			
	Total		30	
		1		
	Course Outcomes	Knowle	edge Level	
СО	Course Outcomes On completion of this course, students will	Knowle	edge Level	
<b>CO</b>	Course OutcomesOn completion of this course, students willKnows the basic concept in HTML Concept of resourcesin HTML	Knowle K1,K	edge Level	
<b>CO</b> 1 2	Course OutcomesOn completion of this course, students willKnows the basic concept in HTML Concept of resourcesin HTMLKnows Design concept. Concept of Meta Data Understandthe concept of save the files.	Knowle K1,K K1,K2,K	edge Level 2,K3,K4 3,K4,K5,K6	
CO 1 2 3	Course OutcomesOn completion of this course, students willKnows the basic concept in HTML Concept of resourcesin HTMLKnows Design concept. Concept of Meta Data Understandthe concept of save the files.Understand the page formatting. Concept of list	Knowle K1,K K1,K2,K K1,K2,K	edge Level 2,K3,K4 3,K4,K5,K6 3,K4,K5,K6	
CO 1 2 3 4	Course OutcomesOn completion of this course, students willKnows the basic concept in HTML Concept of resourcesin HTMLKnows Design concept. Concept of Meta Data Understandthe concept of save the files.Understand the page formatting. Concept of listCreating Links. Know the concept of creating link to emailaddress	Knowle K1,K K1,K2,K K1,K2,K K1,K2,K	edge Level 2,K3,K4 3,K4,K5,K6 3,K4,K5,K6 3,K4,K5,K6	
CO 1 2 3 4 5	Course OutcomesOn completion of this course, students willKnows the basic concept in HTML Concept of resourcesin HTMLKnows Design concept. Concept of Meta Data Understandthe concept of save the files.Understand the page formatting. Concept of listCreating Links. Know the concept of creating link to emailaddressConcept of adding images Understand the table creation.	Knowle K1,K K1,K2,K K1,K2,K K1,K2,K K1,K2,K	edge Level 2,K3,K4 3,K4,K5,K6 3,K4,K5,K6 3,K4,K5,K6 ,K3,K4,K5	
CO 1 2 3 4 5	Course OutcomesOn completion of this course, students willKnows the basic concept in HTML Concept of resourcesin HTMLKnows Design concept. Concept of Meta Data Understandthe concept of save the files.Understand the page formatting. Concept of listCreating Links. Know the concept of creating link to emailaddressConcept of adding images Understand the table creation.Textbooks	Knowle K1,K K1,K2,K K1,K2,K K1,K2,K K1,K2,K	edge Level 2,K3,K4 3,K4,K5,K6 3,K4,K5,K6 3,K4,K5,K6 ,K3,K4,K5	
CO 1 2 3 4 5 1.	Course OutcomesOn completion of this course, students willKnows the basic concept in HTML Concept of resourcesin HTMLKnows Design concept. Concept of Meta Data Understandthe concept of save the files.Understand the page formatting. Concept of listCreating Links. Know the concept of creating link to emailaddressConcept of adding images Understand the table creation.Textbooks"Mastering HTML5 and CSS3 Made Easy", TeachUComp Inc	Knowle K1,K K1,K2,K K1,K2,K K1,K2,K K1,K2,K	edge Level 2,K3,K4 3,K4,K5,K6 3,K4,K5,K6 3,K4,K5,K6 ,K3,K4,K5	
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CO 1 2 3 4 5 1. 2.	Course OutcomesOn completion of this course, students willKnows the basic concept in HTML Concept of resourcesin HTMLKnows Design concept. Concept of Meta Data Understandthe concept of save the files.Understand the page formatting. Concept of listCreating Links. Know the concept of creating link to emailaddressConcept of adding images Understand the table creation.Textbooks"Mastering HTML5 and CSS3 Made Easy", TeachUComp IncThomas Michaud, "Foundations of Web Design: IntroductioReference Books	Knowld K1,K K1,K2,K K1,K2,K K1,K2,K K1,K2,K ., 2014. on to HTM	edge Level 2,K3,K4 3,K4,K5,K6 3,K4,K5,K6 3,K4,K5,K6 ,K3,K4,K5 IL & CSS"	
