

Question.No: 003

171.10.33.103

Subnets 54 $\Rightarrow 2^6 = 64$

Host 519 $\Rightarrow 2^{10} = 1024$

$$64 \times 1024 = 65536$$

$$256 \times 256 = 65536$$

It is a class B IP.

as range is equal to Mask-Mask range

so subnetting is not possible.

Question.No: 04

12.12.12.12

Subnets : 3333 $\Rightarrow 2^{12} = 4096$

Hosts : 4011 $\Rightarrow 2^{12} = 4096$

$$4096 \times 4096 = 16777216$$

$$256 \times 256 \times 256 = 16777216$$

It is a class A IP.

as ranges are equal so subnetting is not possible.

Question No: 05

191.255.255.255

$$\text{Subnet: } 512 \Rightarrow 2^{10} = 1024$$

$$\text{Hosts: } 511 \Rightarrow 2^9 = 512$$

$$1024 \times 512 = 524288$$

$$256 \times 256 = 65536$$

It is a class B IP

as range is greater than Mask-Mask so
sub-netting is not possible.