                                                                 Ôn thi trắc nghiệm NWC203c ( Final Exam )

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| QN=1 (8643) | SMTP, POP3, and IMAP protocols run on the following layer: |
| a. | Non of them |
| b. | Transport layer |
| c. | Network layer |
| d. | Link layer |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.1 |
| MIX CHOICES: | Yes |

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| QN=2 (8644) | In computer networking, hosts are sometimes divided into two categories: |
| a. | clients and servers |
| b. | Network and routers |
| c. | Routers and clients |
| d. | End-system and beginning-system |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.2 |
| MIX CHOICES: | Yes |

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| QN=3 (8656) | Two types of network switching are: |
| a. | Circuit and packet switching |
| b. | X25 and Frame Relay |
| c. | ATM and Frame Relay |
| d. | Datagram and X25 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.3 |
| MIX CHOICES: | Yes |

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| QN=4 (8661) | Which delay mainly depends on the congestion of the network? |
| a. | Queuing delay |
| b. | Transmission delay |
| c. | Processing delay |
| d. | Propagation delay |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.4 |
| MIX CHOICES: | Yes |

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| QN=5 (8672) | What is the order of the 5 layers in the Internet model? |
| a. | Application, transport, network, link, physical |
| b. | Application, network, link, physical, transport |
| c. | Application, transport, link, physical network, |
| d. | Application, transport, network, physical, link |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.5 |
| MIX CHOICES: | Yes |

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| QN=6 (8681) | Vulnerability Attack, Bandwidth Flooding, and Connection Flooding belongs to |
| a. | Internet DoS Attack |
| b. | Bogus Attack |
| c. | Sniffer |
| d. | Snoofing |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.6 |
| MIX CHOICES: | Yes |

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| QN=7 (8685) | A packet of L bits is transmitted via the link with the transmission rate of R bits/sec; the transmission delay is |
| a. | L/R |
| b. | R/L |
| c. | 2L/R |
| d. | 2R/L |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.7 |
| MIX CHOICES: | Yes |

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| QN=8 (8696) | Assume that an image is about 1000 x 800 pixels with 3 bytes/pixel and it is uncompressed. How long does it take to transmit it over a 1 Mbps channel? |
| a. | 19.2 sec |
| b. | 24 sec |
| c. | 2.4 sec |
| d. | 1.12 sec |
| ANSWER: | A (1000\*800\*3\*8/10^6) |
| MARK: | 1 |
| UNIT: | Chapter 1.8 |
| MIX CHOICES: | Yes |

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| QN=9 (8710) | There are 4 serial links between the client and the server, with the transmission rates being 3Mbps, 12Mbps, 12 Mbps, and 2 Mbps. What is the throughput between the client and the server? |
| a. | 2 Mbs |
| b. | 1 Mbps |
| c. | 3 Mbps |
| d. | 12 Mbps |
| ANSWER: | A (choose min) |
| MARK: | 1 |
| UNIT: | Chapter 1.9 |
| MIX CHOICES: | Yes |

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| QN=10 (8713) | If the router’s buffer memory is empty and no other packet is currently being transmitted, then the packet’s\_\_\_\_ will be zero |
| a. | Queueing delay |
| b. | Transmission delay |
| c. | Propagation delay |
| d. | Processing Delay |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.10 |
| MIX CHOICES: | Yes |

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| QN=11 (8740) | As soon as the browser receives the IP address from\_\_\_\_, it can initiate a TCP connection to the HTTP server located at port\_\_\_\_\_ at that IP address |
| a. | DNS…80 |
| b. | FTP… 20 |
| c. | User…80 |
| d. | Client…60 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.1 |
| MIX CHOICES: | Yes |

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| QN=12 (8749) | In the file distribution of the client-server model, the server has to send \_\_\_\_ of file to many hosts, consuming (tiêu thụ) a large amount of\_\_\_\_\_ |
| a. | Copies…bandwidth |
| b. | Copies…transmission |
| c. | Duplicate…bandwidth |
| d. | Portion…transmission |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.2 |
| MIX CHOICES: | Yes |

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| QN=13 (8759) | Although HTTP is stateless (không trạng thái), if the webserver wants to identify the users, \_\_\_\_is used |
| a. | Cookies |
| b. | Caches |
| c. | Password |
| d. | ID |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.3 |
| MIX CHOICES: | Yes |

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| QN=14 (8769) | When you use ftp client (a utility in Windows), what is command used to get files from ftp server? |
| a. | get |
| b. | Retr |
| c. | recv |
| d. | ls |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.4 |
| MIX CHOICES: | Yes |

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| QN=15 (8774) | This command identifies the receiver of the message in email. |
| a. | RCPT TO |
| b. | MAIL FROM |
| c. | HELO |
| d. | DATA |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.5 |
| MIX CHOICES: | Yes |

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| QN=16 (8786) | Regarding to (về) the DNS, hostnames such as www.fpt.edu.vn, www.stanford.edu are \_\_\_\_ to remember by human, but \_\_\_\_\_ to process by routers |
| a. | Easy…Difficult |
| b. | Difficult…Easy |
| c. | Easy…clear |
| d. | Difficult…heavy |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.6 |
| MIX CHOICES: | Yes |

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| QN=17 (8792) | DNS is short for |
| a. | Domain Name System |
| b. | Distributed Name System |
| c. | Distributed Network System |
| d. | Distributed Network Simplification |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.7 |
| MIX CHOICES: | Yes |

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| QN=18 (8804) | Skype is a |
| a. | P2P application |
| b. | Transport Layer application |
| c. | Network Layer application |
| d. | Kazza application |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.8 |
| MIX CHOICES: | Yes |

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| QN=19 (8817) | Assume the one-way propagation delay 100ms, the size of the Web object 0.2Mb and the transmission rate 10Mbps, how long does it take to download that object from a Web Server to a client if using non-persistent HTTP? |
| a. | 420ms |
| b. | 220ms |
| c. | 440ms |
| d. | 240ms |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.9 |
| MIX CHOICES: | Yes |

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| QN=22 (8851) | The job of delivering the data in a transport-layer segment to the correct application process is called\_\_\_\_\_\_\_\_\_. |
| a. | De-multiplexing |
| b. | Multiplexing |
| c. | Congestion control |
| d. | Gathering |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.2 |
| MIX CHOICES: | Yes |

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| QN=23 (8862) | Which protocol is better for real-time video application over the Internet in term of minimizing the average transmission delay? |
| a. | UDP |
| b. | TCP |
| c. | ICMP |
| d. | ARP |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.3 |
| MIX CHOICES: | Yes |

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| QN=24 (8869) | Which the following is the individual characteristic (Đặc điểm riêng) of rdt3.0? |
| a. | Requires countdown timer. |
| b. | Packet retransmission on receipt of NAK |
| c. | Handling duplicate packets. |
| d. | Retransmit current packet on receipt of duplicate ACK. |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.4 |
| MIX CHOICES: | Yes |

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| QN=25 (8878) | The acknowledgment (sự công nhận)number in TCP segment is \_\_\_\_\_\_\_\_. |
| a. | Cumulative (tích lũy) |
| b. | randomly generated |
| c. | independent |
| d. | 0 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.5 |
| MIX CHOICES: | Yes |

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| QN=27 (8896) | What is the one's compliment 8-bit checksum of the following 8-bit binary numbers:  1001 0101 and 1010 1010. |
| a. | 1011 1111 |
| b. | 0100 0000 |
| c. | 0011 1111 |
| d. | 1010 1110 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.7 |
| MIX CHOICES: | Yes |

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| QN=29 (8922) | Host A and B are communicating over a TCP connection, host A send to host B the first segment with size 5105 bytes, sequence number 600, the source port 1028, the destination port 1029. What is the ACK number, the source port number, the destination port number in the ACK segment sent by host B to host A |
| a. | ACK number: 5705, source port: 1029, destination port: 1028 |
| b. | ACK number: 5706, source port: 1028, destination port: 1029 |
| c. | ACK number: 5700, source port: 1029, destination port: 1028 |
| d. | ACK number: 5705, source port:1028, destination port: 1029 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.9 |
| MIX CHOICES: | Yes |

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| QN=30 (8930) | In the congestion avoidance phase of TCP congestion control, if the timeout occurs at the current congestion window size 32, the congestion size will reduce to \_\_\_ and the threshold window size is set to \_\_\_\_\_ |
| a. | 1…16 |
| b. | 1……32 |
| c. | 0…32 |
| d. | 0… 64 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.10 |
| MIX CHOICES: | Yes |

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| QN=31 (8947) | In IP fragmentation with MTU (Maximum Transmission Unit) size of 1500 bytes , a 2000 byte datagram is fragmented into  \_\_\_\_\_\_\_ datagram(s) |
| a. | 2 |
| b. | 1 |
| c. | 3 |
| d. | 4 |
| ANSWER: | A(2000/1500) => ^ |
| MARK: | 1 |
| UNIT: | Chapter 4.1 |
| MIX CHOICES: | Yes |

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| QN=33 (8960) | If the fragment offset has a value of 100 and MF = 0, it means that \_\_\_\_\_\_\_. |
| a. | this is the last fragment. |
| b. | the datagram is 100 bytes in size. |
| c. | the first byte of the datagram is byte 100. |
| d. | the datagram has not been fragmented. |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.2 |
| MIX CHOICES: | Yes |

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| QN=35 (8958) | In Datagram networks and in Virtual networks: |
| a. | One has each packet to route independently; one has all packet to route in one path, respectively (tương ứng) |
| b. | One has all packet to route in one path; One has each packet to route independently, respectively |
| c. | All packets follow one unique path for the same source-destination pair for both those network |
| d. | Senders have to wait for ACK for each packet before sending a new packet for both those networks |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.2 |
| MIX CHOICES: | Yes |

