Enrollment No: _____   Exam Seat No:_____

C.U.SHAH UNIVERSITY
Summer Examination-2017

Subject Name: Data Communication &Networking

Subject Code: 4CS03INT1   **Branch: B.Sc.IT**

Semester: 3   Date: 27/03/2017   Time: 10:30 To 1:30   Marks:70

Instructions:
   (1) Use of Programmable calculator & any other electronic instrument is prohibited.
   (2) Instructions written on main answer book are strictly to be obeyed.
   (3) Draw neat diagrams and figures (if necessary) at right places.
   (4) Assume suitable data if needed.

Que-1 Attempt all the following MCQ and short questions.   [14]

   1. IP address lies between _____.
      a) 0 to 245   c) 0 to 255
      b) 0 to 25   d) 0 to 265
   2. What is the port number of FTP?
      a) 25   c) 23
      b) 20/21   d) 27960
   3. Which protocol provides reliable data transfer?
      a) TCP   c) IP
      b) UDP   d) None of these
   4. Which topology requires a central controller or hub?
      a) Mesh   c) Ring
      b) Star   d) Bus
   5. ARP stands for _____.
      a) Address Resolution Protocol   c) Address Routing Protocol
      b) Address Reverse Protocol   d) Address Routing Packet
   6. Various LAN protocols are _____.
      a) Ethernet   c) Both a and b
      b) Token ring   d) None of above
   7. Check sum is used for _____.
      a) Error correction   c) Both a and b
      b) Error detection   d) None of above

   8. TCP is _____ protocol.
      a) Message oriented   c) Connectionless
      b) Object oriented   d) Connection Oriented
   9. The _____ layer lies between network layer and session layer.

a) Physical   c) Application

b) Transport   d) Data link

10. _____ is the technology that connects machines and people within a site in a small area.

a) LAN   c) MAN

b) WAN   d) CAN

11. What do you mean by simplex communication mode?
12. What is the use of gateway?
13. Define BootP.
14. Give the full form of CDMA.

Attempt any four questions from Que-2 to Que-8

Que-2 Attempt the following questions. [14]

1. Explain OSI reference model in detail with diagram. [7]
2. Write a note on TCP/IP protocol suite. [7]

Que-3 Attempt the following questions. [14]

1. Explain Wi-Fi and Wi-Max in detail. [7]
2. Explain any two Layer1 and Layer2 networking devices. [7]

Que-4 Attempt the following questions. [14]

1. Explain FDM and TDM in detail. [7]
2. Explain IPV4 and IPV6 addressing. [7]

Que-5 Attempt the following questions. [14]

1. Write a note on LAN and WAN. [5]
2. What is circuit switching? Explain in detail. [5]
3. Explain twisted pair and fiber cable. [4]

Que-6 Attempt the following questions. [14]

1. Explain various channelization protocols. [5]
2. Write short note on FTP and SMTP protocol. [5]
3. What is firewall? Explain in detail. [4]

Que-7 Attempt the following questions. [14]

1. What is packet switching? Explain in detail. [5]
2. Explain Bluetooth and infrared in detail. [5]
3. Explain WDM in short. [4]

Que-8 Attempt the following questions. [14]

1. Explain network connection types in detail. [5]
2. What is manageable and unmanageable switch? [5]
3. Write a short note on ARP and RARP protocols. [4]