



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

PEPERIKSAAN AKHIR SEMESTER II SESI 2009/2010

NAMA MATA PELAJARAN : SISTEM PENGOPERASIAN RANGKAIAN

KOD MATA PELAJARAN : BIT 3263

KURSUS : 3 BIT

TARIKH PEPERIKSAAN : APRIL/MEI 2010

JANGKA MASA : 3 JAM

ARAHAN : JAWAB SEMUA SOALAN.

KERTAS SOALAN INI MENGANDUNGI LIMA (5) MUKA SURAT

Instruction: Answer **ALL** questions.

- Q1**
- (a) Describe **TWO (2)** functions of fault tolerance. (4 marks)
 - (b) Differentiate the architectures of disk duplexing and disk mirroring by using an appropriate diagram. (4 marks)
 - (c) Give **THREE (3)** issues affecting in fault tolerance selection. (6 marks)
 - (d) Discuss why Business Continuous Plan is important in modern network design. (6 marks)
- Q2**
- (a) Define group policies. (2 marks)
 - (b) List **FOUR (4)** examples areas covered by group policies. (2 marks)
 - (c) Differentiate between Compact Disk File System (CDFS) and Universal Disk Format (UDF). (2 marks)
 - (d) Discuss **THREE (3)** methods of assigning an IP address. (9 marks)

- (e) Describe **FIVE (5)** elements in an Active Directory hierarchical container based on **FIGURE Q2**.

(10 marks)

