Computer Network || Summer- 25

Quiz 1   **Section: 65_J**

ID:_____   Name:_____   **Set: A**

A company has been assigned the network 172.20.0.0/16 and plans to expand its operations across 8 branch offices. Each branch office requires the same number of IP addresses. Using Fixed-Length Subnet Masking (FLSM), complete the following table and answer the questions: **7.5 Marks**

Branch Office	Network Address	Broadcast Address
Branch Office 1		
Branch Office 2		
Branch Office 3		
Branch Office 4		
Branch Office 5		
Branch Office 6		
Branch Office 7		
Branch Office 8		

1. Given an IP address of 192.168.1.0/24, how many hosts can be assigned in this network?
   Answer:

2. What is the broadcast address for the network 192.168.10.0/24?
   Answer:

3. Given an IP address of 192.168.1.0/24, what would be the result of changing the subnet mask to /26, and how many subnets and hosts will this create?
   Answer:

4. How would you calculate the number of subnets and hosts if you are given a subnet mask of /27 for a Class C network?
   Answer:

5. What is the broadcast address for the network 10.1.2.32/27?
   Answer:

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Quiz 1   Section: 65_J

ID:_____ Name:_____   Set: B

You are assigned the network 172.20.0.0/16 and need to divide it into 16 equal-sized subnets using Fixed Length Subnet Masking (FLSM). Fill in the following details for each subnet. 7.5 Marks

	Network Address	Broadcast Address	Last Usable IP
Subnet 1			
Subnet 2			
Subnet 3			
Subnet 4			
Subnet 5			
Subnet 6			
Subnet 7			
Subnet 8			

1. Given an IP address of 192.168.1.0/25, how many hosts can be assigned in this network?
   Answer:

2. What is the broadcast address for the network 10.0.0.0/8?
   Answer:

3. Given an IP address of 192.168.1.0/24, what would be the result of changing the subnet mask to /27, and how many subnets and hosts will this create?
   Answer:

4. Calculate the number of subnets and hosts if you are given a subnet mask of /28 for a Class C network?
   Answer:

5. What is the broadcast address for the network 192.168.50.64/26
   Answer: