

## IP Scheming

R1-Router 1-1<sup>st</sup> Building

S1-Switch 1 -1<sup>st</sup> floor– General Ward of 1<sup>st</sup> building

S2-Switch 2 -2<sup>nd</sup> floor– Private Ward of 1<sup>st</sup> building

S3-Switch 3 -3<sup>rd</sup> floor– Clinical Ward of 1<sup>st</sup> building

S4-Switch 4 -4<sup>th</sup> floor– Reception of 1<sup>st</sup> building

R2-Router 2-2<sup>nd</sup> Building

S5-Switch 1 -1<sup>st</sup> floor– Private Ward of 2<sup>nd</sup> building

S6-Switch 2 -2<sup>nd</sup> floor– Reception Ward of 2<sup>nd</sup> building

S7-Switch 3 -3<sup>rd</sup> floor– General of 2<sup>nd</sup> building

S8-Switch 4 -4<sup>th</sup> floor– Clinical Ward of 2<sup>nd</sup> building

S9-Switch 5 -5<sup>th</sup> floor–Doctor's Cabin of 2<sup>nd</sup> building

R3-Router 3-3<sup>rd</sup> Building

S10-Switch 1 -1<sup>st</sup> floor– General of 3<sup>rd</sup> building

S11-Switch 2 -2<sup>nd</sup> floor– Reception Ward of 3<sup>rd</sup> building

S12-Switch 3 -3<sup>rd</sup> floor– Private Ward of 3<sup>rd</sup> building

S13-Switch 4 -4<sup>th</sup> floor– Clinical Ward of 3<sup>rd</sup> building

## First Building

$R1 = 10.10.10.00000000/26 = 10.10.10.0/26$

Subnet mask = 255.255.255.192

R1 has 4 switches S1, S2,S3 and S4

$S1 = 10.10.10.00001000/29=10.10.10.8/29$

Subnet mask = 255.255.255.248

$S2=10.10.10.00010000/29=10.10.10.16/29$

Subnet mask = 255.255.255.248

$S3=10.10.10.00011000/29=10.10.10.24/29$

Subnet mask = 255.255.255.248

$S4 =10.10.10.00100000/29=10.10.10.32/29$

Subnet mask = 255.255.255.248

## **Second Building**

R2 = 10.10.10.01000000/26 = 10.10.10.64/26

Subnet mask = 255.255.255.192

R2 has 3 switches S5, S6, S7, S8 and S9 =

S5 = 10.10.10.01001000/29 = 10.10.10.72/29

Subnet mask = 255.255.255.248

S6 = 10.10.10.01010000/29 = 10.10.10.80/29

Subnet mask = 255.255.255.248

S7 = 10.10.10.01011000/29 = 10.10.10.88/29

Subnet mask = 255.255.255.248

S8 = 10.10.10.01100000/29 = 10.10.10.96/29

Subnet mask = 255.255.255.248

S9 = 10.10.10.01101000/29 = 10.10.10.104/29

Subnet mask = 255.255.255.248

## **Third Building**

R3 = 10.10.10.10000000/26 = 10.10.10.128/26

Subnet mask = 255.255.255.192

R3 has 4 switches S10, S11, S12, S13

S10 = 10.10.10.10001000/29 = 10.10.10.136/29

Subnet mask = 255.255.255.248

S11 = 10.10.10.10010000/29 = 10.10.10.144/29

Subnet mask = 255.255.255.248

S12 = 10.10.10.10011000/29 = 10.10.10.152/29

Subnet mask = 255.255.255.248

S13 = 10.10.10.10100000/29 = 10.10.10.96/29

Subnet mask = 255.255.255.248