CO 1 2 3 4 5 1. 2. 1. 2.	Course Outcomes         On completion of this course, students will         Knows the basic concept in HTML Concept of resources in HTML         Knows Design concept. Concept of Meta Data Understand the concept of save the files.         Understand the page formatting. Concept of list         Creating Links. Know the concept of creating link to email address         Concept of adding images Understand the table creation.         Textbooks         "Mastering HTML5 and CSS3 Made Easy", TeachUComp Inc         Thomas Michaud, "Foundations of Web Design: Introductio         Reference Books         Chuck Musciano Bill Kennedy, HTML & XHTML: The Define         October 24, 2006, 6th Edition.	Knowld K1,K K1,K2,K K1,K2,K K1,K2,K K1,K2,K ., 2014. on to HTM itive Guid	edge Level 2,K3,K4 3,K4,K5,K6 3,K4,K5,K6 3,K4,K5,K6 ,K3,K4,K5 IL & CSS"	
CO 1 2 3 4 5 1. 2. 1. 2.	Course Outcomes         On completion of this course, students will         Knows the basic concept in HTML Concept of resources in HTML         Knows Design concept. Concept of Meta Data Understand the concept of save the files.         Understand the page formatting. Concept of list         Creating Links. Know the concept of creating link to email address         Concept of adding images Understand the table creation.         Textbooks         "Mastering HTML5 and CSS3 Made Easy", TeachUComp Inc         Thomas Michaud, "Foundations of Web Design: Introduction         Reference Books         Chuck Musciano Bill Kennedy, HTML & XHTML: The Define         October 24, 2006, 6th Edition.         Thomas A. Powell, Web Design: The Complete Reference         2000.	Knowld K1,K K1,K2,K K1,K2,K K1,K2,K K1,K2,K , 2014. on to HTM itive Guid	edge Level 2,K3,K4 3,K4,K5,K6 3,K4,K5,K6 3,K4,K5,K6 3,K4,K5,K6 ,K3,K4,K5 IL & CSS" de, O'Reilly, w Hill, June	
CO 1 2 3 4 5 1. 2. 1. 2.	Course Outcomes         On completion of this course, students will         Knows the basic concept in HTML Concept of resources in HTML         Knows Design concept. Concept of Meta Data Understand the concept of save the files.         Understand the page formatting. Concept of list         Creating Links. Know the concept of creating link to email address         Concept of adding images Understand the table creation.         Textbooks         "Mastering HTML5 and CSS3 Made Easy", TeachUComp Inc         Thomas Michaud, "Foundations of Web Design: Introduction         Reference Books         Chuck Musciano Bill Kennedy, HTML & XHTML: The Define         October 24, 2006, 6th Edition.         Thomas A. Powell, Web Design: The Complete Reference         Web Resources	Knowle K1,K K1,K2,K K1,K2,K K1,K2,K K1,K2,K , 2014. on to HTM <i>itive Guid</i>	edge Level 2,K3,K4 3,K4,K5,K6 3,K4,K5,K6 3,K4,K5,K6 3,K4,K5,K6 ,K3,K4,K5 IL & CSS" de, O'Reilly, w Hill, June	

