University of Mumbai

Examination 2020

Program: Computer Engineering Curriculum Scheme: Rev2016 Examination: TE Semester V

Course Code: CSC503 and Course Name: Computer network

Time: 2 hour

Max. Marks: 80

| Q1. | Choose the correct option for following questions. All the Questions are compulsory and carry equal marks |
|-----------|---|
| | |
| 1. | The ability of a single network to span multiple physical networks is known as |
| Option A: | Subnetting |
| Option B: | Masking |
| Option C: | Hopping |
| Option D: | Fragmenting |
| | |
| 2. | ICMP is primarily used for |
| Option A: | addressing |
| Option B: | routing |
| Option C: | forwarding |
| Option D: | Error and query functions |
| | |
| 3. | The IPV4 header size is |
| Option A: | Is 20 to 60 byte long |
| Option B: | Its depend upon MTU |
| Option C: | It's always 20 bit long |
| Option D: | It's always 60 bit long |
| | |
| 4. | Which of the following are transport layer protocols used in networking? |
| Option A: | TCP and FTP |
| Option B: | TCP and UDP |
| Option C: | HTTP and TCP |
| Option D: | UDP and FTP |
| | |
| 5. | Buffer overrun can be reduced by using what? |
| Option A: | Traffic control |
| Option B: | Flow control |
| Option C: | Byte orientation |
| Option D: | Data integrity |
| | |
| 6. | The technique of refers a congestion control mechanism in which a |
| | congested node stop receiving the data from the immediate upstream node. |
| Option A: | Back pressure |
| Option B: | Choke packet |
| Option C: | Implicit |
| Option D: | Explicit |
| | |
| 7. | Which one of the following allows a user at one site to establish a connection to |
| | another site and then pass keystrokes from local host to remote host? |

| Option A: | НТТР |
|------------------------|--|
| Option B: | FTP |
| Option C: | TELNET |
| Option D: | SMTP |
| | |
| 8. | A DNS client is called |
| Option A: | DNS updater |
| Option B: | DNS resolver |
| Option C: | DNS handler |
| Option D: | DNS Manager |
| | |
| 9. | When the mail server sends mail to other mail servers it becomes |
| Option A: | SMTP server |
| Option B: | Peer |
| Option C: | Master |
| Option D: | SMTP client |
| 1 | |
| 10. | A 4 byte IP address consists of |
| Option A: | only network address |
| Option B: | only host address |
| Option C: | network address & host address |
| Option D: | network address & MAC address |
| - | |
| 11. | "Parity bits" are used for which of the following purposes? |
| Option A: | Encryption of data |
| Option B: | To transmit faster |
| Option C: | To detect errors |
| Option D: | To identify the user |
| | |
| 12. | A single channel is shared by multiple signals by |
| Option A: | analog modulation |
| Option B: | digital modulation |
| Option C: | multiplexing |
| Option D: | phase modulation |
| 12 | |
| 13. | Which of the following is the multiple access protocol for channel access control? |
| Option A: | CSMA/CD |
| Option B: | CSMA/CA |
| Option C: | Both CSMA/CD & CSMA/CA |
| Option D: | HDLC |
| 1.4 | Which of the fallowing address helping stars A9 |
| 14. | Which of the following address belongs class A? |
| Option A: | 121.12.12.248 |
| Option B: | 130.12.12.248 |
| Option C: | 128.12.12.248 |
| Option D: | 129.12.12.248 |
| 15. | The term IANA stands for? |
| Option A: | |
| Option A: Option B: | Internet Assigned Numbers Authority Internal Assigned Numbers Authoritative |
| Option B . | |

| Option C: | Internet Associative Numbers Authoritative |
|-----------|---|
| Option D: | Internal Associative Numbers Authority |
| | |
| 16. | Which of the following is true with regard to the ping command? |
| Option A: | Ping stands for Packet Internet Generator. |
| Option B: | The ping command checks the port level connectivity between source |
| | destinations end points. |
| Option C: | Ping summarizes the packet loss and round-trip delay between two IP end points. |
| Option D: | The ping command activates the RARP protocol of the IP layer. |
| | |
| 17. | A local telephone network is an example of a network. |
| Option A: | Packet switched |
| Option B: | Circuit switched |
| Option C: | Bit switched |
| Option D: | Line switched |
| - 1 | |
| 18. | In OSI model, when data is sent from device A to device B, the 5th layer to |
| | receive data at B is |
| Option A: | Application layer |
| Option B: | Transport layer |
| Option C: | Link layer |
| Option D: | Session layer |
| | |
| 19. | CSMA is based on medium called |
| Option A: | Listen before talk |
| Option B: | Listen before sending |
| Option C: | Sense before transmit |
| Option D: | Sense before collision |
| r · · · · | |
| 20. | There is no reflection until angle of incidence is greater than angle. |
| Option A: | Critical |
| Option B: | Refractive |
| Option C: | Vertical |
| Option D: | Horizontal |
| option D. | |

| Q2 | Solve any Two Questions out of Three |
|-----------------|---|
| (10 Marks Each) | |
| A | Explain sliding window protocol using Go back n techniques. |
| В | What is function of IP protocol? Explain the header format. |
| С | What are the transport service primitives? |

| Q3. | Solve any Two Questions out of Three |
|-----------------|--|
| (10 Marks Each) | |
| А | Explain CSMA protocol. Explain how collision handled in CSMA/CA? |
| В | Explain open loop and close loop congestion policies. |
| С | Explain the need of DNS protocol and describe the protocol learning. |