



GANPAT UNIVERSITY

FACULTY OF COMPUTER APPLICATION

Programme	BACHLOR OF SCIENCE IN INFORMATION TECHNOLOGY (INFRASTRUCTURE MANAGEMENT SERVICES) – BSC-IT (IMS)	Branch/Spec.	Computer Applications					
Semester	I	Version	1.0.0.0					
Effective from Academic Year	2017-18		Effective for the batch Admitted in	June 2017				
Subject code	U41A1ADP	Subject Name	Algorithm Development and Introduction to Programming					
Teaching scheme			Examination scheme (Marks)					
(Per week)	Lecture(DT)	Practical(Lab.)	Total	CE	SEE	Total		
	L TU	P TW						
Credit	3	2	-	05	Theory	40	60	100
Hours	3	4	-	07	Practical	20	30	50
Pre-requisites:								
Basic Knowledge of computer, arithmetic calculation and MS-DOS.								
Learning Outcome:								
Will be able to learn programming language, Concepts of Basic Programming languages like loop, array, structure and will be able to learn other advance programming languages like .net, Java, C++, Android etc.								
Theory syllabus								
Unit	Content					Hrs		
1	Concepts of C: (9) Overview of C (5) Brief history of C, Importance of C, Features of 'C' language(1), Basic Structure of C Programs(1), Programming Style, Steps to execute 'C' Program(1), Understanding the terminologies:SourceProgram,ObjectProgram,ExecutableProgram,Linker,Loader(1), Debug, Compilation process,Interpreter(1) Constants, Variables and Data Types: (4) Character set, C tokens, keywords and identifiers (1), constants, variables (1), data types (1), declaration of variables, assigning value to variable, defining symbolic constants (1).					09		
2	Operators and Managing I/O (9) Operators – arithmetic, relational (1), logical, assignment, increment–decrement (1), conditional, bit–wise and special(1),Arithmetic expressions, evaluation of expressions, precedence of arithmetic operators(1), type conversions in expressions(1), operator precedence and associativity, mathematical functions.(1), Reading and writing a character Formatted input–output (3)					09		
3	Decision Making Branching: Decision making with IF statement, simple IF statement, the IF–ELSE statement (1), nesting of IF ... ELSE statements, the ELSE IF ladder (1), Switch statement (1), turnery (? :) operator(1), Go–To statement (1) Looping :					10		

	Looping statements – WHILE (1), DO (1) and FOR. (2) Nesting and Jumps in loops, Break & Continue (1)	
4	<p>Array & Function (11)</p> <p>Arrays: (4) Introduction to Array, Concept of Dimensions in arrays, (1) Initialization values in an array, Overflow and Underflow, (2) Concepts in Multidimensional Array. (1)</p> <p>Functions: (7) Need for user-defined functions, the form of c function, return values and their types, (1)calling a function, category of functions, (1) no arguments and no return values, argumentswithreturnvalues,(1)handlingofnon-integerfunctions,nestingoffunctions, recursion, functions with arrays,(2) the scope, visibility and lifetime of variables in functions.(2)</p> <p>Structure: (06) Structure definition, Assigning values into members,(1) structure initialization, comparison of structures, (1) arrays of structures, (2) arrays within structures,(2)</p>	17
Practical content		
List of programs specified by the subject teacher based on above mentioned topics		
Text Books		
1	Programming in ANSI C by Balaguruswami E. – TMH Publications	
Reference Books		
1	“Programming in C” by Pradipdey and Manash Ghosh	
2	Let us ‘C’ by YashwantKanetkar –BPB Publications	
3	Mastering Turbo C by Stan, Kelly,Bootle –BPB Publications	
4	How to Solve it by Computer, R.G.Dromey–PHI Publication	
<p><u>Note for Examiner</u> 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</p> <p><u>Paper Structure</u> Q-1 (Attempt any Six Out of Eight: each question must be 5 marks) --- 30 Questions must be covered all possible section. Q-2 (Must be From topics: Concepts of C: (6 marks)) Q-3 (Must be From topics: Operators and Managing IfO (6 marks)) Q-4 (Must be From topics: Decision making branching and Looping: (8 marks)) Q-5 (Must be From topics: Array and Function: (6 marks)) Q-6 (Must be From topics: Structure: (4 marks))</p>		