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| QN=37 (8975) | Which layer does ICMP reside in (cư trú tại)? |
| a. | Network |
| b. | Data link |
| c. | Physical |
| d. | Transport |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.3 |
| MIX CHOICES: | Yes |

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| QN=38 (8979) | What does the IP header’s protocol field identify? |
| a. | The transport layer protocol that generated the information in the data field |
| b. | The data link layer protocol that will carry the datagram |
| c. | The physical layer specification of the network that will carry the datagram |
| d. | The application that generated the message carried in the datagram |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.4 |
| MIX CHOICES: | Yes |

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| QN=39 (8986) | A \_\_\_\_\_\_\_ routing table is updated periodically (định kỳ) using one of the adaptive (thích nghi) routing protocols. |
| a. | dynamic |
| b. | static |
| c. | hierarchical |
| d. | deterministic |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.5 |
| MIX CHOICES: | Yes |

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| QN=40 (9000) | Which is the function of NAT router? |
| a. | Replacing source IP address and port # with NAT IP address and new port # for every outgoing datagram and doing vice verse for every incoming datagram |
| b. | Adaptively replacing the broken route by a new working route |
| c. | Replacing IP address with MAC address |
| d. | Translate the IP address to a port number |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.6 |
| MIX CHOICES: | Yes |

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| QN=41 (9009) | Which one is not an IP address? |
| a. | 251.222.258.1 |
| b. | 255.222.1.171 |
| c. | 10.10.10.110 |
| d. | 10.100.200.0 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.7 |
| MIX CHOICES: | Yes |

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| QN=42 (9019) | What is the 32-bit binary equivalent of the IP address 13.253.17.252? |
| a. | 00001101.1111101.00010001.11111100 |
| b. | 00010011.1111101.00010001.11111100 |
| c. | 00001101.1111111.00010001.11111101 |
| d. | 00001101.1111101.00010001.11111110 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.8 |
| MIX CHOICES: | Yes |

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| QN=45 (9061) | In datalink layer, there are two types of networks links: |
| a. | Point-to-point link and broadcast (phát sóng) link |
| b. | Point-to-point link and unicast link |
| c. | Unicast link and broadcast link |
| d. | Multiple link and broadcast link |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.1 |
| MIX CHOICES: | Yes |

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| QN=46 (9067) | Which one is not a service provided by the link layer? |
| a. | Congestion control (điều khiển tắc nghẽn) |
| b. | Flow control |
| c. | Error Detection |
| d. | Error Correction |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.2 |
| MIX CHOICES: | Yes |

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| QN=47 (9082) | Assume the original message to be sent 11001, the generator is 1001 . What is the transmitted message? |
| a. | 11001010 |
| b. | 11001111 |
| c. | 11001011 |
| d. | 11001000 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.3 |
| MIX CHOICES: | Yes |

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| QN=48 (9090) | Channel partitioning (phân vùng), random access, and taking turns are\_\_\_\_\_\_ |
| a. | Congestion control |
| b. | Channel Access Protocols |
| c. | CSMA/CA |
| d. | CSMA/CD |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.4 |
| MIX CHOICES: | Yes |

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| QN=49 (9103) | What does that mean by “Carrier Sense” in CSMA/CD? |
| a. | The host listens for the carrier signal from other adapters before any transmission |
| b. | The host waits for carrier signal from other adapter to arrive before any transmission |
| c. | The host cancels its transmission after a random access time |
| d. | The host sends multiple signals to detect collision |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.5 |
| MIX CHOICES: | Yes |

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| QN=52 (9130) | The broadcast MAC address in LAN is |
| a. | FF-FF-FF-FF-FF-FF |
| b. | FF-FF-FF-FF |
| c. | EE-FF-EE-FF-EE-FF |
| d. | 00-00-00-00-00-00 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.8 |
| MIX CHOICES: | Yes |

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| QN=53 (9136) | In the exponential backoff  phase of CSMA/CD, after 3rd collision of a frame, the adapter then waits K x 512 bit times before sensing the channel again, where K is chosen at a random from |
| a. | {0,1,2,3,4,5,6,7} |
| b. | {0,1,2,3,} |
| c. | {0,1} |
| d. | 3 |
| ANSWER: | A (2^3 -1) |
| MARK: | 1 |
| UNIT: | Chapter 5.9 |
| MIX CHOICES: | Yes |

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| QN=54 (9150) | What is the MAC protocol used in 802.11 network? |
| a. | CSMA/CA |
| b. | CSMA/CD |
| c. | Token passing |
| d. | TDMA |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.10 |
| MIX CHOICES: | Yes |

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| QN=55 (8725) | Examples of \_\_\_\_\_\_\_include copper wire, coaxial cable, optical fiber, and satellite radio. |
| a. | physical transmission media |
| b. | Data link transmission media |
| c. | Transmission channel |
| d. | Transmission technique |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.11 |
| MIX CHOICES: | Yes |

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| QN=56 (8735) | In \_\_\_\_\_, the network establishes a dedicated end-to-end connection  between two hosts |
| a. | Circuit switching |
| b. | Packet switching |
| c. | Time switching |
| d. | Channel switching |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.12 |
| MIX CHOICES: | Yes |

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| QN=57 (8830) | IMAP and POP are\_\_\_\_\_\_\_\_\_ |
| a. | Mail access protocols |
| b. | Web access protocols |
| c. | Protocols used in the post office |
| d. | Multimedia transmission protocols |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.11 |
| MIX CHOICES: | Yes |

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| QN=58 (8937) | Regarding TCP, what can happen if timeout is much larger than the round-trip time? |
| a. | When a segment is lost, TCP would not quickly retransmit the segment, resulting in long data transfer delays into the application. |
| b. | The sender may sleep for longer time |
| c. | Triple duplicate ACKs of TCP congestion control phase will be activated, resulting unnecessary retransmission |
| d. | Fast transmission will be used |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.11 |
| MIX CHOICES: | Yes |

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| QN=59 (8943) | The transport layer protocol provides logical communication between \_\_\_\_\_\_, while the network layer protocol provides logical communication between \_\_\_\_\_. |
| a. | Processes…..Hosts |
| b. | Hosts…..Processes |
| c. | Points…..Processing |
| d. | Layers….Hosts |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.12 |
| MIX CHOICES: | Yes |

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| QN=60 (9046) | While IPv4 is …byte-long, IPv6 is … byte-long |
| a. | 4….16 |
| b. | 4….6 |
| c. | 32….48 |
| d. | 8….16 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.11 |
| MIX CHOICES: | Yes |

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MULTIPLE CHOICES QUESTIONS:

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| QN=2 (8645) | The Internet provides two types of services to its applications: |
| a. | connectionless service and connection-oriented service. |
| b. | Non-connection service and connection-oriented service. |
| c. | wireless service and wire-oriented service. |
| d. | pipeline service and non-pipeline service. |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.2 |
| MIX CHOICES: | Yes |

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| QN=3 (8658) | That the frequency spectrum of a link is shared among the connections established across the link is called….. |
| a. | Frequency division multiplexing |
| b. | Frequency-Time division multiplexing |
| c. | Packet division multiplexing |
| d. | Channel division multiplexing |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.3 |
| MIX CHOICES: | Yes |

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| QN=4 (8666) | If the buffer of the router in the Internet is full, the router will\_\_\_\_ |
| a. | Drop incoming packets, resulting packet loss |
| b. | Modify the packets to make it smaller |
| c. | Transmit packets faster |
| d. | Automatically enlarge the buffer so that it can store more packets |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.4 |
| MIX CHOICES: | Yes |

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| QN=5 (8675) | In OSI model, as data packet moves from the upper to the lower layer header are |
| a. | Added |
| b. | Removed |
| c. | Refined |
| d. | Redirected |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.5 |
| MIX CHOICES: | Yes |

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| QN=6 (8679) | A program running in a network attached device that passively (thụ động) receives all  packet  passing by the device's network interface is |
| a. | Packet sniffer |
| b. | Packet snoofer |
| c. | Packet catcher |
| d. | Network virus |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.6 |
| MIX CHOICES: | Yes |

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| QN=7 (8694) | Suppose there are 5 routers between the source host and the destination host, 10ms is the processing delay at each router, 10ms is the propagation delay at each link, and 12ms is the transmission delay out of each router and the source, then the total delay is (ignore all other delays) |
| a. | 192ms |
| b. | 96ms |
| c. | 160ms |
| d. | 32ms |
| ANSWER: | A (10 + 12 + 10) \* 6 |
| MARK: | 1 |
| UNIT: | Chapter 1.7 |
| MIX CHOICES: | Yes |

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| --- | --- |
| QN=8 (8702) | Assume that an image is about 1000 x 800 pixels with 1 byte/pixel and it is uncompressed. How long does it take to transmit it over a 2 Mbps channel? |
| a. | 3.2 sec |
| b. | 0.4 sec |
| c. | 32 sec |
| d. | 4 sec |
| ANSWER: | A (1000\*800\*8) / (2\*10^6) |
| MARK: | 1 |
| UNIT: | Chapter 1.8 |
| MIX CHOICES: | Yes |

