



UNIVERSITI KUALA LUMPUR
MALAYSIAN INSTITUTE OF INFORMATION TECHNOLOGY

FINAL EXAMINATION
JANUARY 2016 SEMESTER

SUBJECT CODE : IFD20603
SUBJECT TITLE : NETWORK MANAGEMENT
LEVEL : DIPLOMA
DATE : 25 MAY 2016
TIME : 9.00AM- 12.00PM
DURATION : 3 HOURS

INSTRUCTIONS TO CANDIDATES

1. Please read the instructions given in the question paper CAREFULLY.
2. This question paper is printed on both sides of the paper.
3. This question paper consists of TWO SECTIONS: SECTION A and SECTION B.
4. Answer ALL questions in SECTION A. Use the answer booklet.
5. For SECTION B, answer THREE (3) questions only.
6. Please write your answers for SECTION B on the answer booklet given.
7. Answer all questions in English.

THERE ARE 10 PAGES OF QUESTIONS, INCLUDING THIS PAGE.

SECTION A (TOTAL 25 marks)

INSTRUCTION: Answer ALL questions**Please use the answer booklet provided**

1. The goal of _____ is to monitor network and system configuration information.
 - A. Configuration management
 - B. Fault management
 - C. Security management
 - D. Performance management

2. The _____ is a remote room or closet connected to the MDF by fiber optic cable
 - A. Server room
 - B. Independent Distribution Frame
 - C. Data center
 - D. Intelligent Distribution Frame

3. Below are the example of logbook, EXCEPT
 - A. Server log
 - B. Workstation log
 - C. Passbook log
 - D. Security log

4. Below are the function of network analyzer, EXCEPT
 - A. Capture packets on the network for later analysis
 - B. Determine the percent network utilization
 - C. Determine the type of network packets
 - D. Filtering the malware

5. _____ provide Hamming codes error correction
 - A. RAID 0
 - B. RAID 1
 - C. RAID 2
 - D. RAID 3

6. Data loss can happen in many ways, EXCEPT
- A. Physical failure of the media the data is stored on
 - B. Power failure or spikes
 - C. Virus attacks
 - D. Mirroring
7. Knowing your network well allows you to do the following task(s)
- A. Speed up the process of isolating network problems
 - B. Be more effective at troubleshooting problems that arise
 - C. Optimize network performance
 - D. All of the answer above
8. Below are the common features and functions of traffic measurement tools, EXCEPT
- A. Provide real-time traffic graphs
 - B. Support for traffic shaping or rate limiting
 - C. Support access- list
 - D. Support website blocking and content filtering
9. A _____ is a database used to manage the devices in a communications network
- A. Management Information Base
 - B. Simple Gateway Monitoring Protocol
 - C. View-based Access Control
 - D. Dispatcher
10. What is the objective of RMON?
- A. Has local knowledge of management information
 - B. To provides services for sending and receiving messages
 - C. To address the problem of managing LAN segments and remote sites from a central location
 - D. To find and solve network problems, and plan for network growth

11. _____ is a widely used management protocol in telecommunications industry.
- A. Transaction Language 1
 - B. Simple Network Management Protocol
 - C. Common Management Interface Protocol
 - D. NetWare Management System
12. _____ provides a system and method for using a web browser to manage network devices.
- A. Media Information Base
 - B. Shadowing
 - C. Web Based Network Management System
 - D. Journaling
13. A(n) _____ allow network administrator to view all monitoring events and actions for selected time period, target and alert notification contact
- A. Event Log
 - B. Summary report
 - C. Status history
 - D. Timestamps
14. _____ needs user to specifies the page and its parameters
- A. Pager alert
 - B. SMS alert
 - C. Email alert
 - D. URL alert
15. Which area of network management concerns on tracking each individual and group user's utilization of network resources to better ensure that users have sufficient resources?
- A. Accounting management
 - B. Fault management
 - C. Configuration management
 - D. Security management

