



capacity \rightarrow 64 computers in each subnet

$$\therefore 64 \times 4 = 2^6 \times 2^2 = 2^8$$

MNITVN

$$= 2^{32-24} = 2^8 \quad \therefore n=24$$

\therefore subnet address ranges.

- firstyear-vn-01 \Rightarrow 10.0.1.0/26, 10.0.2.0/26
10.0.3.0/26, 10.0.4.0/26
- secondyear-vn-01 \Rightarrow 20.0.1.0/26, 20.0.2.0/26
20.0.3.0/26, 20.0.4.0/26
- thirdyear-vn-01 \Rightarrow 30.0.1.0/26, 30.0.2.0/26
30.0.3.0/26, 30.0.4.0/26
- fourthyear-vn-01 \Rightarrow 40.0.1.0/26, 40.0.2.0/26
40.0.3.0/26, 40.0.4.0/26

- 10.0.0.0/24
 - 20.0.0.0/24
 - 30.0.0.0/24
 - 40.0.0.0/24
- respectively.

\therefore Vnet ranges should be