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| QN=10 (8714) | The time delay for checking bit-level error in the packet that occurs at the router can be classified as the \_\_\_\_\_ |
| a. | Processing Delay |
| b. | Transmission delay |
| c. | Propagation delay |
| d. | Queueing delay |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.10 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=11 (8743) | Assume that the time it takes for a small packet to travel from the client to the server and then back to the client is 100 ms, then the round-trip time is |
| a. | 100ms |
| b. | 200ms |
| c. | 50ms |
| d. | 250ms |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=12 (8748) | Which one is not belong to application layer? |
| a. | ARP |
| b. | HTTP |
| c. | DNS |
| d. | P2P |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=13 (8760) | An HTTP request message always contains \_\_\_\_\_\_\_. |
| a. | a request line and a header |
| b. | a header and a body |
| c. | a status line, a header, and a body |
| d. | a reply code |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=14 (8770) | FTP uses port 21 for sending…. and port 20 for sending….. |
| a. | Identification and password…. Data file |
| b. | Data file… Identification and password |
| c. | Data file…Control signal |
| d. | Identification… Control signal |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=15 (8777) | To talk with a mail server (with name serverName), we can use command |
| a. | telnet serverName 25 |
| b. | telnet serverName 80 |
| c. | telnet serverName 21 |
| d. | put serverName 21 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.5 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=16 (8781) | The\_\_\_\_\_\_ that together implement the DNS distributed database, store\_\_\_\_ for the hostname to IP address mappings. |
| a. | DNS servers….Resource Records |
| b. | Resource Records…DNS servers |
| c. | Root servers….IP address |
| d. | Root servers…IP address and port number |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.6 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=17 (8791) | What type of DNS Server has the IP addresses of all names in the Autonomous? |
| a. | authoritative |
| b. | top level |
| c. | root |
| d. | local |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.7 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=18 (8802) | Which one is correct about P2P network? |
| a. | A user computer can be both client and server |
| b. | A user computer is not allowed to change its IP address |
| c. | The must be a server containing all files for clients to download |
| d. | One user computer failure can lead to the whole P2P network to fail |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.8 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=19 (8813) | Assume the RTT 50ms, the size of the Web object 0.4Mb and the transmission rate 10Mbps, how long does it take to download that object from a Web Server to a client if using non-persistent HTTP?? |
| a. | 140ms |
| b. | 240ms |
| c. | 440ms |
| d. | 90ms |
| e. | 9 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.9 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=20 (8821) | Which statement is correct about cookie technology? |
| a. | Most major commercial Web sites today use cookies |
| b. | None of them |
| c. | Web server does not has back-end database to record user’s last activity |
| d. | User’s browser has a back-end database to contain the web’s content |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.10 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=21 (8845) | Which of the following is the pipelining protocol: |
| a. | Selective Repeat |
| b. | Sliding Window |
| c. | Premature Timeout |
| d. | Stop and Wait |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=22 (8852) | The job of gathering data at the source host from different application processes, enveloping the data and passing the segments to the network layer is called |
| a. | Multiplexing |
| b. | De-multiplexing |
| c. | Congestion control |
| d. | Gathering |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=23 (8858) | Electronic mail uses \_\_\_\_ while streaming multimedia typically uses\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| a. | TCP…….. UDP |
| b. | UDP……..TCP |
| c. | TCP……..HTTP |
| d. | FTP……..DNS |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=24 (8868) | Pipelined reliable data transfer protocols allow the sender to \_\_\_\_\_\_\_ |
| a. | transmit multiple packets without waiting for an ACK |
| b. | Transmit only one packet and waiting for an ACK |
| c. | Transmit unlimited number of packet without ACK |
| d. | Stop transmission when there is NAK |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=25 (8877) | TCP connection provides \_\_\_\_\_\_\_\_\_\_\_. |
| a. | Full-duplex service |
| b. | Half-duplex service |
| c. | Simplex service |
| d. | One way communications |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.5 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=26 (8892) | How many duplicate ACKs to trigger the Fast Retransmission mode? |
| a. | 3 |
| b. | 2 |
| c. | 1 |
| d. | An option. |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.6 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=27 (8898) | UDP and TCP use 1s complement checksum. Suppose you have the followings 2 bytes: 00110111 and 01001100. What is the 1s complement of the sum of those two bytes? |
| a. | 01111100 |
| b. | 10000011 |
| c. | 00110111 |
| d. | 01001100 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.7 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=28 (8909) | Suppose that Host A then sends two segments to Host B over a TCP connection. The first and second segments contain 30 and 40 bytes of data, respectively. In the first segment, the sequence number is 165. In the acknowledgement of the first arriving segment, what is the acknowledgment number? |
| a. | 195 |
| b. | 235 |
| c. | 205 |
| d. | 135 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.8 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=29 (8913) | Host A and B are communicating over a TCP connection, host A send to host B the first segment with size 40 bytes, sequence number 410, the source port 1028, the destination port 80. What is the ACK number, the source port number, the destination port number in the ACK segment sent by host B to host A |
| a. | ACK number: 450, source port: 80, destination port: 1028 |
| b. | ACK number: 400, source port: 1028, destination port: 80 |
| c. | ACK number: 451, source port: 80, destination port: 1028 |
| d. | ACK number: 450, source port:1028, destination port: 80 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.9 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=30 (8933) | In \_\_\_\_\_\_\_\_, if timeout occurs while the current congestion window size is 64, the congestion window will reduce to 1 |
| a. | The congestion avoidance phase of TCP congestion control |
| b. | The congestion avoidance phase of UDP congestion control |
| c. | The timeout phase of TCP flow control |
| d. | The timeout phase of UDP flow control |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.10 |
| MIX CHOICES: | Yes |

==================================3=========================================

MULTIPLE CHOICES QUESTIONS:

|  |  |
| --- | --- |
| QN=1 (8845) | Which of the following is the pipelining protocol: |
| a. | Selective Repeat |
| b. | Sliding Window |
| c. | Premature Timeout |
| d. | Stop and Wait |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=2 (8849) | The job of gathering data at the source host from different…..,enveloping the data with header information to create ….is called multiplexing |
| a. | application processes…. segments |
| b. | application processes…..data link frame |
| c. | hosts…. segments |
| d. | Application flows… data link frame |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=3 (8859) | Which one is incorrect about UDP? |
| a. | Has congestion control |
| b. | No connection establishment. |
| c. | No connection state. |
| d. | Smaller segment header overhead in comparison with TCP |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=4 (8873) | \_\_\_\_\_\_ in the Internet is achieved through the use of acknowledgments and retransmissions. |
| a. | Reliable data transfer |
| b. | Interacting procedure |
| c. | Exchanging procedure |
| d. | Data moving |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.4 |
| MIX CHOICES: | Yes |

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| --- | --- |
| QN=5 (8881) | To accomplish (hoàn thành) flow control, TCP uses a \_\_\_\_\_\_\_\_\_\_\_ window protocol. |
| a. | sliding |
| b. | limited-size |
| c. | fixed-size |
| d. | Variable-size |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.5 |
| MIX CHOICES: | Yes |

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| --- | --- |
| QN=6 (8889) | In the \_\_\_\_\_\_\_\_ algorithm of the TCP congestion control, the size of the CONGWIN (congestion window) increases exponentially. |
| a. | slow start |
| b. | congestion detection |
| c. | congestion avoidance |
| d. | Exponential increasing |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.6 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=8 (8908) | Suppose that Host A then sends two segments to Host B over a TCP connection. The first and second segments contain 30 and 40 bytes of data, respectively. In the first segment, the sequence number is 145. In the acknowledgement of the first arriving segment, what is the acknowledgment number? |
| a. | 175 |
| b. | 185 |
| c. | 215 |
| d. | 125 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.8 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=9 (8921) | Host A and B are communicating over a TCP connection, host A send to host B the first segment with size 2105 bytes, sequence number 100, the source port 1028, the destination port 1029. What is the ACK number, the source port number, the destination port number in the ACK segment sent by host B to host A |
| a. | ACK number: 2205, source port: 1029, destination port: 1028 |
| b. | ACK number: 2206, source port: 1028, destination port: 1029 |
| c. | ACK number: 2200, source port: 1029, destination port: 1028 |
| d. | ACK number: 2205, source port:1028, destination port: 1029 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.9 |
| MIX CHOICES: | Yes |

