Name: Ahmed Kasheer
Roll number: 20F-0336
Section: 5C

Question: 1 =>

Subnet prefix 128.119.40.128/26

IP address: 128.119.40.64/26

4 subnets so $2^4 = 16$

As of class B so

default mask 255.255.0.0

11111111.11111111.11110000.00000000

255.255.224.0

Interval 256 - 240 = 16

Four subnets are as follows

128.119.40.64

128.119.40.80

128.119.40.96

128.119.40.112

Question Number # 02

Prefix Match

a)

11100000 00*	0
11100000 01000000	1
11100001*	2
11100000 01000010	3

b, determine

1st IP address ; interface 3

2nd interface 2

3rd interface 3

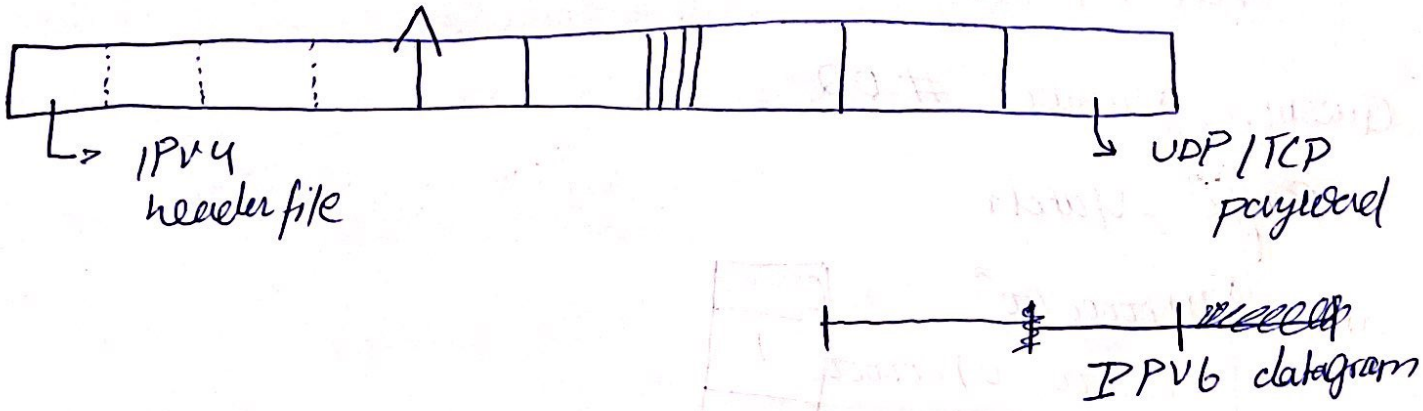
Question Number # 03

Converting IPV4 to IPV6 is a whole new procedure which includes many techniques is a whole new process as IPV6. It facilitates the network users more widely.

Tunneling:

All the routers cannot be upgraded. As the payload of IPV6 or datagram of IPV6 is carried in IPV4 datagram which includes routers of IPV4 datagram

IPV4 source and destination address



Question Number # 04

IP address 200.23.16.0/20

In Binary

1100 1000

23 in Binary remainder

0001 0111

Now

00000000

200.23.16.0

Network

11001000 00010110 00010000 00000000

(For first organization)

in Binary

Network ← 11001000.00010110.00100000 00000000

Broadcast

11001000.00010111.00010111.11111111

200.23.16.0 (Network ID)

200.23.23.255 (Broadcast ID)

200.23.16.1 (1st usable ID)

(2nd organization)

200.23.24.0 (Network ID)

200.23.24.1 (1st IP)

200.23.31.255 (Broadcast address)

(3rd organization)

200.23.32.0 (Network)

200.23.32.1 (1st IP)

200.23.32.2 (2nd IP)

200.23.39.255 (Broadcast address)

(4th organization)

200.23.40.0 (Network IP)
200.23.40.1 (1st usable IP)
200.23.47.255 (Broadcast address)

(5th organization)

200.23.48.0 (Network IP)
200.23.48.1 (1st usable IP)
200.23.55.255 (Broadcast IP)

(6th organization)

200.23.56.0 (Network IP)
200.23.56.1 (1st usable IP)
200.23.63.255 (Broadcast IP)

(7th organization)

200.23.64.0 (Network IP)
200.23.64.1 (1st usable IP)
200.23.71.255 (Broadcast Address)

(8th organization)

200.23.72.0 (Network IP)
200.23.72.1 (1st IP)
200.23.79.255 (Broadcast address)

Question Number #05

Packet scheduling is a process by which data packet is transmitted from one host to another that regulates how much data flow is allowed to transfer data efficiently Schedule is basically assigning resources to perform task Resources can be devices and network link.