

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

MCA (Sem.-2)
LINUX ADMINISTRATION
Subject Code : PGCA-1956
M.Code : 79618
Date of Examination : 12-07-22

Time : 3 Hrs.

Max. Marks : 70

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION - B & C have FOUR questions each.
3. Attempt any FIVE questions from SECTION B & C carrying TEN marks each.
4. Select atleast TWO questions from SECTION - B & C.

SECTION-A

1. Write short notes on :

- a) What is the difference between LINUX and Windows?
- b) What is the use of VI editor in LINUX?
- c) What file permissions can be given to a user in LINUX?
- d) What is a package and how it is different from a folder in windows?
- e) How HTTP is different from HTTPS?
- f) What is the use of APACHE in the LINUX system?
- g) How a server is different from a normal computer?
- h) What is the meaning of SWAT?
- i) In which scenario, you will prefer windows over LINUX? Give an example.
- j) What is the usage of the SAMBA server?

SECTION-B

2. Explain the following commands with examples: ls, rm, cp, mv, chown, chmod.
3. Which are the different file systems supported by Linux? Which feature of Linux makes this support possible (Virtual File Systems Layer)?
4. a) What are file permissions in Linux? Name different types of file systems in Linux.
b) What do you mean by the Daemons? Give an example.
5. Write a short note on Vi editor and its mode; Users and Groups in Linux, Configuring packages in Linux.

SECTION-B

6. What is DNS? Why is it necessary? What are top level domains? Give 3 examples of TLDs.
7. a) Explain the following terms:
(i) Mail user agent
(ii) Mail transfer agent
(iii) Local delivery agent.
8. State the features of Apache web server .
9. a) What is a POP3 server?
b) What is a secure web server? What are its components? Which packages are needed to create secure web server?



NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.

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MCA (Sem-2)
LINUX ADMINISTRATION
Subject Code : PGCA-1956
M.Code : 79618
Date of Examination : 28-11-2023

Time : 3 Hrs.

Max. Marks : 70

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. SECTION - B & C have **FOUR** questions each.
3. Attempt any **FIVE** questions from SECTION B & C carrying **TEN** marks each.
4. Select atleast **TWO** questions from SECTION - B & C.

SECTION-A

1. Answer briefly :

- What is the key difference between Linux and Windows kernels?
- Explain the role of the root directory in a Linux file system.
- How can you change file permissions in Linux?
- Describe the Linux boot process briefly.
- What tasks are involved in managing packages on a Linux system?
- What are the main steps for configuring a DNS server in Linux?
- How does the Apache HTTP server work, and how do you configure it?
- What is the purpose of SMTP in email communication?
- Describe the basic differences between POP and IMAP.
- Explain the role of the Samba server and its key tasks in administration.

SECTION-B

2. Explain the process of installing a Linux distribution. Discuss the considerations and steps involved in choosing the right distribution for specific use cases. Provide examples of popular Linux distributions and their characteristics.
3. Describe the Linux booting and shutting down processes in detail. Include the role of the bootloader, kernel initialization and essential steps during system shutdown. Discuss the significance of the runlevels in the boot process.
4. Discuss the concept of root in the Linux file system. Explain its privileges, responsibilities, and potential risks. How does the root user differ from other users and what are the best practices for managing the root account securely?
5. Explore the vi text editor in-depth. Explain its various modes, common commands, and advantages in text editing. Provide practical examples of using vi for file editing and manipulation and discuss how it compares to other text editors?

SECTION-C

6. Discuss the mechanism of the Samba server in enabling file and print services in a network. Explain the role of Samba Administration (SWAT) in configuring and managing Samba. Provide practical examples of creating shares and using SWAT for network file sharing.
7. Explain the significance of DNS in modern internet usage. Discuss the components of a typical DNS configuration and how it helps in domain name resolution? Provide detailed steps on how to set up a DNS server and configure DNS clients?
8. Describe the key concepts of the HTTP protocol and its role in web communication. Explain the installation, startup and shutdown processes of the Apache HTTP server. Discuss how Apache is utilized for hosting websites?
9. Explore the basics of email protocols, SMTP, POP, and IMAP, in email communication. Describe the installation and configuration of the UW IMAP and POP3 servers. Discuss their functions in email retrieval and storage.

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MCA (Sem.-2)
LINUX ADMINISTRATION
Subject Code : PGCA-1956
M.Code : 79618
Date of Examination : 24-05-2024

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION - B & C. have FOUR questions each.
3. Attempt any FIVE questions from SECTION B & C carrying EIGHT marks each.
4. Select atleast TWO questions from SECTION - B & C.

SECTION-A

I. Write short notes on :

- i. GUI (Graphical User Interface)
- ii. Kernel
- iii. Booting Process in Linux
- iv. File Permissions in Linux
- v. Steps and Linux Command to Unpacking the Package
- vi. Web Server
- vii. HTTP Protocol
- viii. SMTP Protocol
- ix. POP3 Protocol
- x. Samba SWAT.

SECTION-B

2. Differentiate between Linux and Windows operating systems. Using Suitable examples.
3. Define Linux root user role and discuss its differences from Windows admin accounts.
4. Explain Linux file permissions' role in security also describes types and manipulation.
5. Explain Linux package and user management processes. Include software installation and user/group administration.

SECTION-C

6. Describe the process of installing and configuring a DNS server, including setting up BIND database files and configuring DNS clients.
7. Discuss the various types of DNS records and their significance in DNS resolution. How do they contribute to domain management?
8. Explain the steps involved in understanding the HTTP protocol. How does it facilitate communication between clients and servers?
9. Detail the installation process of Apache HTTP Server and discuss the steps for starting up and shutting down Apache.

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