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| --- | --- |
| QN=10 (8932) | In the congestion avoidance phase of TCP congestion control, if the timeout occurs at the current congestion window size 80, the congestion size will reduce to \_\_\_ and the is set to \_\_\_\_\_ |
| a. | 1…40 |
| b. | 1……80 |
| c. | 0…40 |
| d. | 0… 32 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.10 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=11 (8950) | In classless addressing, \_\_\_\_\_\_\_\_\_\_ is assigned to an organization. |
| a. | a variable-length block |
| b. | a fixed-length |
| c. | a fixed number of blocks |
| d. | an infinite number of addresses |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=12 (8955) | What type of service that Virtual Circuit network provide? |
| a. | Connection-oriented |
| b. | Connectionless |
| c. | Both connection-oriented and connectionless |
| d. | Virtual Private Network (PVN) |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=13 (8971) | What field in the IP header changes when a datagram is forwarded by a simple router? |
| a. | TTL |
| b. | ToS |
| c. | HL |
| d. | Source IP address |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=14 (8981) | What is the data unit used in Internet Protocol (IP)? |
| a. | Datagram |
| b. | Segment |
| c. | Frame |
| d. | Message |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=15 (8990) | What is tracert (in Windows machine) or traceroute (in Linux machine) program for? |
| a. | To find the route path between the sender and receiver and to measure transit times of packets along the path |
| b. | To  find the nearest router and the shortest path |
| c. | To find the shortest path between the sender and receiver and the longest transmission time among routers |
| d. | To find the average path between the sender and receiver and the longest transmission time among routers |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.5 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=16 (8999) | What does NAT stand for? |
| a. | Network Address Translation |
| b. | Network Address Transfer |
| c. | Network Address Taking |
| d. | Network Address Table |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.6 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=17 (9003) | Which one is not an IP address? |
| a. | 256.222.255.1 |
| b. | 255.222.1.1 |
| c. | 10.10.10.10 |
| d. | 10.100.200.0 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.7 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=18 (9020) | What is the 32-bit binary equivalent of the IP address 13.253.17.253? |
| a. | 00001101.1111101.00010001.11111101 |
| b. | 00010011.1111101.00010001.11111101 |
| c. | 00001101.1111111.00010011.11111110 |
| d. | 00001101.1111101.00010000.11111110 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.8 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=19 (9027) | Suppose a subnet has a block of IP addresses 101.101.101.0/24, which address belongs to that block? |
| a. | 101.101.101.122 |
| b. | 101.101.121.122 |
| c. | 101.121.101.111 |
| d. | 101.101.131.131 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.9 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=20 (9031) | Suppose datagrams are limited to 1500bytes including IP header of 20 bytes. UDP header is 8 bytes. How many datagrams would be required to send an MP3 of  80000 bytes |
| a. | 55 |
| b. | 54 |
| c. | 53 |
| d. | 56 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.10 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=21 (9059) | Which of the following is the service of link layer? |
| a. | Error detection. |
| b. | Connection setup. |
| c. | Congestion control. |
| d. | Delay guarantees. |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=22 (9075) | In CRC, both receiver and sender knows |
| a. | The Generator |
| b. | The Correct Frame |
| c. | Divided Frame |
| d. | Polynomial |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=23 (9077) | Assume the original message to be sent 101110, the generator is 1001. What is the transmitted message? |
| a. | 101110011 |
| b. | 101110010 |
| c. | 101110001 |
| d. | 101110111 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=24 (9088) | CSMA/CA belong to\_\_\_\_\_\_ group, one of three broad classes of MAC protocols. |
| a. | Random access |
| b. | Multiple channels |
| c. | Channel partitioning |
| d. | Resource reservation |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=25 (9096) | CSMA/CD stands for |
| a. | Carrier Sense Medium Access/Collision Detection |
| b. | Caring System Medium Access/ Collision Detection |
| c. | Carrier Sense Medium Access/Career Detection |
| d. | Carrier Sense Medium Access/Carrier Detection |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.5 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=26 (9105) | What is cut-through operation in switches? |
| a. | They start forwarding frames as soon as the destination header field has come in, but before the rest of frame has arrived |
| b. | They receive the whole frame before forwarding to next station |
| c. | As soon as they receive the first bit of the frame, they forward to the next station |
| d. | They forward the last bit first |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.6 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=27 (9116) | ARP is |
| a. | Plug-and-play |
| b. | Autonomous |
| c. | Implemented by network administrators |
| d. | An authorative protocol |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.7 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=28 (9126) | Which one is a MAC address: |
| a. | F0-F0-16-F2-15-00 |
| b. | GF-D0-56-F2-05-12 |
| c. | FF-62-DE-6F-D2 |
| d. | F0-62-DE5-75E-EA6 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.8 |
| MIX CHOICES: | Yes |

======================================4==================================

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| --- | --- |
| QN=3 (8652) | Which statement is correct about packet switching and circuit switching? |
| a. | With the same delay performance, packet-switching allows more number of users than circuit switching |
| b. | With the same delay performance, packet-switching allows less number of users than circuit switching |
| c. | Circuit switching is always more efficient than packet-switching in term of delay performance and number of users |
| d. | Circuit switching and Packet switching have the same performance and utilization |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=4 (8660) | Total nodal delay is accumulated from the following delays: |
| a. | Processing delay, queuing delay, transmission delay and propagation delay |
| b. | Queuing delay, transmission delay and propagation delay |
| c. | Transmission delay and propagation delay |
| d. | Transmission delay and buffering delay |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=5 (8676) | Which layer in the Internet that connects directly to wire? |
| a. | None of them |
| b. | Link Layer |
| c. | Transport layer |
| d. | Network Layer |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.5 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=6 (8678) | Which one is correct about Denial of Service (DoS) attack? |
| a. | Attackers make network resources unavailable by overwhelming resource with bogus traffic |
| b. | Attackers put some malware in a hidden part of some otherwise useful software |
| c. | The web program is infected a virus by receiving object (e.g., e-mail attachment) |
| d. | Attackers make control the whole server |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.6 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=7 (8687) | Suppose there are 3 routers between the source host and the destination host, 10ms is the processing delay at each router or host, 12ms is the propagation delay at each link, and 2ms is the transmission delay out of each router and the source, then the total delay is (ignore all other delays) |
| a. | 96ms |
| b. | 72ms |
| c. | 48ms |
| d. | 24ms |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.7 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=9 (8711) | There are 4 serial links between the client and the server, with the transmission rates being 1Mbps, 3Mbps, 2 Mbps, and 1 Mbps. What is the throughput between the client and the server? |
| a. | 1 Mbps |
| b. | 4 Mbps |
| c. | 3 Mbps |
| d. | 2 Mbps |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.9 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=10 (8721) | The lower the \_\_\_\_\_ of the router, the higher the \_\_\_\_\_\_ |
| a. | Speed….processing delay |
| b. | Speed….routing speed |
| c. | Layer….processing delay |
| d. | Layer….transmission delay |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.10 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=11 (8739) | As soon as the browser receives the IP address from\_\_\_\_, it can initiate a TCP connection to the HTTP server located at port\_\_\_\_\_ at that IP address |
| a. | DNS…80 |
| b. | HTTP… 80 |
| c. | User…80 |
| d. | Client…60 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=12 (8746) | While the\_\_\_\_ significantly relies on  always-on infrastructure servers, the\_\_\_\_does not (or minimally relies on) |
| a. | Client-server model…Peer-to-Peer model |
| b. | Peer-to-Peer model …Client-server model |
| c. | Client-server model…DNS |
| d. | DNS... Client-server model |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=13 (8763) | A Web page consists of \_\_\_\_\_\_\_ such as a HTML file, a JPEG image, a GIF image, a Java applet, an audio clip, etc. |
| a. | Objects |
| b. | Blocks |
| c. | Files |
| d. | Structures |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=14 (8771) | FTP uses port\_\_\_\_ for sending identification and password and port\_\_\_\_ for sending data |
| a. | 21…20 |
| b. | 20…21 |
| c. | 20…80 |
| d. | 80..20 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=16 (8782) | The DNS servers that together implement the \_\_\_\_\_, store\_\_\_\_ for the hostname to IP address mappings. |
| a. | DNS database ….Resource Records |
| b. | IP Records…DNS data |
| c. | Root servers….IP address |
| d. | Root servers…IP address and port number |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.6 |
| MIX CHOICES: | Yes |

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| --- | --- |
| QN=17 (8798) | An ISP has a DNS server that holds both names of Web servers and their IP addresses. That DNS servers is called |
| a. | Authorative (có thẩm quyền) |
| b. | Centralized |
| c. | Distributed |
| d. | Cooperative |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.7 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=18 (8806) | The ability of P2P networks to handle many peers is called |
| a. | Scalability |
| b. | Multiplexing |
| c. | Multiple client-server model |
| d. | Self-controlled |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.8 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=19 (8811) | Assume the RTT 100ms, the size of the Web object 1kb and the transmission rate 100kbps, how long does it take to download that object from the Web Server to a client if using non-persistent HTTP? |
| a. | 220ms |
| b. | 110ms |
| c. | 410ms |
| d. | 210ms |
| ANSWER: | D |
| MARK: | 1 |
| UNIT: | Chapter 2.9 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=20 (8826) | Which one is INCORRECT about proxy? |
| a. | Proxy helps to remove the bottleneck of access link |
| b. | Proxy reduces the response time for a client request to a webserver |
| c. | Proxy reduces the traffic on the institution’s access link to the Internet |
| d. | None of them |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.10 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=21 (8845) | Which of the following is the pipelining protocol: |
| a. | Selective Repeat |
| b. | Sliding Window |
| c. | Premature Timeout |
| d. | Stop and Wait |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=22 (8850) | This job of delivering the data in a…. to the correct…. is called de-multiplexing |
| a. | transport-layer segment….. application process |
| b. | transport-layer segment….. IP address |
| c. | Data link frame….. application process |
| d. | IP address… application port |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=23 (8860) | Which one is not in UDP segment header? |
| a. | ACK number |
| b. | Source port |
| c. | Destination port |
| d. | Length |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=24 (8871) | Reliable data transfer in TCP ensures that data is delivered from sending process to receiving process\_\_\_\_\_\_\_\_\_\_ |
| a. | Correctly and in order |
| b. | In any order |
| c. | Without congestion |
| d. | Unreliably |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=25 (8882) | TCP allows the sending process to deliver data as a \_\_\_\_\_\_\_of bytes and allows the receiving process to obtain data as a \_\_\_\_\_\_\_\_\_ of bytes. |
| a. | stream; stream |
| b. | message; message |
| c. | block; block |
| d. | Frame; frame |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.5 |
| MIX CHOICES: | Yes |

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| --- | --- |
| QN=26 (8887) | In Congestion avoidance of TCP congestion control, if timeout occurs while the current congestion window size is 16, the congestion window will\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| a. | Reduce to 1 |
| b. | Reduce to 8 |
| c. | Remain 16 |
| d. | Reduce to 0 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.6 |
| MIX CHOICES: | Yes |

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| --- | --- |
| QN=27 (8900) | UDP and TCP use 1s complement checksum. Suppose you have the followings 2 bytes: 00111101 and 01010001. What is the 1s complement of the sum of those thow bytes? |
| a. | 01110001 |
| b. | 10001110 |
| c. | 10001111 |
| d. | 01110010 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.7 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=28 (8907) | Suppose that Host A then sends two segments to Host B over a TCP connection. The first and second segments contain 20 and 40 bytes of data, respectively. In the first segment, the sequence number is 145. In the acknowledgement of the first arriving segment, what is the acknowledgment number? |
| a. | 165 |
| b. | 185 |
| c. | 205 |
| d. | 125 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.8 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=29 (8919) | Host A and B are communicating over a TCP connection, host A send to host B the first segment with size 105 bytes, sequence number 600, the source port 1028, the destination port 1029. What is the ACK number, the source port number, the destination port number in the ACK segment sent by host B to host A |
| a. | ACK number: 705, source port: 1029, destination port: 1028 |
| b. | ACK number: 706, source port: 1028, destination port: 1029 |
| c. | ACK number: 700, source port: 1029, destination port: 1028 |
| d. | ACK number: 705, source port:1028, destination port: 1029 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.9 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=30 (8925) | In the congestion avoidance phase of TCP congestion control, if the timeout occurs while the current\_\_\_\_\_\_ size is 64, the \_\_\_\_size will reduce to 1 |
| a. | congestion window…. congestion window |
| b. | Timeout window……timeout window |
| c. | Flow window…control window |
| d. | Timeout window… congestion window |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.10 |
| MIX CHOICES: | Yes |

