

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH 2012

(CCSS)

Computer Science – Core Course

CS 6B 16 – COMPUTER NETWORKS

Time : Three Hours

Maximum : 30 Weightage

Part I*Answer all questions.*

1. Optical transmission system has _____ components.
 - (a) Light source.
 - (b) Transmission modem and the detector.
 - (c) Both (a) and (b).
 - (d) None of the above.
2. Frames from one LAN can be transmitted to another LAN via the device :
 - (a) Router.
 - (b) Bridge.
 - (c) Repeater.
 - (d) Modem.
3. The facilities available in the internet are :
 - (i) Electronic mail ; (ii) Remote login ; (iii) File transfer ; (iv) Word Processing.
 - (a) i, ii.
 - (b) i, ii, iii.
 - (c) i, ii, iv.
 - (d) ii, iii and iv.
4. Is the following statement true of the Go-back-N error control strategy?
A transmitter may send upto N packets before it receives an acknowledgment.
 - (a) True.
 - (b) False.
5. A Protocol Data Unit (PDU) is exchanged between the same layer in two separate protocol stacks. It comprises the PDU passed from the layer immediately above and its own protocol control information.
 - (a) True.
 - (b) False.
6. Sending a packet to all destination simultaneously is called _____.
 - (a) Broadcasting.
 - (b) Unicasting.
 - (c) Multicasting.
 - (d) None of the above.
7. Monitoring a traffic flow is called _____.
8. The Client program must be bound with a small library procedure, called the _____.
 - (a) Client stub.
 - (b) Server stub.
 - (c) (a) and (b).
 - (d) None of the above.

Turn over

9. The TCP header length is _____.
- (a) 32 bit words. (b) 16 bit words.
(c) 64 bit words. (d) None of the above.
10. SCTP means _____.
- (a) System Control Transfer Protocol.
(b) Stream Control Transfer Protocol.
(c) System Control Transmission Protocol.
(d) Stream Control Transmission protocol.
11. A web page is located using a :
- (a) Universal Record Linking. (b) Uniform Resource Locator.
(c) Universal Record Locator. (d) Uniformly Reachable Links.
12. The _____ is the original message before transformation.
- (a) Cipher text. (b) Plain text.
(c) Secret text. (d) None of the above.

(12 × ¼ = 3 w

Part II*Answer all questions.*

13. What are the categories of transmission media?
14. List out the topology used for connection of systems in a network.
15. What is the purpose of hamming code?
16. What is meant by bandwidth?
17. What is a virtual circuit?
18. What does the term 'stream' denote?
19. Why the congestion occur in a network?
20. Name different sections used in internet DNS.
21. Define Cryptanalysis.

(9 × 1 = 9 v

Part III*Answer any five questions.*

22. Compare Multicasting and Unicasting.
23. Give the basic functions of a protocol. Explain.
24. Explain Cyclic Redundancy Check.

25. Write about bluetooth.
26. How the packet cost referred in distance vector and link state routing? Explain.
27. What are the fields included in the header of TCP segment format?
28. Explain about E-mail.

(5 × 2 = 10 weightage)

Part IV

Answer any two questions.

29. Explain ISO OSI reference model.
30. Discuss sliding window protocol.
31. Explain congestion control algorithms.

(2 × 4 = 8 weightage)