Bloco ISP

128.20.224.0/20

a) Dividir endereços
b) tabela R1 com agregação e sem agregação

a)

128.20.224.0/20
10000000 00010100 11100000 00000000

Mask: 255.255.240.0 (11111111 11111111 11110000 00000000)
Bcast: 128.20.239.255 (10000000 00010100 11101111 11111111)

[1000 hosts] x2

$2^{10} - 2 \leftarrow$ 1000 hosts

10000000 00010100 11100XX XXXXXXXX → 128.20.224.0/22
10000000 00010100 11101XX XXXXXXXX → 128.20.228.0/22

[500 hosts] x2

$2^9 - 2 \leftarrow 500$ hosts

10000000 00010100 1110100X XXXXXXXX → 128.20.232.0/23
10000000 00010100 1110101X XXXXXXXX → 128.20.234.0/23

[250 hosts] x3

$2^8 - 2 \leftarrow 250 \text{ hosts}$

10000000 00010100 11101100 XXXXXXX   → 128.20.236.0/24
10000000 00010100 11101101 XXXXXXX   → 128.20.237.0/24
10000000 00010100 11101102 XXXXXXX   → 128.20.238.0/24

[50 hosts] x3

$2^6 - 1 \leftarrow 50 \text{ hosts}$

10000000 00010100 11101111 00XXXXXX   → 128.20.239.0/26
10000000 00010100 11101111 01XXXXXX   → 128.20.239.64/26
10000000 00010100 11101111 10XXXXXX   → 128.20.239.128/26

b)

<u>Distribuição de Endereços:</u>

R2:
- 128.20.227.0/22
- 128.20.228.0/22
- 128.20.232.0/23
- 128.20.234.0/23

R3:
- 128.20.236.0/24
- 128.20.237.0/24
- 128.20.238.0/24
- 128.20.239.0/26
- 128.20.239.64/26

R1:
- 128.20.239.128/26   (128.20.239.190)

<u>Tabela R1:</u>

Endereço:	Interface saída:
0.0.0.0/0	e7
128.20.239.128/26	e8
128.20.224.0/22	e1
128.20.228.0/22	e1
128.20.232.0/23	e1
128.20.234.0/23	e1
128.20.236.0/24	e6
128.20.237.0/24	e6
128.20.238.0/24	e6

128.20.239.0/26   e6
128.20.239.64/26   e6

Tabela R2 c/ agregação:

Endereço: Interface Saida:
0.0.0.0/0   e7
128.20.239.128/26 e8

128.20.224.0/20   e1

128.20.236.0/22   e6