====================================5=======================================

MULTIPLE CHOICES QUESTIONS:

|  |  |
| --- | --- |
| QN=1 (8642) | Which method of networks access has the biggest difference between download and upstream speed? |
| a. | ADSL |
| b. | DSL |
| c. | LAN |
| d. | HFC |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=2 (8651) | That an application can rely(dựa vào) on the connection to deliver all of its data without error and in the proper order is called |
| a. | Reliable(đáng tin cậy) data transfer |
| b. | Correctable data transfer |
| c. | Non-Error data transfer |
| d. | Approximated data transfer |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=3 (8654) | What are two fundamental switching approaches for building a network core? |
| a. | Circuit switching and packet switching |
| b. | Message switching and automatic switching |
| c. | Channel switching and datagram switching |
| d. | Frame switching and circuit switching |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=4 (8664) | When does packet loss happen? |
| a. | Packet arriving to the full queue at the routers |
| b. | Packet errors by noise |
| c. | Packet is sent by server with limited bandwidth |
| d. | Packet contains 7-bits ASCII characters |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=5 (8669) | Which layer in the Internet that connects directly to wire (dây điện)? |
| a. | None of them |
| b. | Network layer |
| c. | Transport layer |
| d. | Application layer |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.5 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=6 (8683) | What is DDoS stand for? |
| a. | Distributed Denial-of-Service |
| b. | Data Denial-of-Service |
| c. | Data Domain Open System |
| d. | Directed Denial-of-Service |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.6 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=7 (8686) | In the transmission delay calculation t = L/R, what is R? |
| a. | Link bandwidth of the link |
| b. | Speed of switch |
| c. | Propagation speed |
| d. | Time to process at router |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.7 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=8 (8700) | Assume that an image is about 1000 x 800 pixels with 1 byte/pixel and it is uncompressed. How long does it take to transmit it over a 1 Mbps channel? |
| a. | 6.4sec |
| b. | 64 sec |
| c. | 0.8 sec |
| d. | 8 sec |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.8 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=9 (8706) | There are 4 serial links between the client and the server, with the transmission rates being 1Mbps, 3Mbps, 2 Mbps, and 0.5 Mbps. What is the throughput between the client and the server? |
| a. | 0.5 Mbps |
| b. | 1 Mbps |
| c. | 3 Mbps |
| d. | 2 Mbps |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.9 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=10 (8715) | The higher the \_\_\_\_\_ of the router, the lower the \_\_\_\_\_\_ |
| a. | Speed….processing delay |
| b. | Speed….transmission delay |
| c. | Layer….processing delay |
| d. | Layer….transmission delay |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.10 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=11 (8741) | As soon as the browser receives the IP address from\_\_\_\_, it can initiate a TCP connection to the HTTP server located at port\_\_\_\_\_ at that IP address |
| a. | DNS…80 |
| b. | FTP… 20 and 21 |
| c. | User…80 |
| d. | Client…60 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=12 (8754) | The client-server model significantly relies on  \_\_\_\_ infrastructure servers, the Peer-to-Peer model, instead, pairs of interminably connected peers, communicates \_\_\_\_ with each other |
| a. | Always-on….directly |
| b. | Always-off….indirectly |
| c. | Rarely-on…indirectly |
| d. | Rarely-off…indirectly |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=13 (8761) | Although HTTP is\_\_\_\_, if the webserver wants to identify the users, \_\_\_\_is used |
| a. | Stateless…Cookies |
| b. | Stateless…Caches |
| c. | Heavy…Password |
| d. | Heavy…Cookies |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=14 (8770) | FTP uses port 21 for sending…. and port 20 for sending….. |
| a. | Identification and password…. Data file |
| b. | Data file… Identification and password |
| c. | Data file…Control signal |
| d. | Identification… Control signal |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=15 (8778) | MIME is short for |
| a. | Multipurpose Internet Mail Extensions |
| b. | Multiple Internet Mail Extensions |
| c. | Message Internet Mail External |
| d. | Multipurpose Internet Message Extensions |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.5 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=16 (8789) | Regarding to the DNS, IP addresses such as 209.191.122.70 or 10.22.8.8 are \_\_\_\_ to remember by human, but \_\_\_\_\_ to process by routers |
| a. | Difficult… Easy |
| b. | Easy…Difficult |
| c. | Easy…clear |
| d. | Difficult…heavy |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.6 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=17 (8791) | What type of DNS Server has the IP addresses of all names in the Autonomous? |
| a. | authoritative |
| b. | top level |
| c. | root |
| d. | local |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.7 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=18 (8803) | Which of the following is hybrid of client-server and P2P? |
| a. | Skype |
| b. | BitTorrent |
| c. | Telnet |
| d. | EBay |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.8 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=19 (8814) | Assume the RTT 40ms, the size of the Web object 0.2Mb and the transmission rate 20Mbps, how long does it take to download that object from a Web Server to a client if using non-persistent HTTP?? |
| a. | 90ms |
| b. | 50ms |
| c. | 170ms |
| d. | 60ms |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.9 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=20 (8828) | Which one is incorrect about proxy? |
| a. | Client caches the whole website to improve the downloading speed |
| b. | Proxy reduces the response time for a client request to a webserver |
| c. | Proxy reduces the traffic on the institution’s access link to the Internet |
| d. | Proxy can reduce the cost for ISP and the Institution |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.10 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=21 (8848) | The connection establishment procedure in TCP is susceptible (dễ bị tấn công) to a serious security problem called the \_\_\_\_\_\_\_\_\_ attack. |
| a. | SYN flooding |
| b. | FIN flooding |
| c. | ACK flooding |
| d. | POST flooding |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=22 (8853) | The job of delivering the data in a transport-layer segment to the correct socket is called\_\_\_\_\_\_\_\_\_. |
| a. | De-multiplexing |
| b. | multiplexing |
| c. | Congestion control |
| d. | De-capsulation |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=23 (8863) | Which one is not in UDP segment header? |
| a. | Receiving Windows |
| b. | Source port |
| c. | Destination port |
| d. | Length |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=24 (8867) | rdt 1.1 assumes that the channel is |
| a. | Perfectly reliable |
| b. | Fiber optic |
| c. | Error vulnerable |
| d. | Unlimited bandwidth |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=25 (8877) | TCP connection provides \_\_\_\_\_\_\_\_\_\_\_. |
| a. | Full-duplex service |
| b. | Half-duplex service |
| c. | Simplex service |
| d. | One way communications |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.5 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=26 (8888) | In TCP congestion control, two important  variables the sender has to keep track are |
| a. | Congestion window and the threshold |
| b. | Congestion window and socket number |
| c. | Threshold and Receiving window |
| d. | MSS and RTT |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.6 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=27 (8899) | UDP and TCP use 1s complement checksum. Suppose you have the followings 2 bytes: 00110111 and 01011100. What is the 1s complement of the sum of those two bytes? |
| a. | 01101100 |
| b. | 10010011 |
| c. | 10010010 |
| d. | 01101101 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.7 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=28 (8910) | If the segment has sequence number of 128 and length of 8 bytes, the receiving computer will send ACK with value of  \_\_\_\_\_\_\_\_\_ |
| a. | 136 |
| b. | 128 |
| c. | 137 |
| d. | 138 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.8 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=29 (8915) | Host A and B are communicating over a TCP connection, host A send to host B the first segment with size 45 bytes, sequence number 200, the source port 1038, the destination port 80. What is the ACK number, the source port number, the destination port number in the ACK segment sent by host B to host A |
| a. | ACK number: 245, source port: 80, destination port: 1038 |
| b. | ACK number: 246, source port: 1038, destination port: 80 |
| c. | ACK number: 200, source port: 80, destination port: 1038 |
