Paper Code: CCCS101	Total Credit : 4
<b>Title of Paper:</b> Computer Fundamental and PC Software	Total Marks: 70
	<b>Time:</b> 3 Hrs

Unit	Description	Weighting
I	Introduction to Computer Systems and Number Systems	20%
	Block diagram of a simple computer and significance of	
	different functional units.	
	Evolution of computers	
	Definitions of the terms: hardware, software. Applications of	
	computers. Binary, octal, decimal, and hexadecimal number	
	systems Conversion of numbers among binary, octal, decimal,	
	and hexadecimal number systems. Addition and subtraction of	
	binary numbers	
II	Parallel Instruction Execution and Memory Organization	20%
	Introduction to parallel instruction execution	
	Array processors, Multiprocessors, Multiple functional units	
	Pipelining, Primary memory – Introduction to RAM, ROM,	
	Cache, Registers. Secondary memory. Various types and	
	organization of secondary storage devices such as magnetic	
	disks, optical disks, flash memories.	
III	Addressing Techniques and I/O Devices	20%
	Addressing techniques like Immediate, Direct, Indirect,	
	Register, Indexing and Stack, Common types of Input/Output	
	devices, such as Monitors, keyboard, mouse Printers (Line, Dot	
	Matrix, Inkjet, Laser ) Scanners	
IV	PC Software-I	20%
	Introduction to word processing. Examples of some popular	
	word processing packages. Uses of word processors. Creation,	
	editing, and formatting of documents. Mail merge facility in	
	word processors. Global search & replacement of text	
	Page layout and printing of a document. Spelling checker,	
	Tables, Templates, Advanced features.	
	Introduction to spreadsheets	
	Examples of some popular spreadsheet packages	
V	Uses of spreadsheet packages	20%
V	Addressing cells in a spreadsheet	20%
	Building Spreadsheets using formulas, conditional calculations, built-in functions. Graph-plotting facilities. Sorting and filtering	
	data. Using externally created data files in a spreadsheet package. What-if analysis and protection facility in spreadsheets	
	Using pivot tables. Applications of spreadsheets. Introduction to	
	presentation tools. Creating a presentation. Formatting slides	
	Slide transition and adding special effects. Inserting pictures,	
	sound, charts	
	sound, Charts	

Bas	Basic Text & Reference Books :-			
1.	1. Tanenbaum A.S.: Structured Computer Organization, Prentice-Hall of India Pvt. Ltd.			
2.	Rajaraman V.: Computer Fundamentals, Prentice-Hall of India Pvt. Ltd.			
3. Taxali R.K: PC Software for windows made simple, Tata McGraw-Hill Publishing Co. Ltd				

Paper Code: CCCS101	Total Credit : 4
<b>Title of Paper:</b> Computer Fundamental and PC Software	Total Marks: 70
	Time: 3 Hrs

Unit	Description		Total Marks
I	Q.1 (A) Answer the Following. (Definitions, Blanks, Full Forms, True/False, Match the Following)	06	14
	Q.1 (B) Medium / Long Questions. (With Internal Option)	08	
II	Q.2 (A) Answer the Following. (Definitions, Blanks, Full Forms, True/False, Match the Following)	06	14
	Q.2 (B) Medium / Long Questions. (With Internal Option)	08	
III	Q.3 (A) Short / Medium Questions (With Internal Option)	06	14
	Q.3 (B) Medium / Long Questions. (With Internal Option)	08	
IV	Q.4 (A) Short / Medium Questions (With Internal Option)	06	14
	Q.4 (B) Medium / Long Questions. (With Internal Option)	08	
V	Q.5 (A) Short / Medium Questions (With Internal Option)	06	14
	Q.5 (B) Medium / Long Questions. (With Internal Option)	08	

Paper Code: CCCS102	Total Credit: 4
<b>Title of Paper:</b> Fundamentals of Computer Programming Using C	

