KSKV Kachchh University
Program: BCA
Semester: I

Course Type	Course Code	Name of the Course	T/P	Credit	Exam Duration In Hrs	Components Of Marks		
						Internal	External	Total
Core Courses	CCCS-101	Fundamentals Computer Programming Using C	T	4	2:15	40	60	100
	CCCS-102	Web Application Development – I	T	4	2:15	40	60	100
	CCCS-103	Computer Fundamental and PC Software	T	4	2:15	40	60	100
	CCCS-104	Practical based on CCCS-101	P	4	2:15	40	60	100
	CCCS-105	Practical based on CCCS-102, CCCS-103	P	4	2:15	40	60	100
Foundation Courses	FCCS-101	Communication Skills in English	T	4	2:15	40	60	100
Elective Courses (Any One)	CECS-101	Digital Electronics	T	2	2:15	40	60	100
	CECS-102	Financial Management and Accounting	T	2	2:15	40	60	100
Total				26		280	420	700

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Program: BCA
Semester - I

Paper Code: CCCS-101	Total Credit : 4
Title of Paper: Fundamentals of Computer Programming Using C	

Unit	Description	Weighting
I	**Concept of Algorithm, Flowchart and Languages** Concept of an algorithm and a flow chart, need and definition Symbols used to draw a flow chart 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	25%
II	**Basics of Programming** Problem analysis Variables, expressions & manipulation Data types in a high-level language, operators I/O statements, Assignment statements Control strategies, Conditions	25%
III	**Structured Programming, Library Functions and Arrays** Loop statements Method of structured programming Common standard library functions Arrays, Strings	25%
IV	**Structures and union, Pointers, User-Defined Functions and Command-line arguments** Structure and union. Pointers Working with functions Calling functions, passing arguments User-defined functions Command-line arguments	25%

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.

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Paper Code: CCCS-101	Total Credit : 4
Title of Paper: Fundamentals of Computer Programming Using C	Total Marks : 60
	Time : 2:15 Hrs

Unit	Description		Total Marks
I,II,III,IV	Q.1(A) Multiple Choice Questions (MCQ)	07	15
	Q.1 (B) Short Questions (Definitions, Blanks, Full Forms, True/False, Match the Following)	08	
I,II	Q.2(A) Medium Questions (Any Two)	06	15
	Q.2(B) Medium Questions / Long Questions (Any Three)	09	
III,IV	Q.3(A) Medium Questions / Long Questions (Any Two)	06	15
	Q.3(B) Medium Questions / Long Questions (Any Two)	08	
I,II,III,IV	Q.4 Programs based on C (Any Two)	15	15

KSKV Kachchh University
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Paper Code: CCCS-102	Total Credit : 4
Title of Paper: Web Application Development – I	Total Marks : 60
	Time : 2:15 Hrs

Unit	Description	Weighting
I	**The Internet and Web Browsers** Introduction to the Internet History of the Internet Services provided by the Internet Some basic terminology and concepts (WWW, URL, webpage, web site, web servers, web browsers, HTML, search engines, etc.) Components of a browser window Use of menus and toolbar buttons History and navigation Setting basic options, security and privacy precautions Managing bookmarks/favorites Tabbed browsing, downloading files, saving web pages for offline reading	25%
II	**Web Page Designing-I** An introduction to HTML HTML tags Structure of an HTML document Text and paragraph formatting Ordered and unordered lists, nested lists	25%
III	**Web Page Designing-II** HTML tables Hyperlinks Images Frames, framesets, nested framesets	25%
IV	**Web Page Designing-III** Designing HTML forms Webpage layout Introduction to a selected website development tool Key features of the website development tool Developing websites using the tool	25%

Basic Text & Reference Books :-	
1.	Ivan Bayross, "Web Enabled Commercial Applications Development using HTML, DHTML, Javascript, Perl CGI", BPB, 2004
2.	Douglas E Comer: The Internet, PHI, Second Edition, May 2000
3.	Xavier C : World Wide Web Design With HTML, Tata McGraw Hill Publication, 2000

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Paper Code: CCCS-102	Total Credit : 4
Title of Paper: Web Application Development – I	Total Marks : 60 Time : 2:15 Hrs