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Semester	I	Version	1.0.0.0					
Effective from Academic Year	2017-18	Effective for the batch Admitted in	June 2017					
Subject code	U41A2IWD1	Subject Name	Introduction to web development – I					
Teaching scheme			Examination scheme (Marks)					
(Per week)	Lecture(DT)	Practical(Lab.)	Total	CE	SEE	Total		
	L TU	P TW						
Credit	3	2	-	05	Theory	40	60	100
Hours	3	4	-	07	Practical	20	30	50
Pre-requisites:								
Knowledge of Internet.								
Learning Outcome:								
Students can make static website quickly by applying this concepts.								
Theory syllabus								
Unit	Content					Hrs		
1	Internet Concepts: (10) Introduction to the Internet : Computer Networks (1), Network Topology: (Bus, Star, Ring, Hierarchical, Hybrid, Mesh topology) (3) Internet service Provider, Types of network: LAN, WAN, MAN (1), Intranet and Extranet (1), Virtual Private Network (1) Introduction to World Wide Web (1) Electronic Mail – Structure of Email, Email Protocol, Advantage (1) FTP, Remote Login, Ecommerce, Elearning, Ebanking (1)					10		
2	Basics of HTML: (15) Introduction History of HTML, Hypertext and Hypertext Markup Language, •Why HTML (1) HTML Documents Dividing the document into 2 parts: Header tags, Body tags, Paragraphs, Formatting (2) Elements of an HTML Document : Text Elements, Tag Elements, Special Character elements (2) Image tags (1), Hyperlinks, Links with images and buttons (1), Anchor tag (1), Text fonts and styles, background colors/images, Marquee Behavior (2) Lists : Order list, Un-Order lists, Definition lists (3) HTML Media Tags: Inserting audio files, Inserting Video Files (2)					12		

3	Advance HTML:(15) Tables in HTML: Inserting and Removing Rows and Columns, Spanning Rows and Columns (4) Frames in HTML: Vertical, Horizontal frameset, <FRAMESET> tag, <FRAME> tag, <NOFRAME>,Inline frame.(5) Forms: <FORM> tag, <INPUT> tag, <TEXTAREA> tag, Selection List fields (6)	12
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4	<p>Java Script:(15) Introduction to JavaScript: Writing First Java Script, External java script (1) Variables: Rules ,Declaring, Assign and Scope of variable (1) Control Statement: IF, If...Else, If...Else if, Switch statement(2) Loops: the for loop, while loop, the do while loop (2) Operators : Arithmetical, Assignment, Comparison, String Operators (2) Popup Boxes: Alert box, confirm box, prompt box(3) Functions : Defining function(2) Event Handling (2)</p>	11
Practical content		
List of programs specified by the subject teacher based on above mentioned topics		
Text Books		
1	Introduction to Internet and HTML scripting (Fourth Edition) By Bhaumik Shroff	
Reference Books		
1	Beginning HTML,XHTML,CSS and Java script by Jon Duckett	
<p>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</p> <p>Paper Structure Q-1(AttemptanySixOutOfEight:eachquestionmustbe5marks)---30 Q-2 (Must be From topics: Internet Concepts:(6)) Q-3 (Must be From topics: Java Scripts: (8)) Q-4 (Must be From topics: Introduction to HTML: (8)) Q-5 (Must be From topics: Advanced HTML: (8))</p>		