Unit	Description	Weighting
	Concept of Algorithm, Flowchart and Languages	
	Concept of an algorithm and a flow chart, need and definition	
I	Symbols used to draw a flow chart.	20%
	Typical (primitive) examples of flow charts and algorithms	
	Generations of computer languages. High-level and low-level	
	languages. Translators	
	Introduction to editors and details about one of the editors	
	Basics of Programming	
	Problem analysis.	
II	Variables, expressions & manipulation	20%
	Data types in a high-level language, operators	
	I/O statements, Assignment statements	
	Control strategies, Conditions	
	Structured Programming, Library Functions and Arrays	
	Loop statements	
III	Method of structured programming	20%
	Common standard library functions	
	Arrays and its types	
	Strings, User-Defined Functions and Command-line	
	arguments	
IV	String handling.	20%
	Working with user defined functions	
	Calling functions, passing arguments	
	User-defined functions	
V	Pointer	
	Structure and Union	20%
	Bit fields, File Management	
	Command Line Arguments	

Bas	Basic Text & Reference Books :-		
1.	Balaguruswami : Programming in ANSI C., Tata McGraw Hill Publication.		
2.	Kernighan B., Ritchie D.: The C Programming Language, Prentice Hall.		
3.	Cooper H. & Mullish H: The Sprit of C, Jaico Publication House, New Delhi.		

Paper Code: CCCS102	Total Credit: 4
<b>Title of Paper:</b> Fundamentals of Computer Programming Using C	Total Marks: 70
	Time: 3 Hrs

Unit	Description		Total Marks
	Q.1 (A) Short Questions. (Definitions, Blanks, Full Forms, True/False, Match the Following)	04	
I	Q.1 (B) Short Questions / Medium Questions (With Internal Option)	06	
	Q.1 (C) Questions Based on Flowchart / Algorithm (With Internal Option)	04	14
	Q.2 (A) Short Questions. (Definitions, Blanks, Full Forms, True/False, Match the Following)	04	
П	Q.2 (B) Short Questions / Medium Questions (With Internal Option)	06	14
	Q.2 (C) Questions Based on Program in C (With Internal Option)	04	11
	Q.3 (A) Short Questions. (Definitions, Blanks, Full Forms, True/False, Match the Following)	04	
III	Q.3 (B) Short Questions / Medium Questions (With Internal Option)	06	14
	Q.3 (C) Questions Based on Program in C (With Internal Option)	04	
	Q.4 (A) Short Questions. (Definitions, Blanks, Full Forms, True/False, Match the Following)	04	
IV	Q.4 (B) Short Questions / Medium Questions (With Internal Option)	06	14
	Q.4 (C) Questions Based on Program in C (With Internal Option)	04	
	Q.5 (A) Short Questions. (Definitions, Blanks, Full Forms, True/False, Match the Following)	04	14
V	Q.5 (B) Short Questions / Medium Questions (With Internal Option)	06	
	Q.5 (C) Questions Based on Program in C (With Internal Option)	04	

Paper Code: CCCS103	<b>Total Credit :</b> 6
Title of Paper: Practical Based on CCCS101	Total Marks :
	70
	Time: 3 Hrs

Unit	Description	Weighting
	Sample Practical Exercises:	
	[A] 1. Microsoft Word	
	Creating the documents with Special effects like underline, bold,	
	different	
	size, different font, different color. Etc.	
	Find and Replace operations like cut, paste, copy, and clipboard.	
	Inserting Date & Time, Pictures, Bullets & Numbering etc.	
	Paragraphs, bullets, indentation etc. Formatting features.	
	Printing the documents, it includes paper-size, margins, header and	
	footer,	
	page no. etc.	
	Creating a table.	
	Mail merge, spell-check, drawing table. Template.	
	2. Microsoft PowerPoint	
	Creating a presentation	
	Inserting/Deleting slides	
	Different slide views	
	Editing slides	
	Formatting slides Slide transition & additing special effects	
	Inserting sound, picture, chart, organization chart	
	3. Microsoft Excel	
	Creating Worksheets Printing, Inserting, Deleting, Copying, Moving worksheets.	
	Formulas, built-in functions	
	Graph-Plotting facilities	
	Database Management System	
	Using extenternally created data files.	
	What – if analysis	
	Formatting cells, Worksheets etc.	
	Custom Controls	
	Protection facility	
	Pivot tables	
	Macro facility	

