Hotel Management Networking Project Description

As a part of your end year networking project, you are required to design and implement Vic Modern Hotel network. The hotel has three floors; in the first floor there three departments (Reception, store and Logistics), in the second floor there are three departments (Finance, HR and Sales/Marketing), while the third floor hosts the IT and Admin. Therefore, the following are part of the considerations during the design and implementation.

**1.** There should be three routers connecting each floor (all placed in the server room in IT department).

**2.** All routers should be connected to each other using serial DCE cable.

**3**. The network between the routers should be 10.10.10.0/30,10.10.10.4/30,10.10.10.8/30

**4.** Each floor is expected to have one switch (placed in the respective floor).

**5**. Each floor is expected to have WIFI networks connected to laptops and phones.

**6**. Each department is expected to have a printer.

**7.** Each department is expected to be in different VLAN with the following details  
  
**1st Floor;**

* Reception- VLAN 80, Network of 192.168.8.0/24
* Store- VLAN 70, Network of 192.168.7.0/24
* Logistics- VLAN 60, Network off 192.168.6.0/24

**2nd Floor;**

* Finance- VLAN 50, Network of 192.168.5.0/24
* HR- VLAN 40, Network of 192.168.4.0/24
* Sales- VLAN 30, Network of 192.168.3.0/24

**3rd Floor;**

* Admin- VLAN 20, Network of 192.168.2.0/24
* IT- VLAN 10, Network of 192.168.1.0/24

**8**. Use OSPF as the routing protocol to advertise routes.

**b**. All devices in the network are expected to obtain IP address dynamically with their respective router configured as the DHCP server.

**10**. All the devices in the network are expected to communicate with each other.

**11.** Configure SSH in all the routers for remote login.

**12**. In IT department, add PC called Test-PC to port fa0/1 and use it to test remote login.

**13**. Configure port security to IT-dept switch to allow only Test-PC to access port fa0/1 (use sticky method to obtain mac-address with violation mode of shutdown.)