Q.P. Code : 733703

(3 Hours) | Total Marks : 80

N.B. : (1) Question **No.1** is **compulsory**.
     (2) Solve **any three** from remaining.

1. Solve **any four** :   20
    (a) Write a short note on frame relay.
    (b) What do you mean by Network layer design ?
    (c) What is wireless sensor network ?
    (d) Explain with diagram frame format of SO NET.
    (e) What is Roll of VCI & VPI in ATM ?

2. (a) What is a firewall ? What are the capabilities & limitation of firewall ? Discuss   10
     the different type of firewall, along with their advantage & disadvantage.
   (b) Explain the hardware implement of SONET architecture.   10

3. (a) Explain the protocol stack for IEEE 802.15.1 standard.   10
   (b) Draw and explain IEEE 802.15.4 LR-WPAN device architecture.   10

4. (a) Explain ATM cell format. Also describe the different functional layers of   10
     ATM and bring out the significance of AAL layer.
   (b) Draw and explain frame format of FR & explain address fields. How it   10
     provides congestion control and QoS.

5. (a) Explain Demilitarized Zone (DMZ) in brief.   10
   (b) What is the need of DWDM? Explain the technology with a neat schematic   10
     diagram, also list the system components.

6. Write a short note (**any four**) :   20
    (a) RMON and FCAPS
    (b) Packet filtering
    (c) B-ISDN
    (d) NAT
    (e) Port forwarding