

23CGMAP122 : OPERATING SYSTEM LAB

Offered to : B. Sc. Honours (Computer science with cognitive systems)

Course Type: Practical - Major 4

Year of Introduction: 2023 – 2024 Year of Offering: 2023 – 2024

Semester: II Hours: 30 Credits: 1

Course Objective:

1. Learn how to install Linux OS

- 2. Learn how to work with directories in Linux OS
- 3. Learn how to work with files in Linux OS
- 4. Learn how to install and manage Windows Client OS
- 5. Learn how to install and manage Windows Server OS

Course Outcomes (based on BTL):

Course Outcome No.	Outcome	Mapping to
CO1	Installation of Linux OS	PO5,PO7
CO2	Working with directories in Linux OS	PO5,PO7
CO3	Working with files in Linux OS	PO5,PO7
CO4	Installation of Windows Client OS and management	PO5,PO7
CO5	Installation of Windows Server OS and management	PO5,PO7

Mapping of Course Outcomes (COs) with Programme Outcomes (POs)&Psos

23CGMAP122	СО	BTL	PO1	PO2	PO3	PO4	PO5	PO6	PO7
	CO1						M	M	Н
	CO2						M	M	Н
	CO3						M	M	Н

CO4			M	M	Н
CO5			M	M	Н

List of the Practicals:

- 1. Installation of Linux OS (CentOS)
 - Explain the steps to Install the Linux OS
- **2. Demonstrate Working with Directories in Linux** (*pwd*, *cd*, *absolute and relative paths*, *ls*, *mkdir*, *rmdir*, *file*, *touch*, *rm*, *cp*. *mv*, *rename*, *head*, *tail*, *cat*, *tac*, *more*, *less*, *strings*, *chmod*)
- **3. Demonstrate Working with Files in Linux** (ps, top, kill, pkill, bg, fg, grep, locate, find, date, cal, uptime, whoami, finger, uname, man, df, du, free, whereis, which)
- 4. Installation of Windows Client OS
 - Explain the steps to Install the Client OS
 - Install a Virtual Machine with Windows Client OS

5. Managing Windows Client OS

- Explain the steps to Create Users and Groups
- Demonstrate the usage of Devices and Printers
- Demonstrate the usage of Disk Management Console

6. Installation of Windows Server OS

- Explain the steps to Install the Server OS
- Install a Virtual Machine with Windows Server OS

7. Managing Windows Server OS

- Demonstrate how to Install Roles and Features
- Demonstrate the Usage of Server Storage Management
- Explain the various Management and Monitoring requirements
- Explain the Backup Types and steps to take Backups

Reference	Lab	M	[anua]	l:
-----------	-----	---	--------	----

	ah D	α aninam	anta	inner
1	ad R	eauirem	ienis —	Lanna

• CentOS Linux ISO

☐ Lab Requirements - Windows

• Windows 10 Evaluation – 90 Days

- Windows Server 2019 Evaluation 180 Days
- Windows Server 2016 Evaluation 180 Days

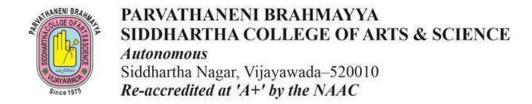
☐ CentOS Linux

- Installation Guide
- CentOS Overview
- Basic CentOS Linux Commands
- File and Folder Management
- ☐ Windows 10

M

- Windows 10 Tutorials Point
- Windows 10 Tutorial
- **□ Windows Server 2016**
 - Windows Server Channel 9
 - Windows Server Administration for Beginners
 - Windows Server 2016 Tutorial Step by Step Full
 - Windows Server 2016 Administration Full Course
 - Windows Server deployment, configuration, and administration

@@@@



23CGMAP122: Operating Systems Lab

Offered to: B. Sc. Honours (Computer Science with Cognitive Systems) Semester: II

Max. Marks: 50 (CIA: 15 + SEE: 35) Hrs/Week: 2

Model Paper: Practicals

Time: 3 Hrs. Max. Marks: 35

Section – A

1. Experiment-1

2. Experiment-2

Section - B

Viva Voce 10
M

CONTINUOUS ASSESMENT: (Internal) 15 M
Total

50Marks

@@@@