Unit	Description		Total Marks
I,II,III,IV	Q.1(A) Multiple Choice Questions (MCQ)	07	15
	Q.1 (B) Short Questions (Definitions, Blanks, Full Forms, True/False, Match the Following)	08	
I,II	Q.2(A) Medium Questions (Any Two)	06	15
	Q.2(B) Medium Questions / Long Questions (Any Three)	09	
III,IV	Q.3(A) Medium Questions / Long Questions (Any Two)	06	15
	Q.3(B) Medium Questions / Long Questions (Any Two)	08	
I,II,III,IV	Q.4 Web designing practical of HTML (Any Two) *(Practical based on Tables, Frames and Forms are preferable)*	15	15

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Paper Code: CCCS-103	Total Credit : 4
Title of Paper: Computer Fundamental and PC Software	Total Marks : 60 Time : 2:15 Hrs

Unit	Description	Weighting
I	**Introduction to Computer Systems and Number Systems** 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	25%
II	**Representation of Information and Processor Organization** Representation of integers Character codes (ASCII, Unicode) Error detection and correction codes Instruction execution cycle CPU organization	25%
III	**Memory Organization** 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.	25%
IV	**I/O Devices** Common types of Input/ Output devices, such as Monitors, keyboard, mouse Printers (Line, Dot Matrix, Inkjet, Laser) Scanners **Office Packages** Documentation Software Spreadsheet Software	25%

Basic Text & Reference Books :-	
1.	Tanenbaum A.S. : Structured Computer Organization, Prentice-Hall of India Pvt. Ltd.
2.	Rajaraman V. : Computer Fundamentals, Prentice-Hall of India Pvt. Ltd.

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Paper Code: CCCS-103	Total Credit : 4
Title of Paper: Computer Fundamental and PC Software	Total Marks : 60
	Time : 2:15 Hrs

Unit	Description		Total Marks
I	Q.1(A) Multiple Choice Questions (MCQ)	07	15
	Q.1 (B) Short Questions (Definitions, Blanks, Full Forms, True/False, Match the Following)	08	
I,II	Q.2(A) Medium Questions (Any Two)	06	15
	Q.2(B) Medium Questions / Long Questions (Any Three)	09	
II,III	Q.3(A) Medium Questions / Long Questions (Any Two)	06	15
	Q.3(B) Medium Questions / Long Questions (Any Two)	08	
IIII,IV	Q.4(A) Medium Questions / Long Questions (Any Two)	06	15
	Q.4(B) Medium Questions / Long Questions (Any Two)	08	

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Semester: I

Paper Code: CCCS-104	Total Credit : 6
Title of Paper: Practical based on CCCS-101	Total Marks : 60 Time : 2:15 Hrs

Unit	Description	Weighting

	Sample Practical Exercises:
	 1. To prepare a cup of tea.
	 2. To open a bank account.
	 3. To find maximum from the given three numbers.
	 4. To find simple interest and Compound Interest
	 5. To read three sides of a triangle and print whether it will form a triangle or not
	 6. To find the solution of quadratic equation.
	 7. To find out N! (Factorial of N).
	 8. To find out minimum and maximum from N numbers.
	 9. To find whether given number is prime or not.
	 10. To print the N terms of Fibonacci series. (i.e. 1, 1, 2, 3, 5, 8, 11 …).
	 11. To read a number & check whether it is a palindrome or not.
	 Find the sum of the following series :
	 12. Sum = 1 + 3 + 5 + 7 ….. up to N terms.
	 13. Sum = 5 - 10 + 15 - 20 + 25 ….. up to N terms.
	 14. Sum = 1 + 1 + 2 + 3 + 5 + 8 + 13 ….. up to N terms.
	 15. Sum = 1! + 2! + 3! + 4! ….. up to N terms.
	 16. 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'.
	 17. To find the sum of the digits in a given positive numbers.
	 18. 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.
	 19. To read the price of one dozen bananas and calculate and print the total cost of N bananas.
	 20. To read a number and find whether it is divisible by two or not.
	 21. To accept a positive integer and check whether it is one-digit, two-digit or three-digit otherwise print appropriate message.	