Paper Code: CCCS103	Total Credit: 4
Title of Paper: Practical Based on CCCS101	Total Marks: 70
	Time: 3 Hrs

Unit	Description		Total Marks
Unit I to V	Q.1(A) Viva Voce	20	70
	Q.1 (B) Practical	50	

Paper Code: CCCS104	Total Credit : 4
Title of Paper: Practical Based on CCCS102 and Elective Courses	Total Marks :
	70
	Time: 3 Hrs

Unit	Description	Weighting
	Sample Practical Exercises:	
	Develop algorithms/flow charts/C programs for the following:	
	To prepare a cup of tea.	
	To open a bank account.	
	To find maximum from the given three numbers.	
	To find simple interest and Compound Interest	
	To read three sides of a triangle and print whether it will form a triangle	
	or not	
	To find the solution of quadratic equation.	
	To find out N! (Factorial of N).	
	To find out minimum and maximum from N numbers.	
	To find whether given number is prime or not.	
	To print the N terms of Fibonacci series. (i.e. 1, 1, 2, 3, 5, 8, 11).	
	To read a number & check whether it is a palindrome or not.	
	Find the sum of the following series :	
	Sum = $1 + 3 + 5 + 7$ up to N terms.	
	Sum = $5 - 10 + 15 - 20 + 25$ up to N terms.	
	Sum = $1 + 1 + 2 + 3 + 5 + 8 + 13$ up to N terms.	
	Sum = $12 + 22 + 32 + 42 + 52 \dots$ up to N terms.	
	Sum = $1! + 2! + 3! + 4!$ up to N terms.	
	Read marks of three subjects and find the percentage of it. Also,	
	print the appropriate class. Here,	
	If percentage < 40 then class is 'fail'	
	If 40 <= percentage < 48 then class is 'pass'	
	If 48 <= percentage < 60 then class is 'second'	
	Else class is 'first'.	
	Find the value of SUM for the following.	
	$SUM = X + X / 2! + X / 3! + X / 4! \dots$ up to N terms.	
	SUM = $1 - \frac{1}{2} + \frac{1}{3} - \frac{1}{4} + \frac{1}{5}$ up to N terms.	
	To find the sum of the digits in a given positive numbers.	
	To input a time as a number of seconds after midpoint and outputs it as	
	hours: minutes: seconds. For example, if the input were 50000 the output	
	should be 13: 53: 20.	
	To read the price of one dozen bananas and calculate and print the total	
	cost of N bananas.	
	To read a number and find whether it is divisible by two or not.	
	To accept a positive integer and check whether it is one-digit, two-digit	
	or three-digit otherwise print appropriate message.	
	of three digit other wise print appropriate message.	
L		1

Paper Code: CCCS104	Total Credit: 4
<b>Title of Paper:</b> Practical Based on CCCS102 and Elective Courses	Total Marks: 70
	Time: 3 Hrs

Unit	Description	Total Marks
Unit I to V	Q.1(A) Viva Voce	70
	Q.1 (B) Practical	

Paper Code: CECS101	Total Credit: 4
Title of Paper: Multimedia Application Development	Total Marks: 70
	<b>Time:</b> 3 Hrs

Unit	Description	Weighting
I	Introduction	20%
	Multimedia: meaning	
	Various facets of multimedia: audio, text, graphics, animation,	
	video	
	Classification of multimedia technology	
	Multimedia: hardware/software essentials, different categories	
	of multimedia software.	
II	Working with Audio, Text and Graphics	20%
	Multimedia audio: introduction, digital audio and sound card	
	fundamentals, sound card functionalities, audio jacks,	
	connectors, digital audio playback, audio editing	
	Multimedia text: introduction, designing text for multimedia,	
	hypermedia, hypertext	
	Multimedia graphics: introduction, basic concepts of color	
	displays, monitor video modes, color monitors and their	
	parameters, graphics in multimedia projects	
III	Working with Video	20%
	Multimedia video: introduction, video in multimedia projects,	
	digital video fundamental, full motion and full screen videos,	
	digital video files sizes, digital video production techniques –	
	video production in multimedia, shooting the sequences, video	
	capture techniques, video capture boards, video capture	
TX 7	software, editing video, embedding sound clips	200/
IV	Working with Animation	20%
	Multimedia Animation: introduction, classifications, two-	
	dimensional animation and three dimensional animation	
	technology, animation development process, names of	
V	animation software tools for 2D and 3D	20%
v	A brief Introduction to Flash, Flash Movie development, Seating of Document Property, Creating share with oval tool,	2070
	Adding text to button, Converting a share into symbol, Editing	
	buttons symbols, Adding key frame, Verifying changes with	
	Test Movie, Adding layers to a movie, Viewing layers in the	
	Timeline, Working with layers, Create Graphic symbols, Insert	
	Instance, Motion Tweezing, Motion Tween settings.	
	instance, motion i weezing, motion i ween settings.	

