

B.C.A. DEGREE EXAMINATION, APRIL 2012
FOURTH SEMESTER

COURSE : MAJOR CORE **REG. NO.** _____
PAPER : NETWORKING CONCEPTS
TIME : 30 MINUTES **MAX. MARKS : 20**

Section - A (20 x 1 =20)

TO BE ANSWERED ON THE QUESTION PAPER ITSELF

Answer all questions:

I. Choose the correct answer:

1. In which topology, each device has a dedicated point to point link only to a central controller
 a. Star b. Mesh c. Bus d. Ring

2. Which protocol is responsible for higher level functions such as segmentation, reassembly and error detection
 a. User Datagram Protocol b. Internet Protocol
 c. Transmission Control Protocol d. Simple Mail Transfer Protocol

3. Transmission media are controlled by
 a. Data Link Layer b. Network Layer c. Application Layer d. Physical Layer

4. BNC Connectors are used by
 a. UTP b. STP c. Coaxial Cable d. Fiber Optic

5. What is the main function of the Transport Layer?
 a. Routing b. Mail Services c. Remote Login d. Port Addressing

6. The passing of the data and network information between the layers of the sending and receiving devices is made possible by
 a. Protocol b. Interface c. Dialog d. Program

7. Identify the Class of the IP Address 191.1.2.4
 a. Class A b. Class B c. Class C d. Class D

8. Which of the following domain is used to map an address to a name?
 a. Reverse b. Inverse c. Generic d. Country

9. A wireless LAN uses _____ frames.
 a. Management b. Control c. Data d. All the above

10. Which topology is used in the 10BaseT Ethernet?
 a. Bus b. Star c. Ring d. Mesh

II. Fill up the blanks:

11. The set of rules that governs the data communication is called as _____
12. _____ transports electromagnetic waves without the use of a physical conductor.
13. _____ Layer is responsible for the source to destination delivery of a packet across multiple networks
14. DNS _____ Server creates , maintains and updates the zone file.
15. _____ is the data rate of Gigabit Ethernet.

III. State True or False

16. A digital signal is a composite signal with a finite bandwidth.
17. Asynchronous transmission will have 1 start bit (0) and 1 or more stop bits (1).
18. The application layer enables the users to access the network.
19. The wireless LAN Access method is CSMA/CD .
20. Ethernet is the most widely used Local Area Network Protocol.

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086
(For candidates admitted during the academic year 2008-09 & thereafter)

SUBJECT CODE : CS/MC/NC44

B.C.A. DEGREE EXAMINATION, APRIL 2012
FOURTH SEMESTER

COURSE : MAJOR CORE
PAPER : NETWORKING CONCEPTS
TIME : 2½ HOURS

MAX. MARKS : 80

Section – B

(8 x 5 = 40)

Answer any eight questions:

1. Discuss on various Data Representation Formats.
2. Explain about the various categories of Network Topologies with their Advantages and Disadvantages.
3. What are the advantages of Parallel Transmission?
4. Discuss on the Layered Architecture of the Network Model.
5. Explain the Peer to Peer Processes with a neat diagram
6. Explain about the DNS in Internet.
7. Explain how CSMA/CD procedure handles Collisions.
8. Discuss on various classes of IP addresses.
9. Explain about various categories of traditional Ethernet.
10. Explain about the MAC sub layer implementation in detail.

Section–C

(4 x 10 = 40)

Answer any four questions:

11. Explain the following Connecting devices
i. Hubs ii. Bridges (5+5)
12. Explain about Serial Transmission with the categories in detail.
13. Discuss on Fiber Optic Cable in Detail.
14. Briefly explain about the following layers
i. Network Layer
ii. Data Link Layer (5+5)
15. Discuss on the following concepts. (5+5)
(i) Network Address Translation
(ii) Blue tooth Technology
16. Explain the IEEE 802.11 Specifications for a Wireless LAN.
