**Assessment Questions**

**Skill: Basic Networking**

1. Which type of network is used for connecting two or more personal computers through a communication medium such as twisted pair, coaxial cable, etc.?

A) PAN

B) LAN

C) MAN

D) WAN

Answer: B

1. Which type of network is created by using wireless technologies such as WiFi, Bluetooth, etc. and has a low range network?

A) Wired PAN

B) Wireless PAN

C) Metropolitan Area Network

D) Home Area Network

Answer: B

1. What was the name of the device that was used to connect different networks in ARPANET and perform packet switching?

A) Router

B) Switch

C) Hub

D) IMP

Answer: D

1. What was the name of the concept that enabled ARPANET’s operation by breaking down data into smaller units called packets?

A) Packet switching

B) Queueing theory

C) Game theory

D) Information theory

Answer: A

1. What is the name of the special IP address that is used to send a message to all devices on a network? For example, the address 192.168.0.255 in an IP address 192.168.0.1/24.

A) Network ID

B) Host ID

C) Subnet ID

D) Broadcast ID

Answer: D

1. Which of the following IP addresses is reserved for multicast purposes?

A) 127.0.0.0

B) 172.0.0.0

C) 255.255.255.255

D) 239.255.0.1

Answer: D

1. What is the CIDR notation for a network that has a subnet mask of 255:255:240:0?

A) /12

B) /16

C) /20

D) /24

Answer: C

1. Find the subnet address of the IP address 172.16.14.101/20?

A) 172.16.0.0

B) 172.16.14.0

C) 172.16.14.64

D) None of these

Answer: A

1. Match the HTTP Status code:
2. 200 - Created
3. 201 - Accepted
4. 202 - No content
5. 204 - Ok
6. ii, iii, iv, I iv, ii,i ,iii
7. iii, iv, i, ii
8. iv, iii, ii, i
9. iii, i, iv, ii

Answer: A

1. What is an example of a valid email address that can be used to send or receive emails using SMTP?

A) alice@wonderland.com

B) bob@localhost

C) charlie@gmail.com

D) All of these

Answer: D

1. What is the name of the HTTP application that is used to provide a REST service on GitHub?

A) Web browser

B) Web server

C) Web service

D) Web crawler

Answer: C

1. Match the following applications with the corresponding TCP port numbers:
2. HTTP service - 25
3. SSH Service - 20 and 21
4. SMTP Service - 80
5. FTP Service - 22
6. iii, iv, i, ii
7. iv, iii, ii, i
8. ii, iv, i, iii
9. iii, iv, ii, i

Answer: A

1. Match the following applications with the corresponding UDP port numbers:
2. DNS Service - 123
3. DHCP service - 88
4. Kerberos Service - 67
5. NTP Service - 53
6. iii, iv, i, ii
7. iv, iii, ii, i
8. ii, iv, i, iii
9. iii, iv, ii, i

Answer: B

1. Match the following applications with the corresponding UDP port numbers:
2. DES - Digital Signature
3. Encryption with hash function and private key - Asymmetric
4. Encrypt message to fixed length value - Symmetric
5. Different Keys for Encryption and Decryption - Hashing
6. iii, iv, i, ii
7. iv, iii, ii, i
8. ii, iv, i, iii
9. iii, iv, ii, i

Answer: C

1. Assume two co-prime numbers be **p**=3 and **q**=11, the public key be {7, 33} and the private key be {3, 33}. The encrypted cipher text, **c** generated using the public key be 4. Find the plain text by using **cd mod n** to generate the plain text.
   * 1. 33
     2. 31
     3. 21
     4. 20

Answer: B

ALTER TABLE your\_table

ALTER COLUMN your\_column

SET DATA TYPE integer

USING CAST(your\_column AS integer);