FINAL
Examination Paper
(COVER PAGE)

Session : August 2015
Programme : Diploma In Information And Communication Technology (DICITN)
Course : ICT1105: Fundamentals Of Networking
Date of Examination : December 8, 2015
Time : 5.00pm – 7.00pm  Reading Time : Nil
Duration : 2 Hours

Special Instructions :

Answer any FOUR (4) questions in the answer booklet provided.

Materials permitted : Nil
Materials provided : Nil

Examiner(s) : Mr. Victor Raj Kolintiar and Mr. Koh Chong Lin
Moderator : Ms. Noor Hasrina

This paper consists of 3 printed pages, including the cover page
DIPLOMA IN INFORMATION AND COMMUNICATIONS TECHNOLOGY (DICTN)
ICT1105: FUNDAMENTALS OF NETWORKING
FINAL EXAMINATION: AUGUST 2015 SESSION

Instructions: This paper consists of SIX (6) questions. Answer any FOUR (4) questions in the answer booklet provided. All questions carry equal marks.

Question 1
(a) Define crosstalk. State TWO (2) reasons why crosstalk happens. (4 marks)
(b) Identify and discuss FIVE (5) networking standard organizations. (15 marks)
(c) Explain THREE (3) characteristics of several types of physical media. (6 marks)

Question 2
(a) Identify and explain FIVE (5) hardware equipment’s found inside a crimping tool kit. (10 marks)
(b) Explain the following terminologies relating to port numbers:
   (i) Well known ports
   (ii) Registered ports
   (iii) Private ports (6 marks)
(c) Describe the NINE (9) steps for troubleshooting network problems. (9 marks)

Question 3
(a) Identify and discuss THREE (3) general guidelines for keeping your network highly available. (9 marks)
(b) Explain THREE (3) basic network topologies with the aid of relevant diagrams. (10 marks)
(c) List SIX (6) functions of Network Operating System (NOS) in client/server networks. (6 marks)
Question 4

(a) Draw the Open Systems Interconnection (OSI) model.  

(b) Compare analog and digital signals.  

(c) Explain the following network protocols:
   (i) UDP
   (ii) IPv6
   (iii) FTP
   (iv) ARP  

Question 5

(a) Describe the following interconnecting devices:
   (i) Repeaters
   (ii) Bridges
   (iii) Switches
   (iv) Routers
   (v) Gateways  

(b) Define switching. Identify and explain THREE (3) methods of switching.  

(c) State the name of the following IEEE 802 standards:
   (i) 802.3
   (ii) 802.4
   (iii) 802.5
   (iv) 802.11
   (v) 802.16  

Question 6

(a) List EIGHT (8) specific capabilities common to wireless network testing tools.  

(b) Identify and explain FOUR (4) methods of remote connectivity.  

(c) Explain THREE (3) categories of disaster recovery contingencies.  

~THE END~