Basic Text & Reference Books :-		
1.	Multimedia Magic. By S. Gokul, BPB Publications, 1998.	
2.	Introduction to Multimedia: By Ana Weston Solomon, Tata McGraw-Hill Publishing	
	Company Limited, 2005	

Paper Code: CECS101	Total Credit : 4
Title of Paper: Multimedia Application Development	Total Marks: 70
	<b>Time:</b> 3 Hrs

Unit	Description		Total Marks
I	Q.1(A) Short / Medium Questions (With Internal Option)	06	14
	Q.1(B) Short / Medium Questions (With Internal Option)	08	
II	Q.2(A) Short / Medium Questions (With Internal Option)	06	
	Q.2(B) Short / Medium Questions (With Internal Option)	08	14
III	Q.3(A) Short / Medium Questions (With Internal Option)	06	
	Q.3(A) Short / Medium Questions (With Internal Option)	08	14
IV	Q.4(A) Short / Medium Questions (With Internal Option)	06	14
	Q.4(B) Short / Medium Questions (With Internal Option)	08	
V	Q.5(A) Short / Medium Questions (With Internal Option)	06	14
	Q.5(B) Short / Medium Questions (With Internal Option)	08	

Paper Code: CECS102	Total Credit : 4
Title of Paper: System Analysis and Design	Total Marks: 70
	<b>Time:</b> 3 Hrs

Unit	Description	Weighting
	INTRODUCTION TO SYSTEM ANALYSES AND DESIGN	20%
	Business Process Modeling, Information System Components,	
	Types of Business Information Systems, Organizational	
	Structure, System Development Techniques and Tools,	
	Overview of Systems development Methodologies, The System	
I	Development Life Cycle, Information Technology Department,	
_	The System Analyst Position.	
	PRELIMINARY INVESTIGATION	
	The importance of strategic planning, A framework for system	
	development, Information System Projects, Evaluation of	
	system requests, Preliminary investigation overview, Steps in	
	preliminary investigation	
	RQEUIREMENTS MODELING	20%
	System analysis phase overview, System development methods,	
	Modeling tools and techniques, system requirements checklist,	
II	Scalability and total cost of ownership, Fact finding, Interviews,	
	Other fact finding techniques, Documentation, Preview of data,	
	Process and object modeling	
	DATA AND PROCESS MODELING	
	Data flow diagrams, Data dictionary, Process Description tools,	
	Logical vs. physical models	
	OBJECT MODELING	
	Object oriented terms and concepts, Relationships among	
	objects and classes, Object modeling with the unified modeling	
	language	
III	TRANSITION TO SYSTEM DESIGN	20%
	Evaluating software alternatives, Steps in evaluating and	
	purchasing software packages, Completion of system analysis,	
	Transition to system design, Prototyping, Overview of system	
	design, Designing and using codes	
	User interface design, Input design, Output design issues,	
	Printed output	
	Data design concepts, Data design terminology, Data	20%
IV	relationships, Normalization, Steps in database design, Database	
	models, Data storage, Data control	
	APPLICATION ARCHITECTURE	20%
	Design checklist, Planning the architecture, Client/server	_0,0
	architecture, Impact of the internet, Processing methods,	
	Network models, Modeling application architecture, System	
V	management and support, system design completion	
<b>v</b>	APPLICATION DEVELOPMENT	
	Quality assurance, Overview of application development,	
	Structured application development, Other application	
	development tools, Coding, Object-oriented application	
	development, Testing the application, Documentation,	
	Management approval	
	management approvar	

Bas	Basic Text & Reference Books :-		
1.	System Analyses And Design, 4th Edition, By Shelly/Cashman/Rosenblatt (Thomson)		
2.	System Analyses and Design, 3rd Edition, By Elias Awad (Galgotia Publications)		
3.			