16. Below are the solution for bottleneck, EXCEPT:
- A. Use Category 3 twisted-pair cable
 - B. Replace a 10 Mbps Ethernet network with a 100Mbps Fast Ethernet
 - C. Replace Ethernet hubs with Ethernet switches.
 - D. Eliminate unnecessary protocols
17. Which area of network management concerns on controlling access to information on the data network?
- A. Fault management
 - B. Security management
 - C. Performance management
 - D. Configuration management
18. _____ is used to detect connectivity error
- A. DNS
 - B. RARP
 - C. Telnet
 - D. Traceroute
19. SNMP PDUs are carried in which of the following protocols?
- A. TCP
 - B. UDP
 - C. SMTP
 - D. RDP
20. The purpose of impact assessment is to _____
- A. Identify risks
 - B. Define support requirements
 - C. Document business functions
 - D. Disgruntled employees

21. If you have a single vendor network, and don't plan on any other vendors within the next couple of years, which solution should you choose?
- A. CMIP Solution
 - B. SNMP Solution
 - C. TL/1 Solution
 - D. Proprietary Solution
22. Below are the reasons for business continuity planning, EXCEPT
- A. Take the correct actions when needed
 - B. Recording network traffic
 - C. Maintain business operations
 - D. Legal requirements
23. The purpose of incident handling is to _____.
- A. Ensure safety of people
 - B. Environmental changes
 - C. Notify vendors
 - D. Reciprocal agreements
24. Below are examples of MDF, EXCEPT
- A. Server
 - B. Switch
 - C. Router
 - D. Patch panel
25. Below are the advantages of SNMPv2 over SNMPv1, EXCEPT:
- A. SNMPv2 expanded data types
 - B. SNMPv2 confirmed event notification
 - C. SNMPv2 provides richer error handling
 - D. SNMPv2 decrease data types

SECTION B (TOTAL 75 marks)

INSTRUCTION: Answer **THREE (3)** questions only

Please use the answer booklet provided

Question 1

- a. Define Network Management (2 marks)
- b. ISO Network Management model consist of five conceptual areas. Briefly explain the goal of Configuration management area. (2 marks)
- c. Determine the function of Main Distribution Frame (MDF) (2 marks)
- d. Answer the following questions:
- i. List **THREE (3)** types of bottleneck (3marks)
 - ii. List **THREE (3)** types of disaster events (3 marks)
- e. Briefly explain **THREE (3)** common reason for DRP failure (6 marks)
- f. List **THREE (3)** categories of downtime (3 marks)
- g. List **FOUR (4)** important procedures need to be involved in DRP. (4 marks)
- [25 marks]

Question 2

- a. Define fault tolerance (2 marks)
- b. Briefly explain **THREE (3)** examples of fault tolerance method (6 marks)
- c. i. Expand the word RAID (1 mark)
- ii. Briefly explain the characteristics of RAID 0 and RAID 1 (4 marks)
- d. Briefly explain **THREE (3)** types of backup (6 marks)
- e. i. Explain the function of UPS (2 marks)
- ii. Briefly explain **TWO (2)** sources of UPS (4 marks)
- [25 marks]

Unikl MIT

Question 3

- a. i. Define Baselining (3 marks)
- ii. List **THREE (3)** main stages of network baseline project (6 marks)
- b. Determine the need of network traffic analysis? (2 marks)
- c. List **THREE (3)** criteria of choosing the hardware and software for monitoring network performance (3 marks)
- d. Provide **TWO (2)** example of traffic management tools (2 marks)
- e. i. Define Simple Network Management Protocol (SNMP) (2 marks)
- ii. List **THREE (3)** main components of SNMP (3 marks)
- f. i. Define RMON? (2 marks)
- ii. List **TWO (2)** component of RMON (2 marks)
- [25 marks]

Question 4

- a Briefly explain:
- i. Hot site (2 marks)
 - ii. Warm site (2 marks)
 - iii. Cold site (2 marks)
- b. Differentiate between SNMP and CMIP (4 marks)
- c. Briefly explain the role of manager and agent in sending the alert (4 marks)
- d. List **TWO (2)** types of alert signals (2 marks)
- e. List **THREE (3)** possible action to be taken by network administrator upon receiving alerts (3 marks)
- f. How do the Network Management systems learn of problems? (2 marks)
- g. Differentiate between RMON1 and RMON2 (4 marks)
- [25 marks]

END OF EXAMINATION PAPER