| d. | ACK number: 245, source port:1038, destination port: 80 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.9 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=30 (8933) | In \_\_\_\_\_\_\_\_, if timeout occurs while the current congestion window size is 64, the congestion window will reduce to 1 |
| a. | The congestion avoidance phase of TCP congestion control |
| b. | The congestion avoidance phase of UDP congestion control |
| c. | The timeout phase of TCP flow control |
| d. | The timeout phase of UDP flow control |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.10 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=31 (8948) | How many default gateway addresses does a computer need to function on a LAN  (assume that not connect to other network)? |
| a. | 0 |
| b. | 1 |
| c. | 2 |
| d. | 3 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=32 (8956) | In a Datagram networks, |
| a. | No call setup and packets may take different paths for the same source-destination pair |
| b. | No call setup and packets must take strictly one path for the same source-destination pair |
| c. | Packets must take the same path for the same source-destination pair |
| d. | Need the call setup |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=33 (8973) | The purpose of echo request and echo reply is to |
| a. | check node-to-node communication |
| b. | Echo error |
| c. | check packet lifetime |
| d. | Prevent congestion |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=34 (8980) | Which field in the IP header is used to prevent an IP packet from continuously looping through a network? |
| a. | Time-to-Live (TTL) |
| b. | Header Checksum |
| c. | Identifier |
| d. | Port number |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=35 (8985) | What type of routing algorithm that OSPF use? |
| a. | Link State Routing Algorithm |
| b. | Distance Vector Routing Algorithm |
| c. | Longest Path Routing Algorithm |
| d. | Multicast Routing Algorithm |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.5 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=36 (8998) | What is (are) correct about DHCP? |
| a. | All of the others |
| b. | It is “plug and play” |
| c. | DHCP server discovery message has the IP destination address: 255.255.255.255 |
| d. | DHCP server offer message has the IP destination address: 255.255.255.255 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.6 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=38 (9012) | What is the 32-bit binary equivalent of the IP address 254.1.8.252? |
| a. | 11111110.00000001.00001000.11111100 |
| b. | 11111111.00000001.00001000.11111101 |
| c. | 11111110.00000011.00001000.11111100 |
| d. | 11111110.00000001.00001000.11111101 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.8 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=39 (9021) | Suppose an ISP owns the block of addresses of the form 101.101.101.128/30, which address can be assigned to its customer? |
| a. | 101.101.101.129 |
| b. | 101.101.101.118 |
| c. | 101.101.101.128 |
| d. | 101.101.101.127 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.9 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=40 (9034) | Suppose datagrams are limited to 1500bytes including IP header of 20 bytes. UDP header is 8 bytes. How many datagrams would be required to send an MP3 of  50000 bytes |
| a. | 34 |
| b. | 33 |
| c. | 32 |
| d. | 35 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.10 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=41 (9065) | \_\_\_\_\_ in link layer guarantees to move each \_\_\_\_\_ datagrams across the link without error |
| a. | Reliable delivery…..network |
| b. | Appropriate delivery…network |
| c. | Error-free transmission ….transport |
| d. | Reliable delivery… transport |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=42 (9068) | Single parity check can |
| a. | Detect a single bit error |
| b. | Detect a single bit error and correct it |
| c. | Detect a bust of bit errors |
| d. | Correct a bust of bit errors |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=43 (9079) | Assume the original message to be sent 101110, the generator is 1001. What is the remainder resulted during the CRC computation? |
| a. | 011 |
| b. | 100 |
| c. | 001 |
| d. | 101 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=44 (9094) | \_\_\_\_\_\_is used in Ethernet |
| a. | CSMA/CD |
| b. | ALOHA |
| c. | CDMA |
| d. | CSMA/CA |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=45 (9099) | Ethernet technologies provides \_\_\_\_ to the network layer |
| a. | Unreliable service |
| b. | Reliable service |
| c. | Safe service |
| d. | Unsafe service |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.5 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=46 (9112) | Switch has a characteristic of |
| a. | Self-learning |
| b. | Interactive |
| c. | Self-connecting |
| d. | Self-improving |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.6 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=47 (9121) | While MAC address is \_\_\_bit long, IP address is\_\_\_ bit long |
| a. | 48…32 |
| b. | 32…48 |
| c. | 128…32 |
| d. | 64…32 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.7 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=48 (9126) | Which one is a MAC address: |
| a. | F0-F0-16-F2-15-00 |
| b. | GF-D0-56-F2-05-12 |
| c. | FF-62-DE-6F-D2 |
| d. | F0-62-DE5-75E-EA6 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.8 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=49 (9144) | In the exponential backoff  phase of CSMA/CD for a 50Mbps Ethernet, after the first collision of a frame, the adapter then waits …. before sensing the channel again. |
| a. | Either 0 or 10.24 microseconds |
| b. | 0 microsecond or 51.2 microseconds |
| c. | 1 microsecond |
| d. | 512 microseconds |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.9 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=50 (9149) | Which is a protocol for wireless LAN |
| a. | 802.11 |
| b. | Ethernet |
| c. | CSMA/CD |
| d. | 802.3 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.10 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=51 (8726) | There are two categories of physical transmission medium: |
| a. | Guided medium and unguided medium |
| b. | Optical medium and copper medium |
| c. | Wireless and Radio |
| d. | Satellite and Terrestrial |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.11 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=52 (8732) | What are the two methods of circuit switching? |
| a. | FDM and TDM |
| b. | FDM and PDM |
| c. | TDM and PPP |
| d. | TDM and Multiplexing |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.12 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=53 (8829) | POP3 is short for |
| a. | Post Office Protocol-Version 3 |
| b. | Popular Open Protocol-Level 3 |
| c. | Palm Open Protocol-Server 3 |
| d. | People Open Protocol-Version 3 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.11 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=54 (8839) | Assume a webpage has only 10 different images, using non-persistent HTTP, a client needs \_\_\_\_\_\_ to the server to load. |
| a. | 10 different TCP connections |
| b. | 10 different UDP connections |
| c. | 11 different TCP connections |
| d. | Only 1 TCP connection |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.12 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=55 (8935) | In TCP, what can happen if timeout is much larger than the round-trip time? |
| a. | When a segment is lost, TCP would not quickly retransmit the segment, resulting in long data transfer delays into the application. |
| b. | The sender may sleep for longer time |
| c. | Triple ACK will be activated |
| d. | Fast transmission will be used |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.11 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=56 (8943) | The transport layer protocol provides logical communication between \_\_\_\_\_\_, while the network layer protocol provides logical communication between \_\_\_\_\_. |
| a. | Processes…..Hosts |
| b. | Hosts…..Processes |
| c. | Points…..Processing |
| d. | Layers….Hosts |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.12 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=57 (9043) | While IPv4 is …byte-long, IPv6 is … byte-long |
| a. | 4…16 |
| b. | 4….6 |
| c. | 4….8 |
| d. | 6….16 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.11 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=58 (9051) | Given the subnet with address 201.14.78.0 and the subnet mask 255.255.255.0, which address belongs to that subnet? |
| a. | 201.14.78.64 |
| b. | 201.14.79.68 |
| c. | 201.14.79.32 |
| d. | 211.14.78.0 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.12 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=59 (9153) | Manchester encoding is to |
| a. | Synchronize between the sender and the receiver |
| b. | Avoid bit 0 and bit 1 |
| c. | Increase bit rate |
| d. | Decrease bit error rate |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.11 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=60 (9160) | Slotted ALOHA efficiency (useful transmission time) is approximately |
| a. | 40% |
| b. | 80% |
| c. | 70% |
| d. | 100% |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.12 |
| MIX CHOICES: | Yes |

