

GANPAT UNIVERSITY									
FACULTY OF COMPUTER APPLICATIONS									
Programme		B.Sc.(CA & IT)				Branch/Spec.			
Semester		I				Version		1.0.0.0	
Effective from Academic Year			2014-15			Effective for the batch Admitted in			June 2014
Subject code		U11A1IP1		Subject Name		INTRODUCTION TO PROGRAMMING-I			
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	3		2	-	5	Theory	40	60	100
Hours	3		4	-	7	Practical	20	30	50
Pre-requisites:									
Basic knowledge of computer.									
Theory syllabus									
Unit	Content								Hrs
1	Fundamental of Algorithms: Introduction, Algorithm Development Method, Algorithms for basic human general activities focused to understand basic steps, Basic number and arithmetic Operation, Looping & Control flow statements, Series computation, Introduction to flowchart, Symbols for input/output, Processes, Decision, Begin/End, Representation of algorithms by Flowchart								9
2	Overview of C: Overview: Brief history of C, Importance of C, Features of 'C' language, Basic Structure of C Programs, Programming Style, Steps to execute 'C' Program, Understanding the terminologies: Source Program, Object Program, Executable Program, Linker, Loader, Debug, Compilation process, Interpreter. Constants, Variables and Data Types: Character set, C tokens, keywords and identifiers, constants, variables, data types, declaration of variables, assigning value to variable, defining symbolic constants								9
3	Operators and Expression: Operators and Expression: Operators - arithmetic, relational, logical, assignment, increment-decrement, conditional, bit-wise and special, Arithmetic expressions, evaluation of expressions, precedence of arithmetic operators, type conversions in expressions, operator precedence and associativity, mathematical functions. Managing Input and Output Operators: Reading and writing a character formatted input-output								9
4	Decision Making and branching: Decision making with IF statement, simple IF statement, the IF-ELSE statement, nesting of IF ... ELSE statements, the ELSE IF ladder, Switch statement, turnery (? :) operator, Go-To statement.								9
5	Looping: Looping statements – WHILE, DO-WHILE and FOR, Nesting and Jumps in loops, Break & Continue.								9
Practical content									
List of programs specify by subject teacher based on above mention topics.									
Text Books									
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Reference Books									
1	Programming in ANSI C by E Balagurusamy - TMH Publications								
2	Programming in C by Pradip dey and Manash Ghosh - Oxford University Press Publication								
3	Let us 'C' by Yashwant Kanetkar –BPB Publications								

4	How to Solve it by Computer, R.G. Dromey-PHI Publication
Note for Examiner	
	Q-1 must be common from any topics from syllabus. Q-2 and onwards must be from specific topics and internal choice or option can be given
Paper Structure	
	Section: 1 Q-1 (Attempt any Five Out of Seven: each question must be 6marks) -- 30 Questions must be covered all possible section. Section: 2 Q-2 (Must be from topics: 1 and 2 (6+6)) Q-3 (Must be from topics: 3 and 4(6+6)) Q-4 (Must be from topic: 5(6))

GANPAT UNIVERSITY									
FACULTY OF COMPUTER APPLICATIONS									
Programme	B.Sc.(CA&IT)				Branch/Spec.	DCS			
Semester	I				Version	1.0.0.1			
Effective from Academic Year			2018-19		Effective for the batch Admitted in			June 2018	
Subject code	U11A2OAT		Subject Name		OFFICE AUTOMATION TOOLS				
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	3	-	2	-	5	Theory	40	60	100
Hours	3	-	4	-	7	Practical	20	30	50
Pre-requisites:									
One should have basic knowledge of computer basics.									
Learning Outcome:									
To understand the concepts of digital document, presentation and database.									
Theory syllabus									
Unit	Content								Hrs
1	DOS Introduction of DOS, Loading DOS, System prompt, Drive and its operations, Introduction to File & Directory, Creating, changing and listing the directory , Copying, Changing and deleting the files, Internal and external dos commands, Batch File, Difference between CUI and GUI								9
2	Microsoft Word Concepts of word, Applications of word processing, Features of Word, Formatting Text and Paragraph, Find and Replace Text, Spell & grammar check, Tabs and indentation, Enhancing a document, Different Views of document and its use, Bullets & Numbering, Page Setup, Columns, Insert Table, chart, shapes, Table Operations, Header, Footer and page number, Footnote and Endnotes, Mail Merge, Hyperlink, references, Page layouts, Document protection								9
3	Microsoft Excel Introduction to Worksheet and Work Book, Application of Excel, features of excel, Cell, Addressing modes, Formatting a Worksheet, Charts, Naming Ranges, and Data base in a worksheet, Conditional Formatting, Sort and Filter, Additional Formatting Commands, Drawing toolbar, Freeze Panes, splitting the worksheet, Goal seek, Multiple Workbooks, Pivot table and chart, Macros and Hyperlinks ,Lookup and reference, Data validation, Functions: Statistical, Mathematical, Financial and Database functions								9
4	Microsoft Power point Introduction to Power Point, Creating a Presentation, features of power point, Power Point views, Slideshow set up, Printing a Presentation, Formatting slides, Slide transition & Custom animation, Inserting pictures, chart & tables								9
5	Microsoft Access Introduction to MS-Access, creating Database, Data sheet, Data sheet operations, Filter and Advanced filter, Table Design & different Data, Types of the Ms-Access Database, Different element of the Ms-Access, Query design & wizards, Import,								9

