CS & IT



ENGINERING



IPv4 Addressing

DPP 07 (Discussion notes)



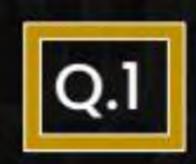
By- Ankit Doyla Sir



TOPICS TO BE COVERED

01 Question

02 Discussion



Consider the subnet mask 255.255.224.0 then which of the following is a valid broadcast address?





180.180.15.255 : 00001111.1111111



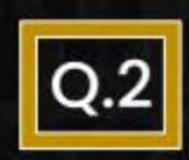
180.180.31.0



180.180.31.255:000 111111 1 1 1 1 1 1 1 1



180.180.255.31: ////// .0001111



Consider a subnet mask for a network is 255.255.255.252. Then, which of the following is/are possible direct broadcast address?





200.200.200.15 : 00001111



200.200.200.31 :00011111

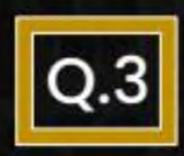


200.200.200.63:0011111



200.200.200.3 : 00000014

[MSQ]



Suppose, direct broadcast address of network is 210.210.210.63

then which of the following is/are always true, for subnet mask?



[MSQ]



In subnet mask number of ones are exactly 26.



In subnet mask number of ones are at most 26.



In subnet mask number of ones are at least 26.



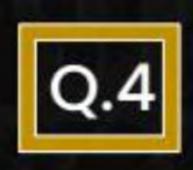
In subnet mask Host ID bits are at most 6.



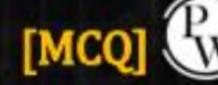
HID CAN BE MAXIMUM

maximum No. of o's in the sim = 6





Two computers P₁ and P₂ configured as follows:



P1 has IP address 160.170.3.67 and Net mask 255.240.0.0 and P2 has IP address 160.169.80.59 and Net mask 255.248.0.0 which of the following statement is true?



P₁ and P₂ both assume they are on the same network.



P₂ assume P₁ is on same network, but P₁ assume P₂ is on different network.



P₁ assume P₂ is on same network, but P₂ assume P₁ is on different network.



P₁ and P₂ both assume they are on different networks.

P

IPA: 160.170.3.67

SMP: 255.240.0.0

P2

IP2: 160.16 9.80.59

SMPa: 255.248.0.0

TP₂ = 160.169.80.29

AND AND

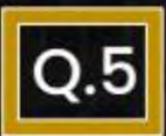
SMP1 = 285.240.0.0

NID = 160.160.0.0

P1 Assume Pa IX on same

NIW

170:178+37+8+2 298:128+64+32 +16+8



Consider the routing table given below:



Destination Network ID	Subnet mask	Interface
160.168.16.0	255.255.224.0	1
160.168.128.0	255.255.192.0	2
160.168.48.0	255.255.240.0	(3)
Default		4

On which interface will the router forward the packet? If packet bearing a destination address 160.168.63.130 ____3___

AD Rule: Ist start with the Longest subnut mask

SOL

DIP =
$$160 \cdot 168 \cdot 63 \cdot 130$$

AND AND AND SM = $355 \cdot 355 \cdot 340 \cdot 0$
NID = $160 \cdot 168 \cdot 48 \cdot 0$



63:00111111 AND 240:11110000 (48) 00110000



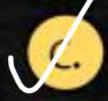
Consider the subnet mask 255.224.0.0, then which of the following can be direct broadcast address?













100.63.255.255 : 00 [[11]] - [[17]] [[1.][1]]

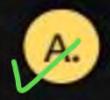


Consider two computers C1 and C2 are configured as follows:

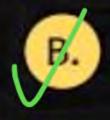


	IP address	Net mask
C1	192.198.2.53	255.255.224.0
C2	192.198.76.99	255.255.192.0

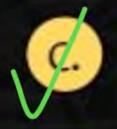
Which of the following statements is/are false?



C1 and C2 both assume they are on the same network.



C2 assumes C1 is on same network, but C1 assumes C2 is on different network.



C1 assumes C2 is on same network, but C2 assumes C1 is on a different network



C1 and C2 both assume they are on different network.

192.198.2.53 AND SMC1 = 255.255.274.0 NIDC, C1 = 199.198.0.0 IP2 = 192.198.76.99 0. 466.226.226 = 12MS NIDcec1 = 193.198.64.0 CIassumu Cz 15 on different N/W



IPc2 = |99.|98.76.99 AND SM(2 = 255.255.192.0 NIDCa(2 = |92.198.64.0

TP: = 192.198.2.53
AND
AND
SMc2 = 255.255.192.0
NIDC: (2 = 192.198.0.0)

cassume ci is on different

Consider a computer C1 is configured with IP address 183.197.89.99 and netmask 255.255.192.0. The DBA of the

network is ____.

- A.
- 183.197.89.0
- В.
- 183.197.89.255
- **G**
- 183.197.64.0
- D.

183.197.127.255