Paper Code: CCCS-104	Total Credit : 6
Title of Paper: Practical based on CCCS-101	Total Marks : 60
	Time : 2:15 Hrs

Unit	Description		Total Marks
	Q.1 Practical Based on C	40	60
	Q.2 Viva – Voce	20	

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Semester: I

Paper Code: CCCS-105	Total Credit : 6
Title of Paper: Practical based on CCCS-102 and CCCS-103	Total Marks : 60 Time : 2:15 Hrs

Unit	Description	Weighting
1. Microsoft Word 1. Understanding formatting style of Microsoft word 2. Understanding formatting functions like cut, copy, paste, etc.. 3. Understanding the insertion and deletion functions 4. Understanding paragraph formatting functions 5. Understating the creation of table and its features 6. Understanding Mail merge, spell-check, etc.. **2. Microsoft Excel** 1. Understanding concept of Worksheets 2. Understanding create, copy, paste 3. Understanding various Formulas and built-in functions 4. Understanding Graph-Plotting facilities 5. Understanding What – if analysis 6. Understanding Formatting cells, Worksheets etc. 7. Understanding Custom Controls **3.HTML** 1. Understanding various tags of HTML 2. Understanding paragraph formatting tags 3. Understanding listing tags 4. Understanding text formatting tags 5. Understanding Table and table formatting tags 6. Understanding frame and forms		

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Program: BCA
Semester: I

Paper Code: CCCS-105	Total Credit : 6
Title of Paper: Practical based on CCCS-102 and CCCS-103	Total Marks : 60
	Time : 2:15 Hrs

Unit	Description		Total Marks
	Q.1 Practical Based on C	40	60
	Q.2 Viva – Voce	20	

KSKV Kachchh University
Program: BCA
Semester: I

Paper Code: FCCS-101	Total Credit : 2
Title of Paper: Communication Skills in English	Total Marks : 60
	Time : 2:15 Hrs

Unit	Description	Weighting
I	**Reading Skills** Mechanics of Reading i.e. Eye Movement and Different Reading Styles Issues of Reading Speed and Comprehension Value Reading Gears for different reading purposes Skimming & Scanning Skills Barriers to Effective Reading	25%
II	**Listening & Feedback Skills** Importance and purpose of Listening. Barriers to Effective Listening. Ways of improving Listening Skills. Giving Feedbacks i.e Confirmatory and Corrective	25%
III	**Writing Skills** Form words properly using prefixes/suffixes. Use Phrasal Verbs. Writing formal letters of invitation (inviting/accepting/declining), letters of complaint and intimation to civil authorities. Paragraph development ie. Topics sentence and supporting sentence, attributes of a good paragraph, types of paragraphs. Writing dialogue on given topics	25%
IV	**Speaking Skills** Use greeting and formulae in everyday conversation Notions and Functions of everyday usage. Parts of Speech, Types of Sentences, Tenses, Imperatives, Modals, Voice, Determiners, Concord, Interrogation and Negation, basic prepositions Use of Phrasal Verbs	25%

Basic Text & Reference Books :-	
1.	Meenakshi Raman & Sangita Sharma, Technical Communication; Principles and Practice , Oxford University Press
2.	Chrissie Wright, Communication Skills, Jaico Publication
3.	Grant Taylor, English Conversation Practice, New Delhi: Tata McGraw Hill
4.	R P Bhatanagar and R T Bell, Communication in English, Hyderabad, Orient Longman.
5.	D Sasikumar and P V Dhamija, Spoken English, New Delhi: Tata McGraw Hill
6.	David Jolly, Writing Tasks: Authentic task approach to individual Writing needs, Cambridge University Press

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Program: BCA
Semester: I

Paper Code: FCCS-101	Total Credit : 4
Title of Paper: Communication Skills in English	Total Marks : 60
	Time : 2:15 Hrs

Unit	Description		Total Marks
I	Q.1(A) Multiple Choice Questions (MCQ)	07	15
	Q.1 (B) Short Questions (Definitions, Blanks, Full Forms, True/False, Match the Following)	08	
I,II	Q.2(A) Medium Questions (Any Two)	06	15
	Q.2(B) Medium Questions / Long Questions (Any Three)	09	
II,III	Q.3(A) Medium Questions / Long Questions (Any Two)	06	15
	Q.3(B) Medium Questions / Long Questions (Any Two)	08	
IIII,IV	Q.4(A) Medium Questions / Long Questions (Any Two)	06	15
	Q.4(B) Medium Questions / Long Questions (Any Two)	08	

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Paper Code: CECS-101	Total Credit : 2
Title of Paper: Digital Electronics	Total Marks : 60
	Time : 2:15 Hrs

Unit	Description	Weighting
I	Number Systems- Binary , Octal , Decimal, Hexadecimal, Floating Point representation of numbers, Number base conversion, Binary Addition, Subtraction, Multiplication, Division, 2'complement arithmetic, BCD Numbers, The ASCII code ,The EXCESS-3 code ,The Gray code, Error correcting and correcting method	25%
II	**Gates and Boolean Algebra** Gates, Boolean algebra, Truth tables Circuit equivalence, De Morgan's theorem	25%
III	**Basic Digital Logic Circuits** Usage of Karnaugh maps Encoders, decoders, comparators Half adder, full adder, binary adder-subtraction Multiplexers	25%
IV	**Memory Elements & Counters** D Flip flops, Shift-left, shift-right and controlled buffer registers Ring counters	25%

