



BACHELOR OF SCIENCE - INFORMATION TECHNOLOGY (B.Sc.(IT))

Semester-IV (SY)

Course No.	Subject Code	Course Type	Subject	Credit
EC-401	22668	ELECTIVE	Time Management	02
FC-402	22669	FOUNDATION	Business Communication-IV	02
CC-403	22670	CORE	Window Programming Using Vb.Net	04
CC-404	22671	CORE	Database Concept And Tools	04
CC-405	22672	CORE	Computer Network	04
CC-406	22673	CORE	Operating System-II	04
CC-407	22674	CORE	Practical	04
Total				24



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B.Sc.(IT)		Course: Time Management	Course No: EC-401	
Semester: 04		Type of Course: ELECTIVE		
Marking Scheme: External Examination: 70 + Internal Evaluation: 30 = 100 Marks				
Credits: 02		Theory Sessions per Week: 02		
Unit	Detailed Syllabus	Teaching Hours	Marks/Weight	
Unit-1	Introduction	8	18	
	Setting goals Making goals smart Plan your success			
Unit-2	Working with time	8	18	
	Evaluate priorities Analyse your current use of time Deal with procrastination			
Unit-3	Work environment	7	17	
	Managing your work environment Identify time bandits Brainstorm solutions for time bandits			
Unit-4	Meetings	7	17	
	Manage your meetings effectively Organize your workplace Learn to delegate- the ABC's of delegation Learn to say 'NO' Manage stress effectively			
Reference Books:				
1. Matt kane: SURGE your guide to put any idea into action				
2. Atul gawande : the checklist manifesto how to get things right				
3. David allen : getting things done: the art of stress free productivity				



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B.C.A. Course: Business Communication-IV Course No: CC-402			
Semester: 04 Type of Course: Foundation Course			
Marking Scheme: External Examination: 70 + Internal Evaluation: 30 = 100 Marks			
Credits: 02 Theory Hours: 30			
Unit	Detailed Syllabus	Teaching Hours	Marks/Weight
Unit-1	Management Communication	8	18
	- Introduction. - Need For Organizational Communication. - Importance of Organizational Communication. - Principles of Effective Organizational Communication. - Causes for Poor Organizational Communication.		
Unit-2	Written Communication	8	18
	- Introduction. - Essentials of a Good Business Letter. - Basic Considerations while Writing Business Letters. - Parts of Business Letter. - Styles & Layout of Business Letter.		
Unit-3	Corporate Communication.	7	17
	- Corporate & Communication. - Defining Corporate Communication. - Employee Relations & Communication. - Crisis & Disaster - Managing & Communicating		
Unit-4	Conflict and Negotiation in Organizations	7	17
	- What is Conflict? Defining Conflict. - Origins of Conflict. - Guidelines for Effective Conflict Management. - Conflict and Negotiations in Industrial Relations. - Guidelines for successful Negotiations Rights & Wrong.		
Reference Books			
1. "Communication: By C.S. Rayudu. Himalaya Publishing House. New Delhi. Chapter No: 08 'Management Communication'. Page No: 216 to 250			
2. "Communication: By C.S. Rayudu. Himalaya Publishing House. New Delhi. Chapter No: 04 'Written Communication'. Page No: 146 – 181			
3. "Business and Managerial Communication" By Sailesh Sengupta. PHI Learning Private LTD. New Delhi. 110001. Chapter No: 19 'Corporate Communication'. Page No: 529 to 559.			
4. "Business and Managerial Communication" By Sailesh Sengupta. PHI Learning Private LTD. New Delhi. 110001. Chapter No: 18 'Conflict & Negotiation In Organization'. Page No: 492 to 528			



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B.Sc. IT Course: Window Programming using VB.NET Course No: CC-403			
Semester: 04 Type of Course : Core Course			
Marking Scheme: External Examination: 70 + Internal Evaluation: 30 = 100			
Credits: 04 Theory Sessions per Week: 04			
Unit	Detailed Syllabus	Teaching Hours	Marks/Weight
Unit-1	Introduction and Basic Controls	16	18
	.Net Framework, Common Language Runtime Feature & Advantages of CLR. JIT & It's Types : Pre-JIT, Econo-JIT, Normal-JIT Introduction to Integrated Development Environment (IDE) Programming Construct – Variable, Data type, Type Casting, control structure, looping statement, array, function & procedure, Exception Handling. Console Application Introduction of form. Label, Textbox, Button. Link Label, Combo box, List box, Checkbox, Radio button, Scrollbar. Timer Control, Group box, Panel Event Handling, Method & Property of controls.		
Unit-2	Advance Control	16	18
	MDI & SDI form, Main Menu Strip & Context Menu. Rich text box, Picture box, Date time Picker. Track bar, Notify Icon, Progress Bar, Tool tip Built In Dialog box (Open File Dialog, Save File Dialog, Color Dialog, Font Dialog, Folder Browser Dialog)		
Unit-3	Database Connectivity	14	17
	ADO.Net Architecture. Create database using MS Access and accessing database using server explorer. Database connectivity using programming code. Database binding with Data Grid View & combo box. Crystal Report.		
Unit-4	Object Oriented Programming	14	17
	Class, Object & it's characteristics Inheritance, Polymorphism. Function Overloading Properties: Read Only Properties, Write Only Properties, ReadWrite Properties Constructor & Destructor.		
Reference Books			
1. Steven Holzner: Visual Basic .NET Programming Black Book DeramTech Press.			
2. Rod Stephens: Visual Basic 2005 Programmer's			