===============================6==========================================

MULTIPLE CHOICES QUESTIONS:

|  |  |
| --- | --- |
| QN=1 (8640) | …. are sets of rules or guidelines that govern interactions between two computer systems in a computer network |
| a. | Network protocols |
| b. | Network conventions |
| c. | Network policies |
| d. | Network rules |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=2 (8648) | The packets in the application layer is called |
| a. | Message |
| b. | Frame |
| c. | Segment |
| d. | Datagram |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=3 (8657) | Today's Internet is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_network. |
| a. | packet-switched |
| b. | circuit-switched |
| c. | data-switched |
| d. | Telephone |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=4 (8665) | Total nodal delay is accumulated from the following delays: |
| a. | Processing delay, queuing delay, transmission delay and propagation delay |
| b. | Queuing delay, and propagation delay |
| c. | Transmission delay and propagation delay |
| d. | Transmission delay and buffering delay |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=5 (8671) | In OSI model, as data packet moves from the upper to the lower layer header are |
| a. | Added |
| b. | Removed |
| c. | Rearranged |
| d. | Modified |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.5 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=6 (8682) | A program running in a network attached device that passively receives all  packet  passing by the device's network interface is |
| a. | Packet sniffer |
| b. | Packet proofer |
| c. | Packet obtainer |
| d. | Network virus |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.6 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=8 (8701) | What is the total delay for transmission of 1.25MB of images over fiber optic cable with distance of 4500 km with transmission rate of 1Gbps (ignore all other delays). Assume that the speed of propagation is 300,000km/sec. |
| a. | 25msec |
| b. | 2.5msec |
| c. | 250msec |
| d. | 20msec |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.8 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=9 (8709) | There are 4 serial links between the client and the server, with the transmission rates being 1Mbps, 1Mbps, 2 Mbps, and 0.7 Mbps. What is the throughput between the client and the server? |
| a. | 0.7 Mbps |
| b. | 1 Mbps |
| c. | 3 Mbps |
| d. | 2 Mbps |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.9 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=10 (8719) | The \_\_\_\_on the physical medium of the link is a little less than or equal to the speed of light |
| a. | Propagation delay |
| b. | Transmission delay |
| c. | Queueing delay |
| d. | Processing Delay |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.10 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=11 (8744) | HTTP, FTP, SMTP and POP3 run on top of… |
| a. | TCP |
| b. | UDP |
| c. | IMAP |
| d. | DNS |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=12 (8753) | The client-server model significantly relies on  \_\_\_\_ infrastructure servers, the Peer-to-Peer model, instead, pairs of interminably connected peers, communicates \_\_\_\_ with each other |
| a. | Always-on….directly |
| b. | Always-off….indirectly |
| c. | Rarely-on…directly |
| d. | Rarely-off…directly |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=14 (8767) | Because FTP uses a separate control connection different from data connection, FTP is said to sent its control information\_\_\_\_\_ |
| a. | Out-of-band |
| b. | Inside-band |
| c. | On-Bandwidth |
| d. | Different Band |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=15 (8776) | Which one is correct about SMTP? |
| a. | SMTP restricts the body of all mail messages to be in simple seven-bit ASCII. |
| b. | SMTP is able to transfer attachment files |
| c. | SMTP transfers files faster than HTTP |
| d. | SMTP allows transferring multimedia files such as images, video… |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.5 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=16 (8787) | \_\_\_\_ are responsible for domains such as com, org, gov, and all of the country domains such as uk, fr, ca, and jp |
| a. | Top-level domain servers |
| b. | Root DNS servers |
| c. | Authoritative severs |
| d. | Country DNS servers |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.6 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=17 (8794) | In DNS, TLD  is short for |
| a. | Top-Level Domain |
| b. | Tier-1 Level Domain |
| c. | Time Lookup Domain |
| d. | Top Lookup Domain |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.7 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=18 (8809) | Skype is a |
| a. | Non of them |
| b. | Transport Layer application |
| c. | Network Layer application |
| d. | Kazza application |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.8 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=19 (8813) | Assume the RTT 50ms, the size of the Web object 0.4Mb and the transmission rate 10Mbps, how long does it take to download that object from a Web Server to a client if using non-persistent HTTP?? |
| a. | 140ms |
| b. | 240ms |
| c. | 440ms |
| d. | 90ms |
| e. | 9 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.9 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=20 (8822) | Which statement is correct about cookie technology? |
| a. | All of the others |
| b. | Cookie files are managed by the user’s browser |
| c. | Webserver has a back-end database to store status of user’s last activity |
| d. | Cookie files are kept on the user’s end system |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.10 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=21 (8844) | The combination of an IP address and a port number is called a \_\_\_\_\_\_\_\_\_. |
| a. | socket |
| b. | network address |
| c. | service information |
| d. | transport address |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=22 (8854) | The job of gathering data at the source host from different sockets, enveloping the data and passing the segments to the network layer is called |
| a. | Multiplexing |
| b. | De-multiplexing |
| c. | Data Enveloping |
| d. | Encapsulation |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=23 (8864) | \_\_\_\_\_ applications typically uses \_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| a. | Loss-tolerant……..UDP |
| b. | Loss-tolerant……..TCP |
| c. | Elastic……..HTTP |
| d. | Elastic……..DNS |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=24 (8873) | \_\_\_\_\_\_ in the Internet is achieved through the use of acknowledgments and retransmissions. |
| a. | Reliable data transfer |
| b. | Interacting procedure |
| c. | Exchanging procedure |
| d. | Data moving |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=25 (8883) | TCP assigns a sequence number to each segment that is being sent. The sequence number for each segment is the number of the \_\_\_\_\_\_\_ byte carried in that segment. |
| a. | first |
| b. | last |
| c. | middle |
| d. | Next |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.5 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=26 (8894) | In modern implementations of TCP, a retransmission occurs if the retransmission timer expires or \_\_\_\_\_\_\_\_ duplicate ACK segments have arrived |
| a. | three |
| b. | two |
| c. | one |
| d. | four |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.6 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=27 (8895) | UDP and TCP use 1s complement checksum. Suppose you have the followings 2 bytes: 00101010 and 11001100. What is the 1s complement of the sum of those two bytes? |
| a. | 00001001 |
| b. | 11110111 |
| c. | 11110010 |
| d. | 11110110 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.7 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=28 (8911) | If the segment has sequence number of 118 and length of 8 bytes, the receiving computer will send ACK with value of  \_\_\_\_\_\_\_\_\_ |
| a. | 126 |
| b. | 136 |
| c. | 127 |
| d. | 128 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.8 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=29 (8916) | Host A and B are communicating over a TCP connection, host A send to host B the first segment with size 55 bytes, sequence number 100, the source port 1028, the destination port 80. What is the ACK number, the source port number, the destination port number in the ACK segment sent by host B to host A |
| a. | ACK number: 155, source port: 80, destination port: 1028 |
| b. | ACK number: 156, source port: 1028, destination port: 80 |
| c. | ACK number: 100, source port: 80, destination port: 1028 |
| d. | ACK number: 155, source port:1028, destination port: 80 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.9 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=30 (8924) | In the congestion(tắc nghẽn) avoidance phase of TCP congestion control, if \_\_\_\_ occurs while the current congestion window size is 32, the congestion window will\_\_\_\_ |
| a. | Timeout……reduce to 1 |
| b. | Timeout……reduce to 16 |
| c. | Triple duplicate ACKs….reduce to 10 |
| d. | Triple duplicate ACKs….reduce to 0 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.10 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=31 (8954) | The IP broadcast address is |
| a. | 255.255.255.255 |
| b. | 256.256.256.256 |
| c. | FF.FF.FF.FF.FF |
| d. | 00.00.00.00 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=32 (8959) | A Virtual Circuit maintains |
| a. | Path from source to destination and forwarding tables in routers along path |
| b. | Address tables in routers along path |
| c. | A MAC address of the destination host |
| d. | Port numbers of the path from source to destination |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=33 (8974) | Who can send ICMP error-reporting messages? |
| a. | Routers and destination hosts |
| b. | destination port |
| c. | Switch |
| d. | repeaters and senders |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=34 (8981) | What is the data unit used in Internet Protocol (IP)? |
| a. | Datagram |
| b. | Segment |
| c. | Frame |
| d. | Message |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=35 (8991) | Which statement is correct about tracert program? |
| a. | To determine a router on the path, the program sends three packets with the same TTL |
| b. | To  find the nearest router and the shortest path |
| c. | To find the shortest path between the sender and receiver and the longest transmission time among routers |
| d. | To find the average path between the sender and receiver and the longest transmission time among routers |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.5 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=36 (9001) | NAT table in router |
| a. | Store pairs of the host’s IP address and the port number |
| b. | Store the IP address without the port number |
| c. | Store the MAC addresses and IP addresses |
| d. | Store the domain names and IP addresses |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.6 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=37 (9009) | Which one is not an IP address? |
| a. | 251.222.258.1 |
| b. | 255.222.1.171 |
| c. | 10.10.10.110 |
| d. | 10.100.200.0 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.7 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=38 (9019) | What is the 32-bit binary equivalent of the IP address 13.253.17.252? |
| a. | 00001101.1111101.00010001.11111100 |
| b. | 00010011.1111101.00010001.11111100 |
| c. | 00001101.1111111.00010001.11111101 |
| d. | 00001101.1111101.00010001.11111110 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.8 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=39 (9025) | Suppose a subnet has a block of IP addresses 101.101.101.0/24, which address does not belong to that block? |
| a. | 101.101.111.0 |
| b. | 101.101.101.1 |
| c. | 101.101.101.211 |
| d. | 101.101.101.201 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.9 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=40 (9033) | Suppose datagrams are limited to 1500bytes including IP header of 20 bytes. UDP header is 8 bytes. How many datagrams would be required to send an MP3 of  600,000 bytes |
| a. | 408 |
| b. | 407 |
| c. | 409 |
| d. | 406 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.10 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=41 (9066) | What is the name of packet in Link layer of Internet protocol stack? |
| a. | Frame |
| b. | Segment |
| c. | Datagram |
| d. | Message |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=42 (9073) | For even parity scheme (single), if the information is 101110, then information after adding parity bit is |
| a. | 1011100 |
| b. | 1011101 |
| c. | 1111111 |
| d. | 1011111 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=43 (9084) | Assume the original message to be sent 100001, the generator is 1001. What is the transmitted message? |
| a. | 100001101 |
| b. | 100001100 |
| c. | 100001001 |
| d. | 100001011 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=44 (9093) | \_\_\_\_\_\_is used in Ethernet |
| a. | CSMA/CD |
| b. | ALOHA |
| c. | ATM |
| d. | CSMA/CA |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=45 (9098) | In CSMA/CD, if the adapter detects signal energy (phát hiện tín hiệu) from other adapters while transmitting, |
| a. | It stops transmitting its frame and transmits a jam signal. |
| b. | It continues transmitting its frame |
| c. | It continues transmitting its frame and begins to transmit a jam signal |
| d. | It stops transmitting its frame immediately and enters a sleep mode |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.5 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=46 (9104) | A method for encapsulating data in a PPP frame, identifying the beginning and end of the frame is called |
| a. | Framing |
| b. | Error detecting |
| c. | Frame identifying |
| d. | Datagram encapsulating |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.6 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=47 (9117) | The destination address field in an Ethernet frame is |
| a. | 6-byte long |
| b. | 4-byte long |
| c. | 16-byte long |
| d. | 48-byte long |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.7 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=48 (9129) | Which one is not a MAC address: |
| a. | A1-000-6C-2D-15-0A |
| b. | AF-D0-56-F2-05-12 |
| c. | FF-62-DE-6F-D2-DD |
| d. | F0-62-D5-EE-EA-6B |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.8 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=49 (9141) | Assume an Ethernet network has speed of 15Mbps. In the exponential backoff  phase of CSMA/CD, after the first collision of a frame, the adapter then waits …. before sensing the channel again. |
| a. | Either 0 or 34 microseconds |
| b. | Either 0 or 51.2 microseconds |
| c. | Either 1 or 34 microsecond |
| d. | Either 1 or 512 microseconds |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.9 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=50 (9147) | Multiple access link in 802.11 wireless LAN is a |
| a. | Broadcast link |
| b. | Point-to-point link |
| c. | Single link |
| d. | Multiple link |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.10 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=51 (8729) | \_\_\_ is a guided transmission medium, while\_\_\_ is an unguided transmission medium |
| a. | Fiber-optic cable…… Wireless LAN channel |
| b. | LAN channel  ……Fiber-optic cable |
| c. | LAN channel  ……Copper cable |
| d. | Fiber-optic cable…… LAN channel |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.11 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=52 (8737) | The telephone networks are examples of \_\_\_\_\_\_\_\_\_\_. |
| a. | Circuit-switched networks |
| b. | Packet-switched networks |
| c. | Optical network |
| d. | Internet |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.12 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=53 (8835) | Three popular mail access protocols are |
| a. | POP3,IMAP and HTTP |
| b. | POP3, IMAP and HTML |
| c. | POP3, SMTP and HTTP |
| d. | PAN, SMTP, and HTTP |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.11 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=54 (8842) | Assume a website has only 15 different objects, using persistent HTTP, a client needs \_\_\_\_\_\_ to the server |
| a. | A single TCP connection |
| b. | 14 UDP connections |
| c. | 14 TCP connections |
| d. | Multiple TCP connections |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.12 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=55 (8936) | In TCP, what can happen if the timeout  is smaller than the connection's round-trip time? |
| a. | It can result in unnecessary retransmissions. |
| b. | It can increase transmission speed |
| c. | It reduces slow start phase |
| d. | It has result in unnecessary adding packet overhead |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.11 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=56 (8942) | One of the responsibilities of the transport layer protocol is to create a logical  communication between: |
| a. | Processes |
| b. | Hosts |
| c. | Nodes |
| d. | Routers |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.12 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=57 (9042) | While IPv4 address is …bit-long, IPv6 address is … bit-long |
| a. | 32…128 |
| b. | 32…48 |
| c. | 4….16 |
| d. | 6….128 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.11 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=58 (9055) | Consider an IP subnet with prefix 139.27.229.96/28. Which address belongs to the subnet? |
| a. | 139.27.229.100 |
| b. | 139.27.229.247 |
| c. | 139.27.229.177 |
| d. | 139.27.229.199 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.12 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=59 (9154) | And encoding technique used in Ethernet that encodes bit 1 a transition from up to down and bit 0 a transition from down to up (of electrical signal) is called |
| a. | Manchester encoding |
| b. | CRC encoding |
| c. | Parity Encoding |
| d. | ADSL encoding |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.11 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=60 (9162) | Two types of ALOHA are: |
| a. | Pure (nguyên chất) ALOHA and slotted ALOHA |
| b. | Random ALOHA and Slotted ALOHA |
| c. | Access ALOHA and Random ALOHA |
| d. | CSMA-ALOHA and CDMA-ALOHA |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.12 |
| MIX CHOICES: | Yes |

