

**University of Eswatini**  
**Department Of Computer Science**  
**Main Examination 2021**

**Title of paper : System Administration and Maintenance**

**Course number : CSC421**

**Time Allowed : Three (3) hours**

**Instructions:**

- **Each question carries 25 marks.**
- **Answer any four (4) questions.**

**This paper may not be opened until permission has been granted by the invigilator.**

### QUESTION 1

- a) Define Domain Controllers, Member Servers and Domain Services. [3]
- b) What is Active Directory? Discuss about all additional Active Directory services that are included Windows Server 2012. [10]
- c) What is Name-Resolution Services? Windows operating system natively support how many name-resolution systems? Explain every system individually. [12]

### QUESTION 2

- a) What is Microsoft Management Console (MMC)? Discuss about the components which are important to prepare server. [7]
- b) What is the minimum and recommended hardware requirement to install Windows Server 2012? [8]
- c) As an administrator, you need to ensure that servers and the network are secure, and unnecessary services are a potential source of security problems. Explain how you can disable unnecessary Services of Windows Server. [10]

### QUESTION 3

- a) What is Active Directory Domain Services (AD DS) and DNS? What are the relation between AD DS and DNS? [6]
- b) Explain how can Create, Enable, Delete and disable Computer Accounts in Active Directory Administrative Center. [9]
- c) Consider the following scenario. Say that you have branch offices in Seattle, Chicago, and New York. Each office has its own domain, which is part of the same domain tree or forest. These domains are called Seattle, Chicago, and NY. You want to make it easy for any administrator (from any office) to manage network resources, so you create a group structure that is very similar at each location. Although the company has marketing, IT, and engineering departments. Write the appropriate steps to configure the groups for the marketing departments at the three offices. [10]

### QUESTION 4

- a) What is logon Scripts? As the administrator, how can you create a logon Scripts. Explain with example. [8]
- b) What is Server Message Block (SMB)? Describe different file-sharing models of Windows Server 2012. [10]
- c) Distinguish between Standard file sharing and Public folder sharing models. [7]

**QUESTION 5**

- a) Windows Server 2012 has an extensive set of networking tools. Discuss briefly different networking tools with it's fundamental functions. [10]
- b) What are the functions of IP address? Write down the difference between IPv4 and IPv6. [8]
- c) What is DNS? Windows Server 2012, how many types of DNS servers are available? Discuss all of them. [7]

**End of Question Paper**