

## School of Computing Science and Engineering

Bachelor of Computer Applications Mid Term Examination - Nov 2023

Duration : 90 Minutes Max Marks : 50

## Sem III - E1UA305B - Introduction to System Administration

<u>General Instructions</u> Answer to the specific question asked Draw neat, labelled diagrams wherever necessary Approved data hand books are allowed subject to verification by the Invigilator

- 1) K2 (2) Describe the some unique features of windows OS. K1 (3) 2) Describe the purpose of a file system in Windows OS. 3) K2 (4) Compare and contrast different file systems used in Windows OS. K2 (6) 4) Discuss the role of the Windows Firewall in managing network connections and providing security. K3 (6) Evaluate the effectiveness of Windows Firewall in protecting against 5) network threats and its role in secure network communication within an organization. Design a basic Active Directory forest and domain structure for a small K3 (9) 6) organization. Specify the forest root and child domains, and explain
- the trust relationships.
  7) Evaluate the implications of IPv4 address exhaustion and the K4 (8) transition to IPv6. Discuss the key differences between IPv4 and IPv6 addressing schemes.
- 8) Examine the role of Windows Update in keeping the operating system K4 (12) and software up to date. Analyze the potential security risks of delaying or ignoring updates.

OR

Analyze the steps involved in setting up a secure Virtual Private <sup>K4 (12)</sup> Network (VPN) connection in a Windows OS environment. Discuss the encryption protocols used for VPN security.