======================================7====================================

MULTIPLE CHOICES QUESTIONS:

|  |  |
| --- | --- |
| QN=1 (8950) | In classless addressing, \_\_\_\_\_\_\_\_\_\_ is assigned to an organization (tổ chức). |
| a. | a variable-length block |
| b. | a fixed-length |
| c. | a fixed number of blocks |
| d. | an infinite number of addresses |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=2 (8957) | A datagram is fragmented (phân mảnh) into three smaller datagrams. Which of the following is true? |
| a. | The identification field is the same for all three datagrams. |
| b. | The more fragment bit is set to 0 for all three datagrams. |
| c. | The do not fragment bit is set to 1 for all three datagrams. |
| d. | The offset field is the same for all three datagrams |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=3 (8971) | What field in the IP header changes when a datagram is forwarded (chuyển tiếp) by a simple router? |
| a. | TTL |
| b. | ToS |
| c. | HL |
| d. | Source IP address |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=4 (8977) | IP is \_\_\_\_\_\_\_\_\_ datagram protocol. |
| a. | An unreliable(không đáng tin cậy) and connectionless (không kết nối) |
| b. | A connection-oriented |
| c. | A reliable |
| d. | A connecting |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=5 (8988) | What is tracert or traceroute program for? |
| a. | To find the route path between the sender and receiver and to measure transit times of packets along the path |
| b. | To  find the nearest router and the shortest path |
| c. | To find the longest path between the sender and receiver and the longest transmission time among routers |
| d. | To find the shortest path between the sender and receiver and the longest transmission time among routers |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.5 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=6 (8996) | Which of the following describe the DHCP Discover message? |
| a. | It does not use a layer 2 destination address. (2 địa chỉ) |
| b. | It sent as a unicast packet to the DHCP server. |
| c. | It uses TCP as the Transport layer protocol. |
| d. | It uses FF:FF:FF:FF:FF:FF as a layer 2 broadcast. |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.6 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=7 (9004) | Which one is not an IP address? |
| a. | 254.322.255.1 |
| b. | 235.222.1.1 |
| c. | 30.80.80.80 |
| d. | 90.190.200.0 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.7 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=8 (9013) | What is the 32-bit binary equivalent of the IP address 1.255.8.252? |
| a. | 00000001.1111111.00001000.11111100 |
| b. | 00000011.1111110.00001000.11111100 |
| c. | 00000001.1111110.00001000.11111110 |
| d. | 00000111.1111111.00001000.11111100 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.8 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=9 (9024) | Suppose a subnet has a block of IP addresses 101.101.101.0/24, which address does not belong to that block? |
| a. | 101.101.102.0 |
| b. | 101.101.101.1 |
| c. | 101.101.101.11 |
| d. | 101.101.101.201 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.9 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=10 (9040) | Consider sending a 5550-byte datagram into a link that has an MTU of 520 bytes (including IP header of 20 bytes). How many fragments are generated? |
| a. | 12 |
| b. | 11 |
| c. | 13 |
| d. | 10 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.10 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=11 (9057) | Where is link layer implemented? |
| a. | NIC |
| b. | IP |
| c. | Bus |
| d. | Interface |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.1 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=12 (9071) | For even parity scheme (single), if the information is 101010, then information after adding parity bit is |
| a. | 1010101 |
| b. | 0101010 |
| c. | 1111111 |
| d. | 1010000 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.2 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=13 (9081) | Assume the original message to be sent 101001, the generator is 1001. What is the transmitted message? |
| a. | 101001001 |
| b. | 101001011 |
| c. | 101001101 |
| d. | 101001111 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.3 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=14 (9092) | Channel partitioning, random access, and taking turns are\_\_\_\_\_\_ |
| a. | MAC protocols |
| b. | Channel Access Protocols |
| c. | ALOHA |
| d. | CSMA/CD |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.4 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=15 (9101) | The most popular Ethernet network topology today is |
| a. | Star |
| b. | Bus |
| c. | Ring |
| d. | Circle |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.5 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=16 (9108) | What is the framing method used in PPP? |
| a. | Byte stuffing. |
| b. | Bit stuffing. |
| c. | Character count. |
| d. | Synchronizing. |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.6 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=17 (9122) | A table has following information: < IP address; MAC address; TTL>, where TTL is Time-To-Live. This table can be a (an) |
| a. | APR table |
| b. | Routing table |
| c. | Mapping table |
| d. | MAC table |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.7 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=18 (9133) | The broadcast MAC address in LAN is |
| a. | FF-FF-FF-FF-FF-FF |
| b. | FF-FF-FF-EE-EE-EE |
| c. | FF-FF-FF-FF-FF |
| d. | 00-00-00-00-00-00 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.8 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=19 (9139) | In the exponential backoff  phase of CSMA/CD for a 1Mbps Ethernet, after the first collision of a frame, the adapter then waits …. before sensing the channel again. |
| a. | Either 0 or 512 microseconds |
| b. | 0 microsecond |
| c. | 1 microsecond |
| d. | 512 microseconds |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.9 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=20 (9150) | What is the MAC protocol used in 802.11 network? |
| a. | CSMA/CA |
| b. | CSMA/CD |
| c. | Token passing |
| d. | TDMA |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.10 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=21 (8727) | There are two categories of\_\_\_\_\_\_\_\_\_\_: Guided medium and unguided medium |
| a. | physical transmission medium |
| b. | Transport medium |
| c. | Traveling medium |
| d. | Virtual transmission medium |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.11 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=22 (8735) | In \_\_\_\_\_, the network establishes a dedicated end-to-end connection  between two hosts |
| a. | Circuit switching |
| b. | Packet switching |
| c. | Time switching |
| d. | Channel switching |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 1.12 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=23 (8833) | IMAP is designed to allow users to manipulate (thao tác)\_\_\_\_\_\_, so it is more\_\_\_\_\_\_\_ than POP3 |
| a. | Remote mailboxes…. Complex |
| b. | Local mailboxes…simple |
| c. | Local mailboxes….complex |
| d. | Remote mailboxes…. interesting |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.11 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=24 (8840) | Assume a website has only 5 different images, using non-persistent HTTP, a client needs \_\_\_\_\_\_ to the server |
| a. | 5 TCP connections |
| b. | 4 UDP connections |
| c. | 4 TCP connections |
| d. | 6 TCP connection |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 2.12 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=25 (8934) | In TCP, what can happen if the timeout  is smaller than the connection's round-trip time? |
| a. | It can result in unnecessary retransmissions. (truyền lại không cần thiết.) |
| b. | It can increase transmission speed |
| c. | It reduces slow start phase |
| d. | It reduces the transmission speed |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.11 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=26 (8946) | The transport layer protocol provides \_\_\_\_\_ communication between \_\_\_\_\_\_ running on different applications |
| a. | Logical…..Processes |
| b. | Logical…Hosts |
| c. | Physical…processes |
| d. | Physical…Hosts |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 3.12 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=27 (9044) | How “big” is an IPv6 Internet address? |
| a. | 128 bits |
| b. | 32 bytes |
| c. | 32 bits |
| d. | 20 octets |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.11 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=28 (9050) | Given the IP address 201.14.78.65 and the subnet mask 255.255.255.224, what is the subnet address? |
| a. | 201.14.78.64 |
| b. | 201.14.78.68 |
| c. | 201.14.79.32 |
| d. | 201.14.78.255 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 4.12 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=29 (9157) | With the following Manchester encoding, the bit stream transmitted is \_\_\_\_\_  [file:9157.jpg]  9157 |
| a. | None of them |
| b. | 11010011 |
| c. | 10100111 |
| d. | 00111010 |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.11 |
| MIX CHOICES: | Yes |

|  |  |
| --- | --- |
| QN=30 (9166) | Which one is correct about ALOHA? |
| a. | Less bandwidth utilization than CSMA/CA |
| b. | Only used for wired network |
| c. | Much better bandwidth utilization than any other random access protocols |
| d. | Has another version called CSMA/CD |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | Chapter 5.12 |
| MIX CHOICES: | Yes |