	Export, database tools, SQL view, Report
Practical content	
List of programs specified by the subject teacher based on above mention topics.	
Text Books	
1	PC Software for windows made simple by R.K. Taxali -Tata McGraw-Hill Publishing Co. LTD.
Reference Books	
1	Working with Personal Computer by RP Soni, Harshal Arolkar and Sonal Jain–Books India Publication
2	The Complete Reference Office 2000 by Stephen L. Nelson. Tata McGraw-Hill Publishing Co.LTD.
3	ACCESS 2000, BPB Publications, Celeste Robinson
4	10 Minute guide to MS-ACCESS 2000, PHI publication, Faithewempen
Note for Examiner	
	Q-1: Must be common from any topics from syllabus. Q-2: And onwards must be from specific topics and internal choice or option can be given.
Paper Structure	
	<p>SECTION-I Q-1: (Attempt any Five out of Seven: each question must be 6 marks) --- 30 Questions must be covered all possible section.</p> <p>SECTION-II Q-2: (Must be from topics:1 and 2 (6+6)) Q-3: (Must be from topics:3 and 4 (6+6)) Q-4: (Must be from topic:-5(6))</p>

Note:

Version 1.0.0.1 (First Digit= New syllabus/Revision in Full Syllabus, Second Digit=Revision in Teaching Scheme, Third Digit=Revision in Exam Scheme, Forth Digit= Content Revision)

L=Lecture, TU=Tutorial, P= Practical/Lab., TW= Term work, DT= Direct Teaching, Lab.= Laboratory work

