P1343

[4858] - 1087
T.E. (Computer Engineering)
COMPUTER NETWORKS
(2012 Pattern)

Time : 3 Hours]   *[Max. Marks : 70*

Instructions to the candidates:

    1)   *Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.*
    2)   *Figures to the right indicate full marks.*
    3)   *Neat diagrams must be drawn wherever necessary.*
    4)   *Assume suitable data, if necessary.*

Q1) a)   What is DNS? Explain in brief hierarchical structure of DNS.   **[6]**

     b)   Compare link state routing and distance vector routing.   **[6]**

     c)   Explain token bucket and leaky bucket algorithm with diagram.   **[8]**

<p align="center">OR</p>

Q2) a)   Explain POP3 and IMAP4.   **[6]**

     b)   Explain socket programming with its primitives.   **[6]**

     c)   Draw the packet header format of OSPF and explain in detail.   **[8]**

Q3) a)   Compare and explain 802.11a, 802.11b and 802.11g wireless standards with respect to   **[8]**

         i)   Bandwidth.

         ii)   Frequency.

         iii)   Signal to noise ratio.

         iv)   Range.

     b)   Draw and explain WAP architecture.   **[8]**

<p align="center">OR</p>

Q4) a) What is WAE (Wireless Application Environment)? Explain in details.

[8]

b) Write a note on: **[8]**

   i) Wireless LAN.

   ii) WML Script.

Q5) a) Explain the advantage of DTN over IP network with example. **[8]**

b) Draw and explain V1OIP network architecture. **[8]**

<div align="center">OR</div>

Q6) a) What is Vehicular network? What are the challenges and applications of vehicular network? **[8]**

b) What is DTN? Explain different layers of DTN. **[8]**

Q7) Write a note on (any 3): **[18]**

   a) Components of optical network.

   b) ATM cell format.

   c) GMPLS.

   d) SDN.

<div align="center">OR</div>

Q8) a) What is Virtualization? List advantages and disadvantages of Virtualization. **[6]**

b) Explain how packet switching is different in optical network than Ethernet. **[6]**

c) Explain SONET/SDH. **[6]**

<div align="center">❀ ❀ ❀</div>