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B.Sc. IT				Course: Computer Network		Course No: CC-405	
Semester: 04				Type of Course : Core Course			
Marking Scheme: External Examination: 70 + Internal Evaluation: 30 = 100							
Credits: 04				Theory Sessions per Week: 04			
Unit	Detailed Syllabus	Teaching Hours	Marks/Weight				
Unit-1	Introduction & Transmission Media And Optical Fiber Communication & Satellite Communication	16	18				
	Communication System Analog & Digital Data Communication Channel Twin Wire and Co-axial cable, Fiber Optic Radio Waves & Microwaves Optical Source & Light Detectors Propagation in Fiber Basic of Routing FDDI & DQDB Satellite Link and Satellite Communication						
Unit-2	Data Networks & Data Communication System	16	18				
	Circuit Switching & Packet Switching PABX Facsimile (Fax) Introduction to ISDN Multiplexing – FDM, TDM & WDM						
Unit-3	Network Topology, Architecture & Standards	14	17				
	LAN,WAN, MAN Basic Network Topologies Ethernet, Token Bus & Token Ring IEEE Standards 802 For LAN and MAN Introduction to Bluetooth						
Unit-4	Network Protocol and Firewall	14	17				
	ATM & X.25 Protocol Inter-W Bridges, Routers And Brouters, Gateways Repeaters, Modems, Hubs and Switches Firewall						
Reference Books:							
1. Andrews Tananbaum: Computers Networks, PHI							
2. Michel and Miller: Introduction to Digital Data Communication							
3. James Martin: Telecommunication and Compute							



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B.Sc. IT		Course: Operating System - II	Course No: CC-406
Semester: 04		Type of Course : Core Course	
Marking Scheme: External Examination: 70 + Internal Evaluation: 30 = 100			
Credits: 04		Theory Sessions per Week: 04	
Unit	Detailed Syllabus	Teaching Hours	Marks/Weight
Unit-1	File & I/O Management	16	18
	File Concept, Characteristics of file, File operations, File system structure Access Methods - Sequential , direct and Index sequential Directory Structure - single level, two level, tree level, Directory operations. Overview of I/O System, Application of I/O Interface, I/O hardware and subsystem. Disk scheduling algorithm (FIFO, SSTF, SCAN, CSCAN)		
Unit-2	Distributed Operating system	16	18
	Introduction and need for distributed OS Architecture of Distributed OS Models of distributed system Remote procedure Calls Distributed shared memory		
Unit-3	Introduction to Linux Operating System And File Structure & Commands	14	17
	Introduction to Linux Operating System History, Advantage & Disadvantage of Linux Operating System. Application area of Linux Operating System. Linux Flavors Desktop Environment – Xwindow, KDE & GNOME. File system hierarchy standard. Linux architecture, Shell & its types. File & directory Command Process command, User command, Misc. Command		
Unit-4	Shell Script	14	17
	Introduction to Vi Editor Mode of Vi Editor Shell Variable, Shell Operator Structure Language – Control structure, Iterating Statement and Array		
Reference Books:			
<ol style="list-style-type: none">1. Silberschatz, Galvin and Gange: Operating System Concepts, Wesley.2. Tanenbaum A.S., “Modern Operating Systems”, 4th Edition, PHI, 20013. Stalling W, “Operating Systems”, 6th edition, Prentice Hall India.4. Sumitabha Das: Concepts and Application of UNIX 4th edition Tata McGraw Hill5. Yashwant Kanitkar: Unix Shell Programing, BPB Publication			



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B.Sc. IT			Course: Practical	Course No: CC-407
Semester: 04			Type of Course: Core Course	
Marking Scheme: External Examination: 100 + Internal Evaluation: 00 = 100 Marks				
Credits: 04			Practical Sessions per Week: 08	
Unit	Detailed Syllabus			Marks/ Weight
Unit-1	Practical Based on 403			50
Unit-2	Practical Based on 404			50