

Effective from Academic Year 2025-26 Effective for the batch Admitted in Subject Name Server Network Infrastructure Management -1 Teaching scheme Examination scheme (Marks) CE	Programme		B.Sc. I'	Γ (Infras	tructure N	Manager	nent	Branch/S	pec.	Comp	Computer Applications			
Effective from Academic Year 2025-26 Effective for the batch Admitted in Subject Code U43A2SNM1 Subject Name Server Network Infrastructure Management -1 Teaching scheme Examination scheme (Marks) CE			Service	s) (Hons	.)									
Credit 2	Semester	•	III							1.0.0.0				
Teaching scheme Practical (Lab.) Total CE SEE Total	Effective	from A	cademic						Effective for the b		tch Admitted in		June 2024	
Credit 2	Subject	Code	U43A2S	NM1	Sub	ject Nar	ne	Server Network Infrastructure Management -I						
Credit 2			Teach	ning sch	eme				Examin	ation sc	heme (Ma	arks)		
Credit 2	(Per we	e Le	Lecture Pra			(Lab.)	Total			CE SEE			Total	
Credit 2 0 2 0 4 Theory 50 50 1 Objective: Students can understand the concepts of Microsoft Client and server Technology and also able to create server. Pre-requisites: Basic knowledge of basic concept of Network Terminology and Protocol. Course Outcomes: Name of CO Description CO1 Understand the concept of basic client server architecture with DNS and FTP CO2 Understand and Apply Selection of group policy and firewall rules. CO3 Understand and creation of DFS and IP security for security purpose. CO4 Creating VPN server and NAT server for Public and Private IP concept. Mapping of CO and PO CC PO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 PO9 PO10 PO11 F CC PO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 PO9 PO10 PO11 F CC PO PO PO PO		(1												
Hours 2		L	,	ΓU	P	TW								
Hours 2														
Objective: Students can understand the concepts of Microsoft Client and server Technology and also able to create server. Pre-requisites: Basic knowledge of basic concept of Network Terminology and Protocol. Course Outcomes: Name of CO Understand the concept of basic client server architecture with DNS and FTP CO2 Understand and Apply Selection of group policy and firewall rules. CO3 Understand and reation of DFS and IP security for security purpose. CO4 Creating VPN server and NAT server for Public and Private IP concept. Mapping of CO and PO CC PO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 PO9 PO1 PO1 PO1 PO1 PO1 PO1 PO2 O 1 O 2 O 2 O 3 O 1 O 0 CC 1 O 1 O 0 CC 1 O 0 O 0 CC 1 O 0 O 0 O 0 O 0 O 0 O 0 O 0 O	Credit	2		0	2	0	4	Theory		50	5	50	100	
Students can understand the concepts of Microsoft Client and server Technology and also able to create server. Pre-requisites: Basic knowledge of basic concept of Network Terminology and Protocol. Course Outcomes: Name of CO Description CO1 Understand the concept of basic client server architecture with DNS and FTP CO2 Understand and Apply Selection of group policy and firewall rules. CO3 Understand and creation of DFS and IP security for security purpose. CC4 Creating VPN server and NAT server for Public and Private IP concept. Mapping of CO and PO CC PO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 PO9 PO10 PO11 FC CC 1 1 3 1 3 2 2 1 0 0 2 1 CC 2 0 3 1 2 0 0 1 3 1 Theory Syllabus Ur Content E Basics of Client Server Architecture, DNS. Basics of Client Server Architecture: - Overview of client/ server, P2P, Types of Client Server Architecture.				0	4	0	6							
Pre-requisites: Basic knowledge of basic concept of Network Terminology and Protocol.	•													
Basic knowledge of basic concept of Network Terminology and Protocol. Course Outcomes :	Students	can und	erstand th	e concep	ots of Mic	crosoft C	lient and	server Tecl	hnology a	nd also a	ble to crea	ate serv	er.	