Paper Code: CECS102	Total Credit : 4
Title of Paper: System Analysis and Design	Total Marks: 70
	Time: 3 Hrs

Unit	Description		Total Marks
I	Q.1(A) Short / Medium Questions (With Internal Option)	06	14
	Q.1(B) Short / Medium Questions (With Internal Option)	08	
II	Q.2(A) Short / Medium Questions (With Internal Option)	06	
	Q.2(B) Short / Medium Questions (With Internal Option)	08	14
III	Q.3(A) Short / Medium Questions (With Internal Option)	06	
	Q.3(A) Short / Medium Questions (With Internal Option)	08	14
IV	Q.4(A) Short / Medium Questions (With Internal Option)	06	14
	Q.4(B) Short / Medium Questions (With Internal Option)	08	
V	Q.5(A) Short / Medium Questions (With Internal Option)	06	14
	Q.5(B) Short / Medium Questions (With Internal Option)	08	

Paper Code: CECS103	Total Credit: 3
Title of Paper: Desktop Publishing	Total Marks: 70
	Time: 3 Hrs

Unit	Description	Weighting
I	Introduction	20%
	Publishing – meaning and planning	
	Graphics and desktop publishing, Publication purpose and	
	effectiveness, Introduction to a popular desktop publishing	
	software and key features	
II	Using DTP Software-I (Page Maker)	20%
	Working with document - creating, saving, printing, etc.	
	Working with tools and pallets, navigation	
	Working with margins, indents, tabs and ruler	
	Working with text, paragraph and graphics	
III	Using DTP Software-II (Page Maker)	20%
	Working with multipage documents	
	Working with master pages, hyperlinks	
	Working with frames, text frames, Using tables	
	Using styles and story board, Working with objects, forms	
	Working with templates, Importing and exporting	
IV	Corel Draw	20%
1,	Introduction, Surfing the Interface, Getting to know the status	2070
	bar. Getting to scrollbar and color palette.	
	Understanding Dialog box, Exploring the standard toolbar,	
	Toolbox. Browsing the Menus, File, Edit, View, Layout,	
	Arrange, Effect, Bitmaps, Text, Tools, Drawing and working	
	with Lines and Curves. Drawing and working with Rectangles,	
	Ellipse and Polygons, Adding Text and Formatting Text,	
	Working with Objects, Defining Outline and Fill Color,	
	Working with objects, Defining Outline and Pin Color, Working with outlines, The outline pen dialog, The outline	
	color dialog, Understanding fills, Fountain fills, Pattern fills,	
	Creating Special Effects, Using an envelope, Creating	
V	perspective effects, Blending objects	200/
V	Photo Shop	20%
	Photoshop's Environment Graphics and Environment Elements	
	Navigating in Photoshop. Sizing Images, Image Size and	
	Resolution Cropping. Selecting Image Areas. The Rectangular	
	and Elliptical Marquee Tools. The Lasso Tools and Saving	
	Selections. The Magic Wand Tool. The Magnetic Lasso Tool	
	and Modifying Selections	
	Layers, Feathering Edges: Image Modes, Color and Painting,	
	Selecting Colors, Painting Tools and the Clone Stamp Tool.	
	Text, Layer Effects, and Filters, Filters, Merging, and	
	Flattening. Adjusting Images, Brightness/Contrast and Levels	
	Adjustment Layers, Toning Tools and Hue/Saturation	

Bas	Basic Text & Reference Books :-		
1.	Jain S.: PageMaker 7 Training Guide, BPB, 2008		
2.	Busch: Teach Yourself PageMaker 6.5 for Mac & Windows, BPB, 2002		
3.	Connally C.: PageMaker (R) 7 - The Complete Reference, McGraw-Hill/Osborne Media,		
	2002		
4.	Mastering Corel Draw by Rick Altman, BPB 4th Edition		

