

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE, APRIL - 2025**

SYSTEM ADMINISTRATION

[Maximum marks: 75]

[Time: 3 Hours]

PART A

I. Answer all the following questions in one word or one sentence. Each question carries 1 mark

(9 x 1 = 9 Marks)

		Module outcome	Cognitive level
1	Recall the use of 'sudo' command.	M1.02	R
2is responsible for maintaining the operation, integrity, and security of computer systems.	M1.01	R
3is the process of installing two operating systems on a single hard drive called.	M1.08	R
4	Give the command to remove a package using YUM.	M2.07	R
5	Show how to set a password for a newly created user account in Linux.	M3.04	R
6	Define the significance of the User ID (UID) field in a user account.	M3.03	R
7command is used to create a new file system in Linux.	M4.10	R
8	LVM stands for.....	M4.07	R
9	Recall the primary purpose of partitioning a hard disk.	M4.02	R

PART B

II. Answer any eight questions from the following. Each question carries 3 marks.

(8 x 3 = 24 Marks)

		Module outcome	Cognitive level
1	Outline the steps involved in installing Fedora Linux from a bootable live media.	M1.03	U
2	Describe one method for setting the system date and time manually on Linux.	M1.07	U
3	Explain the commands used for firewall in Linux.	M1.07	U
4	Discuss the purpose of RPM in Linux package management.	M2.02	U
5	Write three fundamental Yum commands.	M2.07	R
6	Outline how to add third-party software repositories to YUM.	M2.11	U

7	Summarize how do ACLs differ from traditional Unix file permissions.	M3.07	U
8	Compare UID and GID.	M3.10	U
9	List the common partition table formats used in modern systems.	M4.03	U
10	List the benefits of partitioning a hard disk.	M4.04	R

PART C

Answer all questions. Each question carries seven marks

(6 x 7 = 42 Marks)

		Module outcome	Cognitive level
III	Discuss the concept of dual booting and its advantages and disadvantages.	M1.08	U
	OR		
IV	Outline the concept of partitioning hard drives and different types of partitions.	M1.09	U
V	Summarize graphical tools in fedora and Red Hat enterprise.	M1.06	R
	OR		
VI	Explain how to install a software package using the rpm command.	M2.01	U
VII	Elaborate working of YUM.	M2.10	U
	OR		
VIII	List the common methods for installing software in Linux.	M2.02	U
IX	Summarize the steps to create a user in Linux	M3.01	U
	OR		
X	Elaborate User account field in Linux.	M3.02	U
XI	Outline the role of the GID in Unix-like operating systems and how it differs from a UID	M3.06	U
	OR		
XII	Identify the main components of Logical Volume Management (LVM) partitioning.	M4.07	U
XIII	List the key steps involved in partitioning a disk with multiple partitions.	M4.06	R
	OR		
XIV	Outline Mounting file system in Linux.	M4.11	U
