SUBJECT CODE:- 462
FACULTY OF ENGINEERING AND TECHNOLOGY
S.E.(CSE/IT) Examination Nov/Dec 2015
Computer Networks-I
(Revised)

[Time: Three Hours] **[Max. Marks: 80]**

"Please check whether you have got the right question paper."
N.B   i) Q.No.1 and Q.No.6 are compulsory.
      ii) Attempt any two questions from Q. No. 2 to Q. No. 5 and Q.No.7 to Q. No.10 of each section.

SECTION-A

Q.1   Attempt any five   10
    a.   State difference between physical Address, Port Address and Logical Address
    b.   Identify five components of data communication
    c.   What is the relation between data rate and signal rate?
    d.   What is the purpose of line coding?
    e.   State difference between error correction and error detection.
    f.   What are the two approaches of packet switching?
    g.   Define cyclic code
    h.   What is ISP?

Q.2 a)   Why multiplexing is needed? Explain any one type of multiplexing in detail   08

    b)   Discuss the responsibility of Physical layer, Data link Layer and transport Layer of OSI model   07

Q.3 a)   Compare and contrast Circuit Switched network with Packet Switched Network   08

    b)   What is analog to digital conversion? Explain PCM with neat labeled diagram   07

Q.4 a)   Discuss the concept of redundancy in error detection and error correction   08

    b)   Distinguish Between Synchronous and statistical TDM.   07

Q.5   Write short note on (Any three)   15
    a.   Port Address
    b.   Parallel Transmission
    c.   Frequency Hopping spread Spectrum
    d.   Checksum
    e.   Hamming ,distance

SECTION -B

Q.6   Attempt any five   10
    a.   What is Piggybacking?
    b.   Define framing
    c.   Name the three protocols for noisy channel
    d.   What is the purpose of NIC?
    e.   How many numbers of bits are there in IPV_4 address. Give Example
    f.   Define Hand off
    g.   What is frequency reuse pattern?
    h.   What is slotted ALOHA

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Q.7 a) In what situation sliding Window protocol performs better than stop and wait protocol. Discuss.   08

   b) Explain IEEE 802.11 Standard in Detail   07

Q.8 a) Explain encoding and decoding in CDMA with suitable diagram   08

   b) Explain different types of connecting devices   07

Q.9 a) Using a suitable flow chart explain the procedure of channel access for pure ALOHA protocol   08

   b) Explain the IPV$_4$ format with the help of neat diagram   07

Q.10   Write short note on (Any Three)   15
       a. Reservation
       b. Walsh Table
       c. Polling
       d. Bluetooth
       e. Gigabit Ethernet

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