	CSS3.pdf
2.	https://www.w3schools.com/html/default.asp

CO /PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	3	3	3	3	3	3
CO 2	3	3	2	3	3	3
CO 3	2	3	3	3	3	3
CO 4	3	3	3	3	3	3
CO 5	3	3	3	2	3	3
Strong 2 Modium	2 Io					

Strong-3 Medium-2 Low-1

# Level of Correlation between PSO's and CO's

CO /PSO	PSO1	PSO2	PSO3	PSO4	PSO5
C01	3	3	3	3	3
CO2	3	3	2	3	3
CO3	2	3	3	3	3
CO4	3	3	3	3	3
C05	3	3	3	2	3
	T 4				

			ş	6	Marks		
Course Code	Course Title	Category	Credit	Hours	CIAE	TEE	Total
23UCSSE32	<b>OFFICE AUTOMATION</b>	SEC	2	2	25	75	100

	Learning Objectives						
L1	Understand the basics of computer systems and its components.						
L2	Understand and apply the basic concepts of a word processing package.						
L3	Understand and apply the basic concepts of electronic spreadsheet software.						
L4	Understand and apply the basic concepts of database m	anagemen	t system.				
L5	Understand and create a presentation using PowerPoin	t tool.					
UNIT	Contents		No. of Hours				
I	<b>Introductory concepts:</b> Memory unit– CPU-Input Dev board, Mouse and Scanner. Output devices: Monitor Introduction to Operating systems & its features: DOS Windows. Introduction to Programming Languages.	6					
Ш	<b>Word Processing:</b> Open, Save and close word docu Editing text – tools, formatting, bullets; Spell Cher Document formatting – Paragraph alignment, inden headers and footers ,numbering ; printing – Preview, op merge.	6					
III	<b>Spread sheets:</b> Excel–opening, entering text and formatting, navigating; Formulas–entering, handling copying; Charts–creating, formatting and printing, an tables, preparation off in ancial statements, introduct data analytics.	6					
IV	<b>Database Concepts:</b> The concept of data base manages system; Data field, records, and files, Sorting and ineed data; Searching records. Designing queries, and reclaration of data files; Understanding Programenvironment in DBMS; Developing menu drive application query language (MS-Access).	6					
v	<b>Power point:</b> Introduction to Power point - Featu Understanding slide typecasting & viewing slides – cr slide shows. Applying special object – including object pictures – Slide transition–Animation effects, audio inc timers.	6					
	30						
	Course Outcomes	Knowl	edge Level				
ίΟ	Un completion of this course, students will						
1	Possess the knowledge on the basics of computers and its components	K1,K	X2,K3,K4				
2	Gain knowledge on Creating Documents, spreadsheet and presentation.	K1,K2,K	X3,K4,K5,K6				
3	Learn the concepts of Database and implement the	e K1,K2,K3,K4,K5,K6					

	Query in Database.						
4	Demonstrate the understanding of different	K1 K2 K3 K4 K5 K6					
	automation tools.	111,112,110,111,110,110					
5	Utilize the automation tools for documentation,	K1 K2 K3 K4 K5					
5	calculation and presentation purpose.	K1,K2,K3,K <del>1</del> ,K3					
Textbooks							
1.	Peter Norton, "Introduction to Computers"–Tata McGraw-Hill.						
	<b>Reference Books</b>						
1	Jennifer Ackerman Kettel, Guy Hat-Davis, Curt Simmons, "Microsoft 2003",						
1.	Tata McGrawHill.						
Web Resources							
1.	https://www.udemy.com/course/office-automation-ce	rtificate-course/					
2.	https://www.javatpoint.com/automation-tools						

CO /PO		PO 1	PO 2	PO 3	PO 4	PO 5	P0 6
CO 1		3	2	2	3	3	3
CO 2		3	3	3	3	3	3
CO 3		3	3	3	3	3	3
<b>CO 4</b>		3	3	3	3	3	3
CO 5		3	3	3	3	3	3
Strong-3	Medium-2	2 Lo	w-1				

## Level of Correlation between PSO's and CO's

CO /PSO	PSO1	PSO2	PSO3	PSO4	PSO5
C01	3	2	2	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Strong-3 Medium-2	Low-1				

			S			Mark	S
Course Code	Course Title	Category	Credit	Hours	CIAE	TEE	Total
23UCSSE41	WEB DESIGNING	SEC	2	2	25	75	100

	Learning Objectives			
L1	Understand the basics of HTML and its components			
L2	To study about the Graphics in HTML			
L3	Understand and apply the concepts of XML and DHTML			
L4	Understand the concept of JavaScript			
L5	To identify and understand the goals and objectives of the A	jax		
UNIT	Contents		No. of Hours	
I	I HTML: HTML-Introduction-tag basics- page structure-adding comments working with texts, paragraphs and line break. Emphasizing test- heading and horizontal rules-list-font size, face and color-alignment links-tables frames			
II	Forms & Images Using Html: Graphics: Introduction-How to work efficiently with images in web pages, image maps, GIF animation, adding multimedia, data collection with html forms textbox, password, list box, combo box, text area, tools for building web page front page.6			
III	XML & DHTML: Cascading style sheet (CSS)-what is CSS-Why weuse CSS-adding CSS to your web pages-Grouping styles-extensible6markup language (XML).6			
IV	Dynamic HTML: Document object model (DCOM)-Accessing HTML & CSS through DCOM Dynamic content styles & positioning-Event bubbling-data binding. JavaScript: Client-side scripting, What is JavaScript, How to develop JavaScript, simple JavaScript, variables, functions, conditions, loops, and repetition.			
V	Advance script, JavaScript and objects, JavaScript own objects and web browser environments, forms and validations	ects, the S.	6	
	Total		30	
	Course Outcomes	Knowle	edge Level	
CO	On completion of this course, students will			
1	Develop working knowledge of HTML	K1,K	2,K3,K4	
2	Ability to Develop and publish Web pages using Hypertext Markup Language (HTML).	K1,K2,K3,K4,K5,K6		
3	Ability to optimize page styles and layout with Cascading Style Sheets (CSS).	and layout with Cascading K1,K2,K3,K4,K5,K6		
4	Ability to develop a java script K1,K2,K3,K4,K5,K6			
5	An ability to develop web application using Ajax. K1,K2,K3,K4,K5			
	Textbooks			
1.	Pankaj Sharma, "Web Technology", SkKataria& Sons Bangalo	re 2011.		
2.	Mike Mcgrath, "Java Script", Dream Tech Press 2006, 1st Edit	ion.		
3.	Achyut S Godbole & AtulKahate, "Web Technologies", 2002, 2	nd Editio	on.	