CE= Continuous Evaluation, SEE= Semester End Examination

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FACULTY OF COMPUTER APPLICATION									
Programme	B.Sc.(CA&IT)				Branch/Spec.	DCS			
Semester	I				Version	1.0.0.0			
Effective from Academic Year		2018-2019			Effective for the batch Admitted in			June 2018	
Subject code	U11A3WD1		Subject Name		Web Designing -I				
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total		CE	SEE	TOTAL
	L	Tu							
Credit	3	-	2	-	5	Theory	40	60	100
Hours	3	-	4	-	7	Practical	20	30	50
Pre-requisites:									
Working Knowledge of computer, notepad or notepad++ and basic knowledge of arithmetic calculation									
Learning Outcome:									
Students will learn basics of web designing and should be able to design and develop static web page using HTML,CSS and HTML5.									
Theory syllabus									
Unit	Contents								Hrs.
1	Basics of Web Technology: (7)								(7)
	An Introduction to Internet, Internet Address, Uniform Resource Locator, Internet Service Provider, Intranet, Extranet, Working of Internet ,Hypertext Transfer Protocol , World Wide Web , Search Engines, Introduction to Web Server and Web Browser, Static and Dynamic Web Page,Types of Websites, Web Designing Principles								
2	Basic HTML Concepts: (9)								(9)
	What is HTML?, History, HTML Page Structure,HTML Basic Tags – text formatting tags, working with list, image, table ,link, block and inline elements,frame ,HTML form								
3	HTML5 :(12)								(12)
	The Road for HTML 5,Browser Pitfalls, HTML 5 New Elements, Semantics Elements, New Form/Input Elements ,Multimedia, Canvas - Future of Graphics on Web, Simple Shape, Shape Styles, Text and Shadow, Canvas Pitfalls,SVG –Basic shapes , Animation, Introduction to Geolocation API, Web Storage, Web Workers, HTML Drag and Drop features								
4	Cascading StyleSheets:(9)								(09)
	What is CSS?, Advantages of CSS, CSS Syntax Selectors; Type Selector, Universal Selectors, Descendent Selectors, Class Selectors, ID Selectors, Child Selectors, Attribute Selectors, Multiple Style Rules, Grouping Selectors Embedded CSS - The <style> Element, Inline CSS - The style Attribute, External CSS - The <link> Element, Imported CSS - @import Rule, Handling old Browsers, Setting Background using CSS, Set Font Family, Manipulating the Text, CSS Images, CSS Tables, CSS Margins, CSS lists, CSS Padding								
5	Java Script: (8)								(8)
	Introduction to Java Script, Advantage of Java Script, Java Script Syntax, Comments,Variable, Array, Operators, Looping, Functions, Dialog box, Regular Expression, Objects in JavaScript, Cookies, ActiveX and JavaScript								
Practical content									
List of programs specified by the subject teacher based on above mentioned topics.									
Text Books									
	1. The complete reference Web Design by Thomas A. Powell								
Reference Books									
	1. Learning Web Design (A beginner's guide to HTML, CSS ,JavaScript and Web Graphics) by Jeniifer Niederst Robbins								

	2.Beginning HTML5 and CSS3 By Richard Clark, OliStudholme, Christopher Murphy and DivyaManian, APress 3. Head First jQuery by Ryan Benedetti, Ronan Cranley , O'Reilly Media Publisher
Note for Examiner	
	Q-1 must be common from any topics from syllabus. Q-2 and onwards must be from specific topics and internal choice or option can be given
Paper Structure	
	<p>Section: 1 Q-1 (Attempt any Five Out of Seven: each question must be 6marks) -- 30 Questions must be covered all possible section.</p> <p>Section: 2 Q-2 (Must be from topics: 1 and 2 (6+6)) Q-3 (Must be from topics: 3 and 4(6+6)) Q-4 (Must be from topic: 5(6))</p>

Note:

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FACULTY OF COMPUTER APPLICATIONS									
Programme	B.Sc.(CA&IT)				Branch/Spec.	DCS			
Semester	I				Version	1.0.0.1			
Effective from Academic Year		2018-19			Effective for the batch Admitted in			June 2018	
Subject code	U11A4IT		Subject Name		INFORMATION TECHNOLOGY				
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	3	-	-	-	3	Theory	40	60	100
Hours	3	-	-	-	3	Practical	-	-	-
Pre-requisites:									
<ul style="list-style-type: none"> • Basic knowledge about using Computer 									
Learning Outcome:									
<p>By the end of this module students should be able to</p> <ul style="list-style-type: none"> • To get the information about the computer history. • Student gets the knowledge about the anatomy of computer. • To learn the trouble shooting/solution during the access of the computer 									
Theory syllabus									
Unit	Content								Hrs
1	Introduction to the Computer and Computer Peripherals: Introduction to Computer Generation: Digital computer, mini, micro, mainframe, super Hybrid, Block Diagram of computer, Input Devices: Key Board, Mouse, Touch screen, Scanner, Output Devices: VDU, Graphic Plotter, Printer Storage Devices: Floppy Disk, Hard Disk, CD-ROM, DVD, cache memory, Magnetic tape, Magnetic disk, CDs, DVD, ZIP Drive, Pen Drive, Port Introduction: USB, Serial, Parallel and PS2, Other Input Methods: OMR, MICR, OCR, Communication Devices: MODEM, NIC, Computer Data and Information								9
2	Trouble Shooting and computer hardware and software problem: Troubleshooting tools, Formatting, Partition, BIOS, Registry, MSCONFIG and GPEDIT, software Installation and Removal, Running the Disk Cleanup Program, Running Disk Cleanup manually, Scheduling Disk Cleanup to run automatically, Running the Disk Defragmenter Program, Recommended Maintenance Schedule, Audio, CD and DVD Drives, Video, Monitor, Hard Disk Drive, Internet Access, Keyboard and Mouse, Software Repair, Installation of Drivers								9
3	Introduction to language processor: Types of Languages: Low level V/s High level languages, Generations of Programming Language, Introduction to Web Technology: Scripting languages, Introduction Of Machine Language, Introduction of Assembly Language Protocols, and Fourth Generation Language, Language Processor: Compilers, Interpreter, Assemblers								9
4	Introduction to software and communication methods: Overview of Compiler, Assembler and Interpreter, Types of Software: System Software, Application Software, I/O Communication Methods: Programmed I/O, Interrupts, Direct Memory Access (DMA)								9

