Reg. No.

BCACAC 156

Credit Based Second Semester B.C.A. Degree Examination, April/May 2013
BASICS OF NETWORKING
(New Syllabus)
(2012-13 Batch Onwards)

Time : 3 Hours

Max. Marks : 80

Note : *Answer* **any ten** *questions from Part* **A** *and* **any one full** *question from* **each** *Unit in Part* **B**.

PART – A   (10×2=20)

1. a) Define the term Bandwidth. Mention the measurement unit.

   b) Write any two disadvantages of star topology.

   c) What do you mean by Hybrid topology ? Give example.

   d) Differentiate half duplex and full duplex communication.

   e) What do you mean by broadcasting ? How it happens in Ethernet communication ?

   f) Expand TCP/IP and IPX/SPX.

   g) Mention any two reasons for popularity of T-1 lines.

   h) Which are the commonly used VSAT Access technologies ?

   i) Differentiate Network and Tunneling gateways.

   j) What is networking operating system ?

   k) List any four permissions that can be given to a folder.

   l) Define Active Directory and Active Directory Services.

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PART – B

UNIT – I

2. a) Mention the use of any four hardware components used for establishing network.

   b) Sketch and explain OSI reference model.

   c) Explain two types of twisted pair cables with diagram. **(4+8+3)**

3. a) Explain the services provided by Physical and Data Link layers.

   b) Explain the structure and working of Bus topology.

   c) Explain, how the transmission of data occurs in optical fibers in detail. **(5+5+5)**

UNIT – II

4. a) What is network protocol ? What are the aspects of communication to be defined by it ?

   b) Explain the structure of FDDI. List the advantages of using FDDI.

   c) Explain the function of SMTP and PPP with diagram. **(5+6+4)**

5. a) Write a note on Fast Ethernet and Giga Ethernet.

   b) Explain the process of filtering and forwarding in a network containing 8 subnets having Class C IP address. Obtain the IP address and subnet mask for each subnet. Also describe the calculation to be done by the route to identify which subnet contains the destination. **(6+9)**

UNIT – III

6. a) Describe the important differences between LAN and WAN technologies.

   b) What is a Routing Table ? Explain the information stored in it in detail.

   c) What are the various types of ATM classes. **(5+6+4)**

7. a) What is ISDN ? Explain the working of it.

   b) Explain the operations of Transparent bridges that searches a node in different networks.

   c) Write a note on PPP.

(5+5+5)

UNIT – IV

8. a) Explain the features of Windows 2000 servers.

   b) What are the two types of User Accounts offered by Windows 2000 server ? Explain procedure for creating each of them with various settings.   (6+9)

9. a) Explain the features of Novell Netware.

   b) What is DNS ? Explain DNS hierarchy.

   c) How do you create the group user Account ? Explain with various settings.

   d) Briefly explain the working of WINS.   (4+4+4+3)