Reference Books				
1	Laura Lemay, Rafe Colburn, Jennifer Kyrnin, "Mastering HTML, CSS & Javascript			
1.	Web Publishing", 2016.			
2	DT Editorial Services (Author), "HTML 5 Black Book (Covers CSS3, JavaScript,			
Ζ.	XML, XHTML, AJAX, PHP, jQuery)", Paperback 2016, 2nd Edition.			
Web Resources				
1.	NPTEL & MOOC courses titled Web Design and Development.			
2.	https://www.geeksforgeeks.org			

CO /PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	3	2	1	2	1	2
CO 2	3	3	2	2	3	3
CO 3	3	3	2	3	3	2
CO 4	3	2	3	2	2	3
CO 5	3	2	2	2	3	3

Strong-3 Medium-2 Low-1

## Level of Correlation between PSO's and CO's

CO /PSO	PSO1	PSO2	PSO3	PSO4	PSO5
C01	3	2	1	2	1
CO2	3	3	2	2	3
CO3	3	3	2	3	3
CO4	3	2	3	2	2
CO5	3	2	2	2	3
Strong_2 Modium_2	Low-1				

			s		Marks			
Course Code	Course Title	Category	Credit	Hours	CIAE	TEE	Total	
23UCSSE42	<b>QUANTITATIVE APTITUDE</b>	SEC	2	2	25	75	100	

	Learning Objectives			
L1	To understand the basic concepts of numbers			
L2	Understand and apply the concept of percentage, profit & loss			
L3	To study the basic concepts of time and work, interests			
L4	To learn the concepts of permutation, probability, discount	S		
L5	To study about the concepts of data representation, graphs			
UNIT	Contents		No. of Hours	
I	Numbers-HCF and LCM of numbers-Decimal fractions- Simplification-Square root and cube roots - Average-proble Numbers.	ms on	6	
II	Problems on Ages - Surds and Indices - percentage - profits loss - ratio and proportion-partnership-Chain rule.	and	6	
III	Time and work - pipes and cisterns - Time and Distance - problems on trains -Boats and streams - simple interest - compound interest - Logarithms - Area-Volume and surface area - races and Games of skill.6			
IV	Permutation and combination-probability-True Discount-Bankers Discount – Height and Distances-Odd man out & Series. 6			
V	Calendar - Clocks - stocks and shares - Data representation - Tabulation – Bar Graphs- Pie charts-Line graphs.			
	Total		30	
	Course Outcomes	Knowle	edge Level	
CO	On completion of this course, students will			
1	Understand the concepts, application and the problems of numbers	K1,K	2,K3,K4	
2	To have basic knowledge and understanding about percentage, profit & loss related processings	K1,K2,K	3,K4,K5,K6	
3	To understand the concepts of time and work	K1,K2,K	3,K4,K5,K6	
4	Speaks about the concepts of probability, discount	K1,K2,K	3,K4,K5,K6	
5	Understanding the concept of problem solving involved in stocks & shares, graphs	K1,K2	,K3,K4,K5	
	Textbooks			
1 "Quantitative Aptitude",R.S.AGGARWAL.,S.Chand & Company Ltd.,				
	Reference Books			
1.	CA Foundation Quantitative Aptitude Book, Prof.Jatin Demb	ola by Ad	da 247.	
2.	CA Foundation Quantitative Aptitude Book, As per late Chauhan.	st syllab	us, Anurag	
	Web Resources			
1.	https://www.javatpoint.com/aptitude/quantitative			
2.	https://www.toppr.com/guides/guantitative-aptitude/			

