

B.E. DEGREE EXAMINATIONS: APRIL / MAY 2010

Sixth Semester

ELECTRONICS AND COMMUNICATION ENGINEERING

U07EC602: Computer Networks

Time: Three Hours

Maximum Marks: 100

Answer ALL the Questions:-

PART A (10 x 1 = 10 Marks)

1. In _____, each node is connected to every other node by direct links
 - a) ring topology
 - b) tree topology
 - c) mesh topology
 - d) bus topology
2. Encryption is handled by the _____ layer
 - a) data link
 - b) transport
 - c) session
 - d) presentation
3. In cyclic redundancy checking, what is CRC?
 - a) divisor
 - b) quotient
 - c) dividend
 - d) reminder
4. Token ring is _____ standard
 - a) IEEE 802.3
 - b) IEEE 802.4
 - c) IEEE 802.5
 - d) IEEE 802.11
5. Which of the following is a class-A host addresses
 - a) 128.4.5.6
 - b) 117.4.5.1
 - c) 117.8.0.0
 - d) 117.8.0.1
6. A router must have at least _____ NICs
 - a) 2
 - b) 3
 - c) 4
 - d) 5
7. Which transport layer protocol is connectionless?
 - a) UDP
 - b) TCP
 - c) FTP
 - d) NVT
8. Transport layer protocols are useful for ensuring _____ delivery
 - a) host to host
 - b) host to router
 - c) network to network
 - d) end to end
9. HTTP is called a _____ protocol
 - a) Stateful
 - b) State less
 - c) State aware
 - d) Connection oriented
10. Web pages are created in the _____ language.
 - a) HTTP
 - b) WWW
 - c) Java
 - d) HTML

PART B (10 x 2 = 20 Marks)

11. What is the difference between network layer delivery and transport layer delivery?
12. What is point to point connection?
13. Write the minimum hamming distance.
14. Define framing.

15. Write the length of the IPv6 addresses.
16. What is fragmentation?
17. Why is UDP called interactive?
18. What determines the sender window size in TCP?
19. What is DNS?
20. What is polyalphabetic cipher?

PART C (5 x 14 = 70 Marks)

21. a) Explain briefly about the network topology.

(OR)

b) (i) Discuss the role of the network layer in OSI model. (7)

(ii) Explain Return to Zero and Non Return to Zero line coding schemes. (7)

22. a) Explain briefly about high level data link control with proper frame diagrams.

(OR)

b) Explain Cyclic Redundancy check with hardware implementation.

23. a) (i) Discuss classless addressing. (7)

(ii) Explain IPv6 addressing. (7)

(OR)

b) (i) Explain packet switching. (7)

(ii) Write short notes on distance vector routing. (7)

24. a) Briefly discuss when to use TCP and when to use UDP.

(OR)

b) (i) Describe the main fields of the UDP packet header. (7)

(ii) Explain why TCP is Concurrent. (7)

25. a) Discuss the FTP connection mechanism between the client and the server.

(OR)

b) Discuss the idea of HTML tags with an example.