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Semester	I	Version	1.0.0.0						
Effective from Academic Year		2017-18	Effective for the batch Admitted in		June 2017				
Subject code	U41A3SDM	Subject Name	Introduction to data analysis and data management						
Teaching scheme			Examination scheme (Marks)						
(Per week)	Lecture(DT)	Practical(Lab.)		Total	CE	SEE	Total		
	L	TU	P	TW					
Credit	3		1	-	04	Theory	40	60	100
Hours	3		2	-	05	Practical	20	30	50
Pre-requisites:									
Basic knowledge of computer system.									
Learning Outcome:									
Will able to make effective presentation, document editing, spreadsheets, database that will be useful for project documentation, arithmetic calculation, project report.									
Theory syllabus									
Unit	Content								Hrs
1	Open Office – Writer (8) Selecting the application package WorkingwithDocuments–FormattingDocuments–SettingPagestyle–CreatingTables– DrawingTools–PrintingDocuments–OperatingwithMSWorddocuments Mail Merge, Watermark, Drop cap, Macro								08
2	Open Office-Calc (12) Introduction to Spreadsheets, Overview of a Worksheet, Creating Worksheet &Workbooks, Organizing files, Managing files & workbooks Functions & Formulas, Working with Multiple sheets, Creating Charts & Printing Charts								12
3	Open Office-Math (5) Introduction–Formula Editor Math, Menus, Toolbars Open Office -Base (8) Introduction– Database Concepts Advantages of OPEN OFFICE –BASE Overview of Database Creating a New Database Creating Tables								13
4	Open Office -Impress (7) Introduction – Creating Presentation Advantages of OPEN OFFICE –IMPRESS Saving Presentation Files, Master Templates & Re-usability, Slide Transition.								07

Practical content	
List of programs specified by the subject teacher based on above mentioned topics	
Text Books	
1	PC Software for windows made simple by Taxali R.K. – Tata McGraw–Hill Publishing Co. LTD.
Reference Books	
1	Open Office Basic: An Introduction Paperback by Prof James Steinberg.
2	Taming Apache OpenOffice: Getting Started By Jean Hollis Weber.
3	ACCESS 2000 ,BPB Publications, Celeste Robinson .
4	10 Minute guide to MS–ACCESS 2000 ,PHI publication, Faithewempen .
	<p>Note for Examiner:</p> <p>Q–1 Must be common from any topics from syllabus.</p> <p>Q–2 And onwards must be from specific topics and internal choice or option can be given</p> <p>Paper Structure</p> <p>Q–1 (Attempt any Five Out of Seven: each question must be 6 marks) --- 30 marks Question must be covered all possible topics.</p> <p>Q–2 (Must be from topics: Open Office – Writer (9 marks))</p> <p>Q–3 (Must be from topics: Open Office – Calc & Open Office – Math (9 marks))</p> <p>Q–4 (Must be from topics: Open Office – Base (6 marks))</p> <p>Q–5 (Must be from topics: Open Office – Impress (6 marks))</p>



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FACULTY OF COMPUTER APPLICATIONS

Programme	BACHLOR OF SCIENCE IN INFORMATION TECHNOLOGY (INFRASTRUCTURE MANAGEMENT SERVICES) – BSC-IT (IMS)				Branch/Spec.	Computer Applications			
Semester	I				Version	1.0.0.0			
Effective from Academic Year		2017-18			Effective for the batch Admitted in			June 2017	
Subject code	U41A4ITS		Subject Name		Information Technology And System Maintenance				
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total	CE	SEE	Total	
	L	TU	P	TW					
Credit	3	-	-	-	03	Theory	40	60	100
Hours	3	-	-	-	03	Practical	-	-	-
Pre-requisites:									
Require the idea of computer.									
Learning Outcome:									
Awareness regarding internal structure and storage of computer.									
Theory syllabus									
Unit	Content								Hrs
1	Introduction to Computer, Information Technology, Hardware and processor (12) <ul style="list-style-type: none"> History of Computer, Definition of computer, Block Diagram of computer Characteristics of computer, Generation of computer: Digital computer, mini, micro, mainframe, super Hybrid computer Data and Information Features of Information System Hardware Processor Architecture Computer Arithmetic Instruction Set Architecture 								12
2	Introduction to Language, Processor and software (12) <ul style="list-style-type: none"> Types of Languages: Low level vs High level languages, Introduction of Machine Language, Introduction of Assembly Language Language Processor: Compilers, Interpreter, Assemblers Difference between Compiler–Assembler–Interpreter Types of Software: System Software, Application Software 								12

