P3330

[5670]-599

B.E. (E & TC)

COMPUTER NETWORKS & SECURITY

(2015 Pattern) (Semester - I) (404182) (End Sem.)

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 indicate full marks.*

4) *Assume suitable data if necessary.*

Q1) a) Explain basic service set and Extended service set in WLAN?   **[6]**

     b) Write short note on Gigabit Ethernet?   **[4]**

OR

Q2) a) Draw Bluetooth architecture explain function of different layer in Bluetooth?   **[6]**

     b) Write short note on congestion control?   **[4]**

Q3) a) Give general format of ICMP and explain different types of error reporting messages used in ICMP?   **[6]**

     b) Compare IPV4 and IPV6?   **[4]**

OR

Q4) a) Draw and explain IPV6 format?   **[6]**

     b) What is IGMP? How does it used?   **[4]**

Q5) a) Explain various Transport Layer protocols.   **[7]**

     b) Write short note on IP address and Port number?   **[6]**

     c) Explain Process to Process delivery?   **[4]**

OR

Q6) a) Enlist and explain SCTP services? **[7]**

b) Draw TCP header and explain function of each field? **[6]**

c) Draw and explain UDP header in details? **[4]**

Q7) a) What are various components of DNS, explain in brief? **[5]**

b) Explain URL and operating principal of COOKIES? **[6]**

c) Explain types of Web Documents in detail. **[6]**

OR

Q8) a) Explain basic functions of Electronic mail. **[5]**

b) Write short note on : **[6]**

   i) FTP,

   ii) SNMP.

c) Enlist and explain functions of Network Management System? **[6]**

Q9) a) Define cryptography and explain all types of Ciphers? **[8]**

b) Generate the Public Key and Secret Key for following prime number using RSA algorithm? P = 3, Q = 11, take E = 5. **[8]**

OR

Q10) a) What is SSL? How does it provide security at Transport Layer? **[8]**

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

   i) PGP.

   ii) Firewalls.

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