# System and Network Administration Mid-term Examination

Answer all the questions below with explanation and examples. The Total mark is 100.

- 1). Explain Virtualize Intel VT-x/EPT or AMD-V/RVI feature in VMware Workstation?
  - o This feature use for enable sharing or remoting virtual machine.
- 2). Explain **Shutdown Even Tracker** function in Windows Server.
  - o This function use for collects information on the reasons why the server was shut down or restarted, and then logs this information in Event Viewer
- 3). Explain **Password Complexity** function in Windows Server.
  - This function require user put characters, numbers and even special characters for their passwords to provide security.
- 4). Why should we change the name of build-in **Administrator** user account in Windows Server?
  - o Because this default user name can be easy to hack by the other.
- 5). EX: a fully qualified domain name-computer name is server1.gic.itc.edu.kh

Explain: what is **server1**; what is **gic**; what is **itc**; what is **edu** what is **kh**?

- o server1: server name
- o gic: group name
- o itc: university name
- o edu: ministry name
- o kh: country name
- 6). Why do we need to configure static **IP address** on the server?
  - o Because we need to set up a domain.
- 7). Explain the function of **DNS Server**? How to test if your DNS Server is successfully configured?
  - DNS Server provides a standard method for association names instead of a long series of numbers(IP address) with numeric internet addresses. DNS also provides a hierarchical namespace ensuring that each host name will be unique across a local or wide area network.
  - Test DNS Server by: nslookup + domain name Ex: nslookup www.ngounhak.org
- 8). What is **Subnet mask**?

o Subnet mask is a correct IP address subnet according to our LAN.

#### 9). What is **Gateway IP address**?

 Gateway IP address is a correct IP address of a network node that serves as an access point to another network

#### 10). What is **Preferred DNS Server**?

o Preferred DNS Server is to make our computer become a server.

#### 11). What is **Alternative DNS Server**?

O Alternative DNS Server means that a single DNS server failure does not prevent clients from accessing web pages. It allows devices to continue resolving addresses even if their primary server is down. Alternate DNS servers can sometimes also be used to share the load of DNS requests on busy networks.

#### 12). Explain Network Time Protocol (NTP) function in Windows Server?

 NTP server service allow the server to share the correct time to all its clients that connect to the server.

## 13). Explain **Remote Desktop** function in Windows Server.

• Remote desktop allow the server to be configured remotely from somewhere else, so the administrator doesn't have to configure server directly in the server room.

### 14). Explain forward lookup zone and reverse look up zone in Windows Server.

- Forward lookup zone translates DNS names into IP addresses and provides information about available network services.
- o Reverse lookup zone translates IP addresses into DNS names.

#### 15). Explain Active Directory (AD) function in Windows Server?

 Active Directory stores information about users, computers, and other devices on the network. It helps administrators securely manage this information and facilitates resource sharing and collaboration between users.

# 16). Explain **Dynamic Host Configuration Protocol (DHCP)** function in Windows Server.

O DHCP allows servers to assign, or lease, IP addresses to computers and other devices that are enabled as DHCP clients. Deploying a DHCP server on the network provides computers and other TCP/IP-based network devices with valid IP address and the additional configuration parameters these devices need, called DHCP options. This allows computers and devices to connect to other network resources, such as DNS servers, WINS servers, and routers.