[5561]-651

B.E. (E&TC)

COMPUTER NETWORKS & SECURITY

(2015 Pattern) (404182) (Semester - I)

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 Flow control in Transport Layer protocols? **[7]**

b) What are differences in 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]**

P.T.O.

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? **[8]**

P=3, Q=11, take E = 5.

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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