Basic Text & Reference Books :-	
1.	Malvino A. P.: Digital Computer Electronics,2nd Edition, Tata McGraw, Hill Pub. Co. Ltd.,New Delhi, 1990.
2.	Gothmann, William H. : Digital Electronics - An Introduction to Theory and Practice, 2nd Edition,PHI,1982.
3.	Tanenbaum A. S. : Structured Computer Organization, 3rd Edition, Prentice-Hall of India Pvt. Ltd., 1993.
4.	Hall Douglas V. : Microprocessors and Interfacing - Programming and Hardware., McGraw Hill Book Company, 1986.

Paper Code: CECS-101	Total Credit : 2
Title of Paper: Digital Electronics	Total Marks : 60
	Time : 2:15 Hrs

Unit	Description		Total Marks
I	Q.1(A) Short Questions (Definitions, Blanks, True/False, Match the Following)	05	15
	Q.1 (B) Answer the following. (With Internal Option)	10	
II	Q.2(A) Answer the following (With Internal Option)	06	15
	Q.2(B) Answer the following (With Internal Option)	09	
III	Q.3(A) Answer the following (With Internal Option)	05	15
	Q.3(B) Answer the following (With Internal Option)	10	
IV	Q.4(A) Answer the following (With Internal Option)	05	15
	Q.4(B) Answer the following (With Internal Option)	10	

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Semester: I

Paper Code: CECS-102	Total Credit : 2
Title of Paper: Financial Management and Accounting	Total Marks : 60 Time : 2:15 Hrs

Unit	Description	Weighting
I	**Introduction to Accounting & Accounting Process** Definition of accounting, book keeping, need of accounting. Some basic terms : debtor, creditor, solvent, insolvent, bad debts, bad debts recoverable, income, expenditure, trade discount and cash discount Objectives, advantages and scope of accounting. System of book keeping, classification of accounts and rules for debit and credit. Journal: purpose, format, ruling, example, advantages and disadvantages. Ledger : purpose, format, posting, closing ledger accounts, advantages and disadvantages Trial Balance : purpose, format, advantages and disadvantages	25%
II	**Subsidiary Books, Final Accounts & Depreciation** Subsidiary books : Cash books, Purchase books and Sales books Trading account and profit and loss account, balance sheet (each with purpose, format, examples) Adjustment entries : interest on capital, interest of loan, depreciation on fixed assets Depreciating concept and methods (straight line, double decline and sum of the year's digit)	25%
III	**Introduction to Financial Management and Introduction to Ratio Analysis** Introduction, scope of finance, finance functions financial manager's role, financial goal, profit versus wealth, conflict of goals, management versus owners Financial goal and firm's objectives Organization of the finance functions Financial ratio analysis: introduction, users, uses and limitation	25%
IV	**Ratio Analysis And Cost-Volume-Profit (CVP) Analysis** Types of ratio: liquidity ratios, leverage ratios, activity ratios, profitability ratio. Introduction, Break-Even Analysis, Cash Break-even point, Operating leverage and risks. Profit-analysis : impact of changing factors CVP analysis for a multi-product firm Utility and limitations of CVP analysis	25%
Basic Text & Reference Books :-		
1.	A text Book of Accounting for management by S N Maheshwari and S K Maheshwari, vikas publishing house pvt ltd	
2.	Naheshgwari S. N. : Introduction to Accounting, Vikas Pub. House 1986	
3.	Principles and Practice of Accountancy, R.L.Gupta -V.K.Gupta, S.chand&Sons	

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Paper Code: CECS-102	Total Credit : 2
Title of Paper: Financial Management and Accounting	Total Marks : 60
	Time : 2:15 Hrs

Unit	Description		Total Marks
I, II	Q.1(A) Questions with internal options	07	15
	Q.1 (B) Questions with internal options	08	
II, III	Q.2(A) Questions with internal options	07	15
	Q.2(B) Questions with internal options	08	
III, IV	Q.3(A) Questions with internal options	07	15
	Q.3(B) Questions with internal options	08	15
III, IV	Q.4 Questions with internal options	15	15