KUMARAGURU college of technology
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Register Number: …….

B.E DEGREE EXAMINATIONS: APRIL / MAY 2016

(Regulation 2013)

Sixth Semester

ELECTRONICS AND COMMUNICATION ENGINEERING

U13ECT602 **:** Computer Networks

Time: Three Hours **Maximum Marks: 100**

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. A list of protocols used by a system, one protocol per layer, is called
   a) Protocol architecture b) Protocol stack
   c) Protocol suite d) Protocol list
2. Co-axial cable consists of …….. concentric copper conductors.
3. Which one of the following task is not done by data link layer?
   a) Framing b) Error control
   c) Flow control d) Channel coding
4. A BSS without an access point is called……..
5. ICMP is primarily used for
   a) Error and diagnostic functions b) Addressing
   c) Forwarding d) Routing
6. In a LSP, the advertiser is a……..
7. UDP is a
   a) Best effort delivery protocol b) Connection oriented, reliable protocol
   c) Connectionless, unreliable protocol d) Connection oriented, unreliable protocol
8. The connection establishment in TCP is called ……..
9. The two well-known TCP ports used by FTP are
   a) Port 21 and port 22 b) Port 19 and port 20
   c) Port 18 and port 19 d) Port 21 and port 20
10. In symmetric key cryptography, the same key is used by the sender and receiver for ……. and ……

PART B (10 x 2 = 20 Marks)
(Answer not more than 40 words)

11. Define the three transmission modes.
12. List the modes of propagation in optical fibers.
13. Define automatic repeat request and list its types.
14. Compare the token frame and abort frame in IEEE 802.5.
15. What is meant by best effort delivery?
16. Distinguish between a port address, a logical address and a physical address.
17. Mention the functions of transport layer.
18. Discuss 'Path' and 'Resv' messages in RSVP protocol.
19. Define SMTP and list the types of messages supported by it.
20. List the four aspects of security.

PART C (5 x 14 = 70 Marks)
(Answer not more than 400 words)

Q.No. 21 is Compulsory

21. Elaborate the access method, priority and time limits involved in IEEE 802.5 along with the frame formats.

22. (a) (i) Discuss in detail the various transmission media and their specifications. (10)
(ii) List the functions of data link layer. (4)

(OR)

(b) (i) Elaborate the various criteria a network must meet to be efficient and effective. (6)
(ii) Draw the TCP/IP model and explain. Compare it with OSI model. (8)

23. (a) (i) Draw the frame format of IPv6 and explain. (7)
(ii) Explain distance vector routing in detail with an example. (7)

(OR)

(b) Explain the various methods to improve the quality of service.

24. (a) (i) Explain the operation and the type of messages involved in RSVP protocol. (8)
(ii) Discuss multiplexing and demultiplexing in transport layer. (6)

(OR)

(b) (i) Explain UDP in detail. (7)
(ii) How congestion control in TCP is achieved? Explain in detail. (7)

25. (a) (i) Explain SMTP in detail. (7)
(ii) With diagrams, explain HTTP in detail. (7)

(OR)

(b) (i) Write in detail about substitution and transposition ciphers. (7)
(ii) Explain the structure of DES in detail. (7)

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