5	Introduction to Micro Computer: An Ideal Micro Computer, basic block of a micro-computer, An Actual Micro Computer Internal Structure of Microprocessor (CPU), Data Bus, Address Bus, Control Bus, Memory System for Micro Computer, Microcomputer Architecture	9
Text Books		
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Reference Books		
1	O' Level Simple: Information Technology by Satish Kumar-BPB Publications	
2	Fundamentals of computer by V.Rajaraman-PHI Publications.	
3	Structure computer Organization by Andrew S. Tanenbaum-PHI Publications.	
4	Information Technology Concepts by Dr. Madhulika Jain, shashank Jain, satishjain-BPB Publications.	
Note for Examiner		
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Paper Structure		
	Section: 1 Q-1 (Attempt any Five Out of Seven: each question must be 6marks) -- 30 Questions must be covered all possible section. Section: 2 Q-2 (Must be from topics: 1 and 2 (6+6)) Q-3 (Must be from topics: 3 and 4(6+6)) Q-4 (Must be from topic: 5(6))	

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FACULTY OF COMPUTER APPLICATIONS									
Programme	B.Sc.(CA & IT)				Branch/Spec.	DCS			
Semester	I				Version	1.0.0.1			
Effective from Academic Year		2018-19			Effective for the batch Admitted in			June 2018	
Subject code	U11A5FM		Subject Name		FUNDAMENTAL OF MATHEMATICS				
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	3	-	-	-	3	Theory	40	60	100
Hours	3	-	-	-	3	Practical	-	-	-
Pre-requisites:									
Fundamental Knowledge of Basic Mathematics.									
Learning Outcome:									
By the end of this module students should be able to									
<ul style="list-style-type: none"> • Enhance the students' ability to think logically and mathematically. • Be able to describe Basic Mathematics concept like set theory, Matrices, Graph theory, Counting and Combinations. 									
Theory syllabus									
Unit	Content								Hrs
1	Set theory Introduction, Representation of sets, Universal set, Empty set, Finite set, Infinite set, Subset, Disjoint set, Equality of two sets, Equivalent sets, power set, Venn diagram, Set operations: Union, Intersection, Difference, Symmetric difference, Complements, Cartesian product of two sets, the algebraic laws of set theory. Examples related to cardinality of sets								12
2	Matrices Introduction, Unit matrix, Square matrix, Transpose of a matrix, Invertible matrices, Diagonal and Anti diagonal elements of matrices, zero matrix, row and column matrix, Symmetric matrix, Skew symmetric matrix, Upper and Lower triangular matrix. Arithmetic Operations on matrices: Addition, Subtraction , Additive Inverse and Multiplication of matrices.								10
3	Graph theory Introduction, Graph and multi graphs, Finite graphs, Trivial graph, Sub graph, isomorphic graphs, Homeomorphic graphs, Paths, Hamiltonian graphs, Eulerian Graph, Complete, Regular and Bipartite graphs.								08
4	Function Introduction, Definition , Domain, Co-Domain and Range of Function, Types of Function: In to Function, On to Function, One to One Function , Many to One Function, One to One Correspondence and its Examples.								09
5	Counting and Combinations Introduction, Basic counting principles, Factorial notation, Binomial coefficients, Permutations.								06