3	Peripheral Device(8) <ul style="list-style-type: none">• FDD, Types of FDD• Hard diskdrive• Types of HDD	08
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	<ul style="list-style-type: none"> • TapeDrives • CD–DVDDrives • USB • Cache memory • PenDrive • Port Introduction: USB, Serial, Parallel andPS2 • Input Devices: Key Board, Mouse , Touch screen, Scanner,OMR,MICR,OCR • Output Devices: VDU, Printer <p>Communication Devices: MODEM,NIC</p>	
4	<p>System security and Management(8)</p> <ul style="list-style-type: none"> • Backup andRestore • Defragment • DiskManagement • Installation of OS andApplications • DriverInstallation • Booting system <p>Securing system from virus or unauthorized</p>	
Practical content		
N. A.		
Text Books		
1	Fundamentals of Computer Organization and Architecture By Mostafa AB–EL–BARR and Hesham EL–REWNI	
Reference Books		
1	PC Hardware in a Nutshell, 2 nd Edition By Barbara Fritchman Thompson, Robert Bruce Thompson– O’Reilly Publisher	
2	Fundamental Of computer Organization By Albert Zomaya	
	<p>Note for Examiner</p> <p>Q–1 Must be common from any topics from syllabus.</p> <p>Q–2 And onwards must be from specific topics and internal choice or option can be given</p> <p>Paper Structure</p> <p>Q–1 (Attempt any Five Out of Seven: each question must be 6 marks) --- 30 marks Question must be covered all possible topics.</p> <p>Q–2 (Must be From topics 1 and 2 (8+8 marks) (Attempt any Four Out of Six: each question must be 4 marks))</p> <p>Q–3 (Must be From topics 3 : (8 marks))</p> <p>Q–4 (Must be From topics 4 : (6 marks))</p>	



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Semester	I	Version	1.0.0.1						
Effective from Academic Year	2019-20	Effective for the batch Admitted in	June 2019						
Subject code	U41B5CS1	Subject Name	Communication Skill-I						
Teaching scheme			Examination scheme (Marks)						
(Per week)	Lecture(DT)	Practical(Lab.)	Total	CE	SEE	Total			
	L TU	P TW							
Credit	2	-	1	-	03	Theory	40	60	100
Hours	2	-	2	-	04	Practical	20	30	50
Pre-requisites:									
Basic knowledge of English Grammar.									
Learning Outcome:									
Main objective of this subject is to improve the knowledge and speaking skill in English.									
Theory syllabus									
Unit	Content								Hrs
	THEORY								
1	Basic Communication Theory								
	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, synonyms, antonyms, prefix, suffix, one word substitutions, Sentence Construction, Phrasal verbs.								10
3	Listening Skill								05
	Definition and process of listening, Rudiments of effective listening, Modes of listening, Barriers to listening, Tips for effective listening, Traits of a good listening.								
4.	Reading Skill								05
	Definition, Purposes & types of reading, KWL method of reading, Techniques for effective reading comprehension								
	PRACTICAL								
1.	Listening exercises								10
	Listening to audio and answering (monologues, dialogues and polylogues), Listening and writing (integrated skill).								

	Listening comprehension practice using audio-visuals (IELTS Listening) Listening to Announcements- (railway/ bus stations/ airport /sports announcement/ commentaries etc.)	
2.	Reading Exercises	05
	Reading comprehension practice through simple to advanced passages.	
Practical content		
N. A.		
Text Books		
1		
Reference Books		
1		
	<p>Note for Examiner</p> <p>Q-1 must be common from any topics from syllabus.</p> <p>Q-2 and onwards must be from specific topics and internal choice or option can be given</p> <p>Paper Structure</p> <p>Q-1(Attempt any Six Out of Eight: each question must be 5 marks)---30 Questions must be covered all possible section.</p> <p>Q-2 (Must be From topics: Basic Communication Theory: (12 marks))</p> <p>Q-3 (Must be From topics: Functional Grammar and Vocabulary (8 marks))</p> <p>Q-4 (Must be From topics: Listening Skill: (5 marks))</p> <p>Q-5 (Must be From topics: Reading Skill: (5 marks))</p>	