

DiplETE – CS (NEW SCHEME)

Time: 3 Hours

JUNE 2012

Max. Marks: 160

PLEASE WRITE YOUR ROLL NO. AT THE SPACE PROVIDED ON EACH PAGE IMMEDIATELY AFTER RECEIVING THE QUESTION PAPER.

NOTE: There are 9 Questions in all.

- Question 1 is compulsory and carries 20 marks. Answer to Q.1 must be written in the space provided for it in the answer book supplied and nowhere else.
- The answer sheet for the Q.1 will be collected by the invigilator after 45 minutes of the commencement of the examination.
- Out of the remaining EIGHT Questions answer any FIVE Questions. Each question carries 16 marks.
- Any required data not explicitly given, may be suitably assumed and stated.

Q.1 Choose the correct or the best alternative in the following: (2×10)

a. E-mail exchange across the world is possible because most vendors have adopted the _____ in their software.

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|----------|-----------------------|
| (A) HTTP | (B) SMTP |
| (C) SNMP | (D) None of the above |

b. Network connectivity and fault detection use the following:-

- | | |
|------------|----------|
| (A) Telnet | (B) View |
| (C) Ping | (D) SMTP |

c. Tivoli is a product of

- | | |
|--------|----------|
| (A) CA | (B) IBM |
| (C) HP | (D) Dell |

d. Relationship between control and data tables are used in

- | | |
|----------|----------|
| (A) RMON | (B) FTD |
| (C) DNS | (D) None |

e. A traffic monitoring tool that reconstructs and interprets protocol messages that span several packets is

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|-------------|--------------|
| (A) Manager | (B) Analyzer |
| (C) Routing | (D) Alarm |

f. _____ is a router that connects two networks and can perform protocol conversion

- | | |
|-------------------------|-----------------------|
| (A) Hub | (B) Switch |
| (C) Either of the above | (D) None of the above |

Code: DC70

Subject: NETWORK MANAGEMENT

- g. LMDS is a wireless transmission system operating with a maximum range of _____
- (A) 3 miles (B) 1 km
(C) 200 feet (D) None of the above
- h. ISDN stands for
- (A) Indian Services Digital Network
(B) Integrated Services Digital Network
(C) International Services Digital Network
(D) None of the above
- i. The correlator use alarm events with the event model and determines the common problem that caused the alarm event. This is used in
- (A) Case-Based reasoning (B) Model-Based reasoning
(C) Rule-Based reasoning (D) Code Book correlation model
- j. _____ layer controls flow of data in both directions.
- (A) Session (B) Network
(C) Transport (D) Data link

Answer any FIVE Questions out of EIGHT Questions.
Each question carries 16 marks.

- Q.2** a. Describe the analogy of Computer Networks management with Telephone Network management. (5)
- b. Write short notes on TCP/IP. (2)
- c. Explain any **THREE** features for each of the following in network management:-
- (i) Goals (ii) Organisation
(iii) Functions. (9)
- Q.3** a. Describe the OSI Network Management Model. (5)
- b. Explain Network management functional model. (5)
- c. Explain how information model and communication are related. (6)
- Q.4** a. Illustrate how an NMS could monitor a sub-network using a commercial NMS. (8)
- b. Specify in detail the SNMP data type format that would serve the basis for defining managed objects. (8)

Code: DC70**Subject: NETWORK MANAGEMENT**

- Q.5** a. Describe specifications of encapsulated SNMP message. Explain it with diagram. (8)
- b. Elaborate RMON1 groups and functions. (8)
- Q.6** a. Describe the basic configuration of a protocol analyzer. What are the capabilities of the protocol analyzers that are available in the market? (8)
- b. Write short note on Traffic load monitoring and Protocol Statistics. (8)
- Q.7** a. Discuss the CASE Based Reasoning (CBR) and Model-Based Reasoning event correlation techniques. (8)
- b. Explain Packet Filtering. Describe the function of Packet Filtering router with diagram. (8)
- Q.8** a. Explain report management function for a network management application. Mention various planning and management reports. (8)
- b. Explain Service Level Management and Policy Based Management. (8)
- Q.9** a. Explain WBEM architecture with a diagram. Give its features. (8)
- b. Write short note on NMS with Web Interface and Web based Management. (8)