Paper Code: CECS103	Total Credit : 4
Title of Paper: Desktop Publishing	Total Marks: 70
	Time: 3 Hrs

Unit	Description		Total Marks
I	Q.1(A) Short / Medium Questions (With Internal Option)	06	14
	Q.1(B) Short / Medium Questions (With Internal Option)	08	
II	Q.2(A) Short / Medium Questions (With Internal Option)	06	
	Q.2(B) Short / Medium Questions (With Internal Option)	08	14
III	Q.3(A) Short / Medium Questions (With Internal Option)	06	
	Q.3(A) Short / Medium Questions (With Internal Option)	08	14
IV	Q.4(A) Short / Medium Questions (With Internal Option)	06	14
	Q.4(B) Short / Medium Questions (With Internal Option)	08	
V	Q.5(A) Short / Medium Questions (With Internal Option)	06	14
	Q.5(B) Short / Medium Questions (With Internal Option)	08	

Paper Code: CECS104	Total Credit: 4
<b>Title of Paper:</b> Personality Development and Soft skills	Total Marks: 70
	Time: 3 Hrs

Unit	Description	Weighting
I	Introduction to Soft Skills and Hard Skills, Break the ice berg – FEAR, Self Development - Etiquette and Manners. The Self Concept: Attitude, The process of attitude formation, positive attitude, How to build a success attitude, You are the chief architecture of yourself. Self Management Techniques. Believe in your self: Self Image and Self Esteem, Building Self Confidence, Environment we mix with, How to build self	20%
	image?.	
II	Meaning and definition of personality, Personal Planning and Success Attitude: Prioritizing, Creating the master plan, Active positive visualization and Spot analysis. Self Motivation and Communication: Levels of motivation, power of irresistible enthusiasm, etiquettes and manners in a group, public speaking, Importance of listening and responding.	20%
III	Motivation Skills & Personality Development, Goal Setting, Career Planning, Resume Building, Psychometric Test, Priority Management & Time Management, Positive Attitude and Self Confidence. Verbal Communication includes Planning, Preparation Delivery, Feedback and assessment of activities like: Public speaking, Group Discussion, Oral Presentation skills, Perfect Interview, Listening and observation skills, body language and use of Presentation aids.	20%
IV	Written communication that includes project proposals, brochures, newsletters, articles. Etiquettes that include: etiquettes in social as well as office settings, email etiquettes, telephone etiquettes. Improving Personal Memory, study skills that include rapid reading, notes taking and creativity.	20%
V	Problem Solving and Decision Making Skills, Perceptive, Conceptual, Creative, Analytical and Decisive. Leadership as a process: co-ordination while working in a team, Leadership styles, Leader and Team player, Management of conflict, Profiles of great and successful personalities, Role of career planning in personality development, negotiation, Motivating.	20%

Bas	Basic Text & Reference Books :-		
1.	Wallace: Personality Development 1st Edition, 2008 Cengage Learning India.		
2.	Kundu, C.1 Personality development, Sterling Bangalore		
3.	Listening and Responding – Sandra D.Collins-Cengage Learning India.		
4.	1,001 ways to inspire your organization, your team and your self – David E. Rye- Jaico publishing		
	house.		

Paper Code: CECS104	Total Credit: 4
<b>Title of Paper:</b> Personality Development and Soft skills	Total Marks: 70
	<b>Time:</b> 3 Hrs

Unit	Description		Total Marks
I	Q.1(A) Short / Medium Questions (With Internal Option)	06	14
	Q.1(B) Short / Medium Questions (With Internal Option)	08	
II	Q.2(A) Short / Medium Questions (With Internal Option)	06	
	Q.2(B) Short / Medium Questions (With Internal Option)	08	14
III	Q.3(A) Short / Medium Questions (With Internal Option)	06	
	Q.3(A) Short / Medium Questions (With Internal Option)	08	14
IV	Q.4(A) Short / Medium Questions (With Internal Option)	06	14
	Q.4(B) Short / Medium Questions (With Internal Option)	08	
V	Q.5(A) Short / Medium Questions (With Internal Option)	06	14
	Q.5(B) Short / Medium Questions (With Internal Option)	08	