CO /PO	PO 1	PO 2	PO 3	PO 4	PO 5	P0 6
CO 1	3	2	1	2	2	2
CO 2	2	3	1	3	2	2
CO 3	1	3	1	1	3	1
CO 4	1	2	1	1	3	1
CO 5	1	2	1	1	3	3

Strong-3 Medium-2 Low-1

## Level of Correlation between PSO's and CO's

CO /PSO	PSO1	PSO2	PSO3	PSO4	PSO5
C01	3	2	1	2	2
CO2	2	3	1	3	2
CO3	1	3	1	1	3
CO4	1	2	1	1	3
C05	1	2	1	1	3
Strong_? Modium_?	Low-1				

			ş	6	Marks			
Course Code	Course Title	Category	Credit	Hours	CIAE	TEE	Total	
23UCSSE61	PHP PROGRAMMING	SEC	2	2	25	75	100	

Learning Objectives				
L1	To provide the necessary knowledge on basics of PHP.			
L2	To design and develop dynamic, database-driven web applicat	tions us	ng PHP	
1.2	Version.	to ob usio		
L3	To get an experience on various web application development	technic	lues.	
L4	To learn the necessary concepts for working with the files using with the files with th	ig PHP.		
L5	To get a knowledge on OOPS with PHP.			
UNIT	Contents		No. of Hours	
Ι	Introduction to PHP -Basic Knowledge of websites -Introduct Dynamic Website -Introduction to PHP -Scope of PHP -XAMP WAMP Installation	tion of P and	6	
II	PHP Programming Basics -Syntax of PHP -Embedding PHP in HTML -Embedding HTML in PHP.Introduction to PHP Variable -Understanding Data Types -Using Operators -Using Conditional Statements -If(), else if() and else if condition Statement.			
III	Switch() Statements -Using the while() Loop -Using the for() Loop PHP Functions. PHP Functions -Creating an Array -Modifying Array Elements - Processing Arrays with Loops - Grouping Form Selections with Arrays -Using Array Functions.			
IV	PHP Advanced Concepts -Reading and Writing Files -Reading Data from a File. 6			
v	Managing Sessions and Using Session Variables -Destroy Session -Storing Data in Cookies -Setting Cookies.	ving a	6	
	Total		30	
	Course Outcomes	Knov Le	vledge evel	
СО	On completion of this course, students will			
1	Write PHP scripts to handle HTML forms	K1,K2	2,K3,K4	
2	Write regular expressions including modifiers, operators, and metacharacters.	K1,K2,K3,K4, K5,K6		
3	Create PHP Program using the concept of array. K1,K2			
4	Create PHP programs that use various PHP libraryK1,K2functionsK5		2,K3,K4, 5,K6	
5	Manipulate files and directories.     K1,K2		2,K3,K4, K5	
	Textbooks			
1.	Head First PHP & MySQL: A Brain-Friendly Guid mighley and Michael Morrison.	de- 20	09-Lynn	

2.	The Joy of PHP: A Beginner's Guide to Programming Interactive Web					
	Applications with PHP and MySQL- Alan Forbes					
Reference Books						
1.	PHP: The Complete Reference-Steven Holzner.					
2.	DT Editorial Services (Author), "HTML 5 Black Book (Covers CSS3, JavaScript,					
	XML, XHTML, AJAX, PHP, jQuery)", Paperback 2016, 2 <sup>nd</sup> Edition.					
Web Resources						
1.	Opensource digital libraries: PHP Programming					
2.	https://www.w3schools.com/php/default.asp					

CO /PO		PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8
CO 1		3	2	1	2	1	3	2	1
CO 2		3	3	2	2	3	3	3	2
CO 3		3	3	2	3	3	3	3	2
CO 4		3	2	3	2	2	3	2	3
CO 5		3	2	2	2	3	3	2	2
Strong 2	Madi		Low	1					

Strong-3 Medium-2 Low-1

#### Level of Correlation between PSO's and CO's

CO /PSO	PS01	PSO2	PSO3	PSO4	PSO5
C01	3	2	1	2	1
CO2	3	3	2	2	3
CO3	3	3	2	3	3
CO4	3	2	3	2	2
CO5	3	2	2	2	3
Ctuana 2 Madium 2	Lass 1				