Register Number……

B.E. DEGREE EXAMINATIONS: NOVEMBER 2009

Fifth Semester

COMPUTER SCIENCE AND ENGINEERING

U07CS502: Computer Networks

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

Answer ALL the Questions:-

PART A (10 × 1 = 10 Marks)

1. A tree topology is a _____ variation of a topology

   a. mesh b. star c. bus d. ring

2. The end – to – end delivery of the entire message is the responsibility of the _____ layer

   a. network b. transport c. session d. presentation

3. In the _____ layer, the data unit is frame

   a. physical b. data link c. network d. transport

4. In _____ ARQ, if a NAK is received, only the specific damaged or lost frame is retransmitted

   a. stop and wait b. go back –n c. selective – reject d. a and b

5. In link state routing, every router shares its neighbour knowledge with _____

   a. neighbour routers b. next hop routers

   c. all the routers in the internet work d. no other routers

6. Find the class of 198.76.9.23

   a. class C b. class D c. Class B d. Class A

7. A virtual circuit is associated with a _____ service

   a. connectionless b. connection – oriented

   c. segmentation d. datagram

8. Making sure that data segments arrive in the correct order is ___ control

   a. error b. lose c. sequence d. duplication

9. MIME allows _____ data to be sent through SMTP

   a. audio b. non-ASCII data c. image d. ASCII data

10. Which type of document is stored at server side

   a. static b. active c. dynamic d. HTML

PART B (10 x 2= 20 Marks)

11. What is topology?
12. What is port address?
13. State the advantage of piggybacking.
14. How is a lost frame handled at the sender site?
15. Differentiate connection oriented and connection less service.
16. What is IP address?
17. Define demultiplexing.
18. Name the type of characteristics attributed to flow.
19. State the use of HTTP protocol.
20. What is mean by non repudiation?

PART C (5 x 14 = 70 Marks)

21 a) (i) Explain types of direction of data flow between two devices. (7)

(ii) State the advantages of and disadvantages of fiber optic cable. (7)

(OR)

b) Discuss OSI seven layer model

22 a) Discuss the stop and wait ARQ mechanism. List out its features

(OR)

b) Write note on the following (7+7)

(i). IEEE 802.5 (ii). IEEE 802.11

23 a) (i). What is the purpose of network layer? Discuss. (7)

(ii). Write note on datagram approach to packet switching (7)

(OR)

b) Explain link state routing with example.

24 a) (i) Discuss connection establishment and termination in connection oriented service. (7)

(ii) What are the duties of transport layer? Discuss (7)

(OR)

b) Give the format of TCP segment. Discuss its header fields and its use.

25 a) (i) What is the role of user agent in SMTP? Explain (7)

(ii) Discuss mail delivery phase of SMTP. (7)

(OR)

b) Write note on

1. Browser architecture (5)
2. HTML (5)
3. Digital signature (4)

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