Name of CO Description														
Name of CO				concept of	f Networ	k Termi	nology a	nd Protocol						
Understand the concept of basic client server architecture with DNS and FTP														
CO2		CO												
CO3					•						ΤР			
Cod Creating VPN server and NAT server for Public and Private IP concept.							• • •							
Mapping of CO and PO														
CC PO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 PO9 PO10 PO11 FO11 CC 1 1 3 1 3 2 2 1 0 0 2 1 CC 2 0 2 0 3 1 2 0 0 1 3 1 CC 1 1 3 1 2 2 2 0 1 0 2 2 CC 2 0 3 0 3 1 2 1 0 0 2 1 Theory Syllabus Content Basics of Client Server Architecture, DNS. Basics of Client Server Architecture: - Overview of client/ server, P2P, Types of Client Server Architecture. - Overview of client/ server, P2P, Types of Client Server	CO4		Creatin	ig VPN s	erver and	NAT se	rver for P	ublic and Pr	ivate IP co	ncept.				
CC PO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 PO9 PO10 PO11 FO11 CC 1 1 3 1 3 2 2 1 0 0 2 1 CC 2 0 2 0 3 1 2 0 0 1 3 1 CC 1 1 3 1 2 2 2 0 1 0 2 2 CC 2 0 3 0 3 1 2 1 0 0 2 1 Theory Syllabus Content Basics of Client Server Architecture, DNS. Basics of Client Server Architecture: - Overview of client/ server, P2P, Types of Client Server Architecture. - Overview of client/ server, P2P, Types of Client Server														
CC 1 3 1 3 2 2 1 0 0 2 1 CC 2 0 2 0 3 1 2 0 0 1 3 1 CC 1 1 3 1 2 2 2 0 1 0 2 2 CC 2 0 3 0 3 1 2 1 0 0 2 1 Theory Syllabus Content Easics of Client Server Architecture, DNS. 9 Basics of Client Server Architecture: - Overview of client/ server, P2P, Types of Client Server Architecture.	Mapping	of CO a	nd PO											
CC 2 0 2 0 3 1 2 0 0 1 3 1 CC 1 1 3 1 2 2 0 1 0 2 2 CC 2 0 3 0 3 1 2 1 0 0 2 1 Theory Syllabus Content Easics of Client Server Architecture, DNS. 9 Basics of Client Server Architecture: - Overview of client/ server, P2P, Types of Client Server Architecture. - Overview of client/ server, P2P, Types of Client Server	CC PO		PO2	PO3	PO4	PO5	PO	PO7	PO8	PO9	PO10	PO1	1 PO12	
CC 1	CC 1		1	3	1	3	2	2	1	0	0	2	1	
CC 2 0 3 0 3 1 2 1 0 0 2 1 Theory Syllabus Ur Content Basics of Client Server Architecture, DNS. Basics of Client Server Architecture: - Overview of client/ server, P2P, Types of Client Server Architecture.	CY 1		0	2	0	3	1	2	0	0	1	3	1	
Theory Syllabus Ur Content Basics of Client Server Architecture, DNS. Basics of Client Server Architecture: - Overview of client/ server, P2P, Types of Client Server Architecture.			1	3	1	2	2	2	0	1	0	2	2	
Ur Content E Basics of Client Server Architecture, DNS. Basics of Client Server Architecture: - Overview of client/ server, P2P, Types of Client Server Architecture.	CC 2			3	0	3	1	2	1	0	0	2	1	
Basics of Client Server Architecture, DNS. Basics of Client Server Architecture: - Overview of client/ server, P2P, Types of Client Server	CC 2 CC 1		0											
Basics of Client Server Architecture: - Overview of client/ server, P2P, Types of Client Server Architecture.	CC 2 CC 1 CC 2	Syllabus												
Architecture.	CC 2 CC 1 CC 2	Syllabus		3			Conten	t					Hrs.	
Architecture.	CC 2 CC 1 CC 2 Theory S Ur Basic	es of Cli	ent Serve	er Archi	-								Hrs.	
DNS: - Overview of DNS, basic information about zone, DNS hierarchy, Name Resolution. Configuration	CC 2 CC 1 CC 2 Theory S Ur Basic	es of Cli	ent Serve	er Archi	-				P2P, Type	es of Clie	ent Server			
and Implementation of DNS, Domain vs Workgroup, FTP: - Intranet Internet Extranet, FTP server, FTP	CC 2 CC 1 CC 2 Theory S Ur Basic Arch DNS	es of Clies	ent Serve	er Archi er Archi ONS, bas	tecture:	- Overvi ation abo	ew of cliout zone,	ent/ server, DNS hierar	rchy, Nam	e Resolu	tion. Con	figurat	9	

