

GOVERNMENT OF TAMILNADU DIRECTORATE OF TECHNICAL EDUCATION, CHENNAI STATE PROJECT COORDINATION UNIT

(Established under Canada India Institutional Cooperation Project)

CURRICULUM

Course Name	Windows Server System Administration		
Course Code	CSE/2020/018		
Course Duration	80 Hours		
Minimum Eligibility Criteria and Pre-requisites(if any)	ITI/10 th /+2/Diploma/Graduates Basics Knowledge of networking		
Course Objectives	 The main objective of this course is to: Understand administrative tasks in Windows system. know how to setup, manage and configure windows server and managing storage. 		
Course Outcomes	At the end of training, the participants will be able to • Demonstrate Windows Server administrative tasks and perform server configurations based on storage, user and devices.		
Expected Job Roles	Network administrator, system administrator		

TEACHING AND SCHEME OF EXAMINATION						
Course Code	Course Name	Hours		Assessment Marks		Duration of Examination
				Min	Max	Examination
		Theory	20	10	20	
CSE/2020/018	Windows Server System	Practical	60	40	80	3 Hours
	Administration	Total	80	50	100	

CSE/2020/019 - WINDOWS SERVER SYSTEM ADMINISTRATION DETAILED SYLLABUS

UNIT NO	MODULES	NO.OF.HOURS THEORY
I	FUNDAMENTALS OF NETWORKING	
1.1	Introduction to Networks Network devices IP addresses Setting up a LAN Server-Client concept Roles of system administrator Server administration activities	4
II	OS INSTALLATION AND CONFIGURATION	
2.1	Hardware requirements Different editions of OS OS installation and configuration Local Users accounts Group accounts User Account controls	4
III	ACTIVE DIRECTORY	
3.1	Domain and domain controller Active directory (AD) AD objects Installing Active directory User and Group management Computer management Group Policy	4
IV	SERVER ROLES AND FEATURES	
4.1	Server Manager Adding server roles Adding server features DHCP DNS Hyper - V Back up Web Server	4
V	SERVER MAINTENANCE AND SECURITY	
5.1	Preventive maintenance Trouble shooting Remote administration Security features File security Windows Firewall	4
	Total Theory Hours	20
	Total Practical Hours	60
	Total Hours	80

PRACTICAL (60 HOUES)

- 1. Installing Windows Server 2016 operating system.
- 2. Installing a server role using a wizard
- 3. Creating and managing local user and group accounts
- 4. Configuring user account controls
- 5. Installing and configuring Active directory domain service
- 6. Creating a domain ,users and organizational units
- 7. Joining client computers to a domain
- 8. Creating and linking a group policy object
- 9. Installing and configuring Dynamic Host Configuration Server
- 10. Installing and configuring Domain Name Server
- 11. Installing and configuring Hyper V and creating a virtual machine on Hyper-V
- 12. Creating and scheduling a backup
- 13. Trouble shooting common network problems using commands
- 14. Configuring Windows Firewall
- 15. Exploring remote monitoring tools

HARDWARE REQUIREMENT

S.NO	LIST OF TOOLS /EQUIPMENTS
1	Computer
2	Printer
3	Router
4	Hub
5	LAN card

SOFTWARE REQUIREMENT

S.NO	LIST OF SOFTWARE
1	Windows Server 2016

REFERENCE BOOKS

S.NO	NAME OF THE BOOK	AUTHOR	PUBLISHER
1	Mastering Windows Server 2016 –	Jordan Krause	Packt
	A comprehensive and practical		
	guide to Windows server 2016		
2	Introducing Windows server 2012	Mitch Tulloch	Microsoft Press 2012

ASSESSMENT AND CERTIFICATION

S.No	Criteria for assessment
1.	A trainee will be assessed based on the performance in End Examination for Theory and Practical conducted internally in the Project Polytechnic College for a duration of 3 hours
2.	A trainee must have 75% of attendance to appear for End examination in Theory and Practical.
3.	The assessment for theory part will be based on the marks scored in the end examination on the knowledge bank of questions (1 word/objective type questions)
4.	The assessment for practical part will be based on the marks scored in the end examination conducted by the Project Polytechnic and assessed by the Examiners approved by Strategic Plan Implementation Committee (SPIC) of the project polytechnic.
5.	The criteria for successful completion of training is every trainee should score 50% of marks in theory and practical examination.
6.	On successful completion of training, Certificate will be issued to the participants by the Directorate of Technical Education through the Project Polytechnic.

END EXAMINATION

ALLOCATION OF MARKS

S.No	Description	Max.Marks
1.	Theory Examination	20
2.	Practical Examination	
	a)Procedure	10
	b)Execution	30
	c)Output	20
	d)Record	20
	Total Marks	100

THEORY MODEL QUESTION PAPER

CSE/2020/018 - WINDOWS SYSTEM ADMINISTRATION

(Maximum Marks : 20)

(N.B: Answer any **twenty** questions)

 $20 \times 1 = 20 \text{ Marks}$

- 1. What is an IP address?
- 2. Name any two networking devices.
- 3. Write any two advantages of computer networks.
- 4. Write any two activities of server administrator.
- 5. What is a LAN?
- 6. What is an OS?
- 7. Write any two features of Windows OS.
- 8. What is Local user account?
- 9. Write any two advantages of group accounts.
- 10. Name any two user account controls.
- 11. What is a domain controller?
- 12. What is the use of Active directory?
- 13. Write any two Active directory objects.
- 14. What is group policy?
- 15. Name the tool that can monitor and maintain the tasks of computer.
- 16. What is use of server manager?
- 17. Write any two advantages of DHCP.
- 18. Name the server role used for creating virtual machines.
- 19. Write any two benefits of taking backups.
- 20. What is DNS?
- 21. What is preventive maintenance?
- 22. Name any two security features of Windows Server OS.
- 23. What is meant by Firewall?
- 24. What is meant by File security?
- 25. What are the benefits of remote administration?