	Combinations, The pigeonhole principle, The inclusion Exclusion principle, ordered and unordered partitions.	
Practical content		
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Text Books		
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Reference Books		
1	Discrete Mathematics by Seymour Lipschutz and Marc Lipson.	
Note for Examiner		
	Q-1 must be common from any topics from syllabus. Q-2 and onwards must be from specific topics and internal choice or option can be given	
Paper Structure		
	<p>Section :1 Q-1 (Attempt any Five Out of Seven: each question must be 6marks) -- 30 Questions must be covered all possible section.</p> <p>Section:2 Q-2 (Must be from topics: 1 and 2 (6+6)) Q-3 (Must be from topics: 3 and 4(6+6)) Q-4 (Must be from topic: 5(6))</p>	

Note:

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GANPAT UNIVERSITY									
FACULTY OF COMPUTER APPLICATIONS									
Programme	B.Sc.(CA&IT)				Branch/Spec.	Computer Applications			
Semester	I				Version	1.0.0.0			
Effective from Academic Year	2019-20				Effective for the batch Admitted in	July 2019			
Subject code	U11B6CS1		Subject Name		LANGUAGE AND COMMUNICATION SKILLS – I				
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	3	-	-	-	3	Theory	40	60	100
Hours	3	-	-	-	3	Practical	-	-	-
Pre-requisites:									
Familiarity with basics of English language, strong determination and will-power for skill-set enhancement.									
Learning Outcome:									
At the end of the course, the students shall acquire satisfactory competency in the fundamental communication skills so as to be able to:									
<ul style="list-style-type: none"> • listen, understand and respond effectively • read, comprehend and apply the acquired knowledge/information in various practical situations • speak efficiently under various conditions • write various drafts in clear and concise manner 									
Theory syllabus									
Unit	Content								Hrs
1	Basics of Communication: Definition, Principles, Process, Functions, and Forms of communication (Formal – Informal, Verbal – Non-verbal, Electronic and Visual), Language as a tool of Communication, Barriers to communication with remedies								12
2	Functional Grammar and Vocabulary: Articles, Verb forms, Conjunctions, Collocations, Sentence Construction, Phrasal verbs.								11
3	Receptive Language Skills: Listening Skill: Definition and process of listening, Rudiments of effective listening, Modes of listening, Barriers to listening, Tips for effective listening, Traits of a good listening. Listening comprehension practice using audio-visuals (IELTS Listening) Listening to Announcements- (railway/ bus stations/ airport /sports announcement/ commentaries etc.) Reading Skill: Definition, Purposes & types of reading, Techniques for effective reading comprehension, reading comprehension practice through simple to advanced passages.								11

4	<p>Productive Language Skill:</p> <p>Productive Skills of Communication</p> <p>Speaking:</p> <p>Significance of effective interpersonal oral conversation competence Familiarity with tone, stress and voice modulations and paralinguistic features Characteristics of an erudite speaker</p> <p>Oral practice of speaking in different situations (IELTS Speaking)</p>	6
5	<p>Productive Language Skill:</p> <p>Writing:</p> <p>Significance of effective writing skill</p> <p>Coherence and cohesion</p> <p>Points to ponder (fundamentals) for producing impressive written drafts</p> <p>Significance of language quality (4 Cs) and attractive appearance of the draft</p> <p>Difference in structures of formal and informal</p> <p>Writing practice for preparing drafts of various informal, semi-formal and formal letters (IELTS General Training Writing task-1)</p>	5
Text Books		
	Technical Communication - Principles and Practice by Meenaksi Raman & Sangeeta Sharma (Oxford University Press)	
Reference Books		
1	Effective Technical Communication by M Ashraf Rizvi (TMH Publication)	
2	Cambridge IELTS 1-10, Cambridge University Press	
3	A Communicative Grammar of English by Geoffery Leech and Fan Svartvik (Pearson Longman)	
4	Online resources: You Tube - Daily Video Vocabulary, Vocab 24, TED Lectures, Inspirational speeches/addresses of success people, parliamentary speeches, interviews, various internet channels devoted to learning and improving communication in English	
Note for Examiner		
	Q-1 must be common from any topics from syllabus. Q-2 and onwards must be from specific topics and internal choice or option can be given	
Paper Structure		
	<p>Section :1</p> <p>Q-1 (Attempt any Five Out of Seven: each question must be 6 marks) -- 30 Questions must be covered all possible section.</p> <p>Section:2</p> <p>Q-2 (Must be from topics: 1 and 2 (6+6)) Q-3 (Must be from topics: 3 and 4(6+6)) Q-4 (Must be from topic: 5(6))</p>	