P3393

[5353] - 596

T.E. (Information Technology) (Semester - II)
COMPUTER NETWORK TECHNOLOGY
(2015 Pattern)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:
1) *Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8, Q.9 or Q.10.*
2) *Neat diagrams must be drawn wherever necessary.*
3) *Figures to the right side indicate full marks.*
4) *Assume suitable data if necessary.*

Q1) a) What is DHCP? What is its advantage? Explain various messages used in DHCP. **[6]**

b) Explain different timers used in TCP. **[4]**

OR

Q2) a) What is DNS? What is server hierarchy? Explain domain name resolution process. **[6]**

b) Explain the operation of NAT with suitable example. **[4]**

Q3) a) Explain Leaky bucket and Token bucket algorithm. **[6]**

b) Explain in brief SMTP protocol. **[4]**

OR

Q4) a) Explain with neat diagram OSPF routing protocol. **[6]**

b) Write a short note on Quality of Service parameter in Transport Layer. **[4]**

Q5) a) Explain the basic architecture of WLAN and discuss various components in it. **[8]**

b) Compare Bluetooth and 802.11. What are the limitations of Bluetooth? **[8]**

OR

Q6) a) What are hidden station and exposed station problem in WLAN. **[8]**

b) Describe MAC layer mechanism of IEEE 802.11. **[8]**

Q7) a) Differentiate between infrastructure network and infrastructure less network and What are issues in Adhoc wireless network? **[8]**

b) Explain routing protocols in detail. **[8]**

OR

Q8) a) Write short note on MACAW protocol. **[8]**

b) Explain operation of TCP-F. **[8]**

Q9) a) Describe each component in sensor node architecture. **[10]**

b) Short note on : **[8]**

  i) IOT.

  ii) Wireless Sensor Network.

OR

Q10) a) Explain in detail LEACH algorithm. **[10]**

  b) Short note on SDN and Satellite. **[8]**

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