Authentication Method, Configuration and Implementation of FTP.

	Group Policy, Firewall.	6
	GP: - How it Works, GPO, GPMC, Configuration and Implementation of GP, WMI Filter, Local User an	
2	Domain user, Firewall: - Introduction of Firewall, Types of Firewalls, Firewall Profiles, Inbound and	
	Outbound Traffic. Configuration & Rules of Firewall.	
	IPSec Policy, DFS.	7
	IP Sec Policy: - Introduction of IP Sec Policy, Architecture of IP Sec, Protocol of IP Sec,	
	Encryption, decryption Policy, configuration of IP Sec Policy and Implementation of IP Sec Policy	
3	DFS: - Overview of DFS, Namespace creation and its types, overview of replication, Creation method	
	of replication, mesh topology,	
	VPN, NAT, Routing	8
	VPN: - Overview of VPN, VPN protocol, L2TP, PPTP, Configure and implementation of VPN.	
4	NAT: - Overview of NAT, Public IP, Private IP, pros – Cons Public and Private IP, Proxy Server	
	concept, Routing: - what is router, overview of routing protocol types, Important of routing table,	
	xt Books:	
1	Configuring Windows Server 2008 Network Infrastructure by J.C. Mackin and Tony Northrup-Microsoft	
	Press	
2	Microsoft Windows Server 2008 R2 Administration Instant Reference Paperback – Import, 22 January	
	2010 by Matthew Hester, Chris Henley, Sybex.	
3	Windows Server 2008 Administrator's Companion Paperback – 1 January 2008, 1st edition (22 January 2010) by Page J. Charli, Subary	
	2010) by Russel, Charli, Sybex.	
Re	ference Books:	
1	Windows Server 2008 Server Administrator Kindle Edition by Stuart Ami ASIN: B000N6VFVU	
	Windows Berver 2000 Berver Mainimistration Principe Barton by <u>Betaart Mini</u> Main V. Booot of V. V.	
2	All the Steps of Server 2008: Hand Book of Server 2008, Vishweshwar Sahini, ASIN: B079W4XMZJ.	
3	Windows Server 2008 R2: Interview Questions You'll Most Likely Be Asked Paperback – Import, 1	
	January 2012, by Vibrant Publishers, CreateSpace	
W	eb References / MOOC / Certification Course:	
1	http:// www.coursera.org/learn/illinois-tech-microsoft-windows-os?action=enroll	
2	http:// www.coursera.org/learn/windows-server-management-security	
3	http:// www.coursera.org/learn/operating-systems-overview-administration-security	
4	http:// www.udemy.com/course/configuring-managing-and-maintaining-windows-server-2008	
	nestion Paper Scheme:	
ζ.	*	

University Examination Duration:2Hours

Note for Examiner:

- Q-1 Must be common from any topics from the syllabus.
- Q-2 And onwards must be from specific topics and internal choice or option can be given.

Paper Structure:

- Q-1 Must be from all Unit Any Five out of seven (25 Marks) (CO1, CO2, CO3, CO4)
- Q-2 Must be from Unit 1: Any Two out of Three (06 Marks) CO1
- Q-3 Must be from Unit 2: Only one question without any option (**05 Marks**) CO2
- Q-4 Must be from Unit 3: Any Two out of Three (08 Marks) CO3
- Q-5 Must be from Unit 4: Any Two out of Three (06 Marks) CO4