

CS/BCA(H)/Even/6th Sem/BCAE-601A/2014

2014

Advanced Networking and Communication

Time Alloted : 3 Hours

Full Marks : 70

*The figure in the margin indicate full marks.
Candidates are required to give their answers in their
own words as far as practicable*

GROUP - A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for the following:

10x1=10

- i) Hamming code is a method of
 - a) Error detection
 - b) Error correction
 - c) Both (a) and (b)
 - d) None of these
- ii) For six subnets in class B networks, the subnet mask will be
 - a) 255.255.192.0
 - b) 255.255.240.0
 - c) 255.255.224.0
 - d) None of these
- iii) The protocol standard for Token Ring topology is
 - a) IEEE 802.3
 - b) IEEE 802.5
 - c) IEEE 802.4
 - d) None of these
- iv) The address required to uniquely identify running application program is
 - a) Socket address
 - b) MAC address
 - c) IP address
 - d) None of these

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[Turn over]

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- v) To calculate the total number of bytes in the TCP header, the HLEN field is to be multiplied by
- a) 2
 - b) 4
 - c) 8
 - d) None of these
- vi) HTTP uses port id
- a) 20
 - b) 30
 - c) 80
 - d) None of these
- vii) The 1-persistent approach can be considered as special case of the p-persistent approach with p equals to
- a) 0.1
 - b) 0.5
 - c) 1.0
 - d) None of these
- viii) Which is common field in all types of HDLC frames?
- a) P/F
 - b) N(R)
 - c) Both(a) and(b)
 - d) None of these
- ix) Efficiency of slotted ALOHA is _____ too pure ALOHA.
- a) better
 - b) not better
 - c) equal
 - d) None of these
- x) RIP is based on
- a) Link State Routing
 - b) Distance Vector Routing
 - c) Path Vector Routing
 - d) None of these

GROUP - B

(Short Answer Type Questions)

Answer any *three* of the following.

3x5=15

2. Briefly explain the function of Packet Switching.
3. Compare and contrast CSMA/CD and token passing access methods.
4. Define Cookies.
5. Briefly discuss the RSA algorithm?
6. Briefly explain the different policies that can prevent congestion in the network.

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GROUP - C

(Long Answer Type Questions)

Answer any *three* of the following. 3x15=45

7. a) What are the differences between DNS and IP addresses? (5)
b) What is the first address, last address, number of subnets, number of hosts per subnet, broadcast address in the block if one of the addresses is 198.10.10.0/26?

(10)

8. Write short notes(Any Three)

3x5=15

- a) ATM
b) RARP
c) X.25
d) HDLC frame format
e) Line encoding
9. a) What do you mean by LEO,GEO,MEO? (6)
b) Write the differences between guided and unguided media. List the features of Coaxial cable and Twisted pair cable.

4+5=9

10. Explain the following terms with example: 3x5=15

- a) PSK.
b) PCM
c) Topology
11. a) What is the utility of "Flow Control Mechanism"?
b) Explain "Sliding Windows Flow Control Mechanism" with suitable diagram.
c) Explain signal rate and data rate and provide a relation between them.

5+5+5