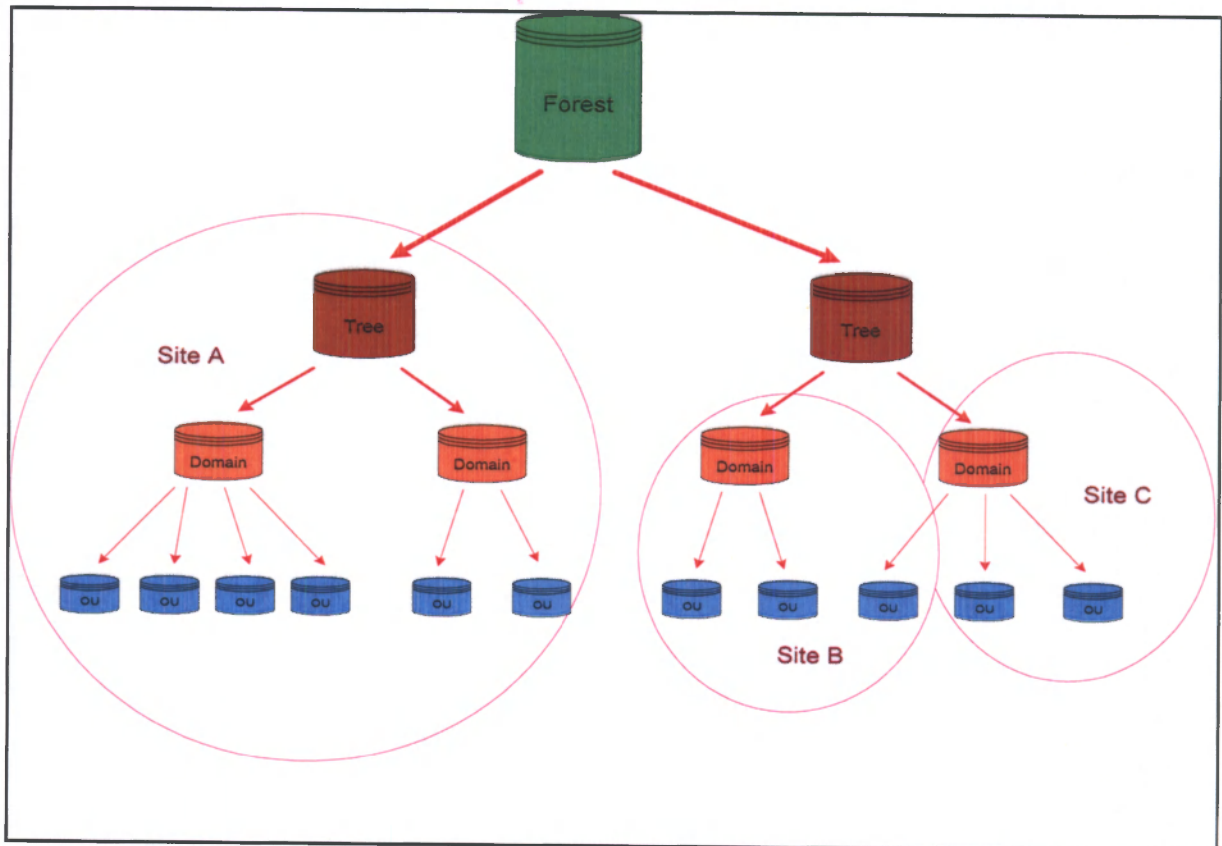


FIGURE Q2

- Q3** (a) Explain the flow of a basic Dynamic Host Configuration Protocol (DHCP) lease based on **FIGURE Q3**.

(4 marks)

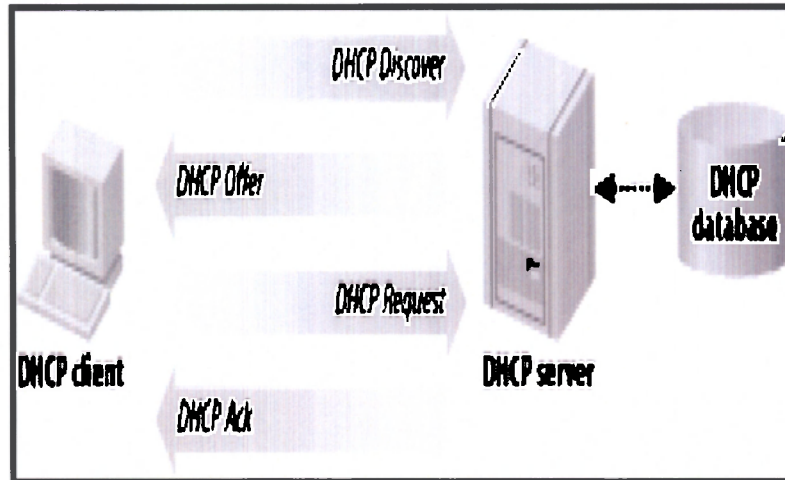


FIGURE Q3

- (b) The Warwick Gas Company has a network segment for its sales agents. The Windows 2000 DHCP server issues a block of 40 addresses to 120 of these sales agents. Because these agents are in and out of the office, no more than 40 of them are on the network at one particular time. What needs to be done to the DHCP server to ensure that users get an IP address each time they log in?
- (6 marks)
- (c) You are the Windows 2000 administrator for Clipped Wings Travel Agency. When checking on your DHCP server, you notice that DHCP requests are much higher than the number of users on the network. Recommend suitable solution for this problem.
- (4 marks)
- (d) Explain **TWO (2)** types of queries in Domain Name Resolution.
- (6 marks)

Q4 Based on case study in **Figure Q4**, answer the following questions.

XYZ Construction has more than 50 years experience in operation. Currently they have employs more than 1,800 people and serve 10,000 customers in Malaysia. They strive to maintain sustainable growth from prudent utility expansion, effective customer service, efficient processes and productive employees.

Company's goals: to provide management teams with real-time access to company data so they could quickly adjust project budgets and allocate resources as project and overall business requirements change. They needed an integration application that could cost effectively support business process updates.

Currently, they do not have any Web-based applications or self-service system that could provide customers with online payment options and account history. As for the internal business process: no central repository that contained key business data.

So, the only way to access the project details such as pipeline and building construction projects was through a manual report and analysis which could take weeks. By the time the report was available, the data was no longer useful.

FIGURE Q4

- (a) Recommend a suitable solution for implementing the above case study by justifying your answer. (10 marks)
- (b) Assume that XYZ wants to upgrade their current network operating system. Prepare **THREE (3)** steps involve in the following phases: (9 marks)
- (i) discovery phase
 - (ii) design phase
 - (iii) pilot phase
- (c) Recommend a suitable backup plan for important data for XYZ company. (6 marks)