FINAL EXAMINATION
FIRST SEMESTER SESSION 2011/2012

KOD / NAMA KURSUS: STIV3023 MULTIMEDIA SYSTEM NETWORKING
DATE : 14 JANUARY 2012 (SATURDAY)
TIME : 09.00 – 11.30 AM (2½ HOURS)
VENUE : DSB K.MAS

INSTRUCTIONS :
1. This question booklet contains TWO (2) parts, TWENTY (20) questions in PART A and TWO (2) questions in PART B in NINE (9) printed pages excluding the cover page.
2. Answer ALL questions in the space provided.
3. You are NOT ALLOWED to remove the question booklet from the examination hall.

MATRIC NO. : ____________________________ (in word) ____________________________ (in number)
IDENTIFICATION CARD NO. :

LECTURER : ____________________________

GROUP : ___________ TABLE NO. : ___________

DO NOT OPEN THIS EXAMINATION PAPER UNTIL INSTRUCTED
1. In order to create a network, major elements needed is networking device. Briefly defined what is networking device and give \textbf{TWO (2)} examples. \hfill (4 \text{ marks})

2. What is the primary function of \textbf{Network Interface Card (NIC)}. \hfill (2 \text{ marks})

3. Nowadays, user tends to use \textbf{Digital Subscriber Line (DSL)} compared to dial up connection. State \textbf{TWO (2)} reasons why DSL is better than dial up connection. \hfill (4 \text{ marks})
4. In your opinion, explain why do network administrator created subnet? (2 marks)

5. There are several commands used to troubleshoot network problem. Name TWO (2) commands and explain it. (6 marks)

6. State TWO (2) differences between LAN, MAN and WAN. (6 marks)
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7. Based on your answer in question 6, which network is suitable to be used to connect several labs together? (1 mark)

8. Deliberates THREE (3) ways to conduct digital transmission. (6 marks)

9. State TWO (2) types of text standards. (2 marks)
10. Briefly define the main function of a router and why router is different from other networking devices? (4 marks)

11. List **TWO (2)** goals of video coding. (2 marks)

12. Briefly define pattern recognition. (1 mark)
13. Define the meaning of CODEC and state THREE (3) examples of media encoding in computers. (5 marks)

14. Identify FIVE (5) techniques used in digital image processing (5 marks)

15. Give and explain TWO (2) types of data compressions. (5 marks)
16. State FOUR (4) types of data redundancy. (4 marks)

17. Name and illustrate THREE (3) types of IP Multicast. (6 marks)

18. Identify FIVE (5) video on demand requirements. (5 marks)
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19. Sketch the structure of client and server system at the space provided below. (5 marks)

20. Give FIVE (5) examples of telephone technologies. (5 marks)
PART B: CASE STUDY (20 MARKS)
PLEASE ANSWER ALL QUESTIONS.

1. Raslinda had been appointed the new lab technician at School of Multimedia Technology and Communication. Raslinda need to create the labs.

   a) List THREE (3) important network equipments in order to create this lab.

      (3 marks)

   b) Help Raslinda to understand the difference between straight through, rollover and cross over cable according to its characteristics.

      (6 marks)

   c) Raslinda also need to create a system that will store the document (Profile) of Multimedia Student according to their semester. In your opinion, which model is suitable, peer-to-peer or client server model?

      (1 mark)
2. Compare between Huffman encoding and arithmetic encoding.

(10 marks)

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END OF QUESTION