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| **Project Based Learning** | | |
| **Roll No. : 152** | | **Section:B** |
| **Aim :** | **HOSPITAL NETWORK SYSTEM DESIGN.** |  |
| **Diagram:** |  | |
| **Component Parameters:**  Real Time  Observations: | |  |  |  |  | | --- | --- | --- | --- | | Sr.No. | Component | IP Address | Gateway Address | | Server room (network1) | | | | | 1. | PC1 | 193.168.10.15 | 193.168.10.1 | | 2. | Laptop1 | 193.168.10.14 | | 3. | Server 1 | 193.168.10.11 | | 4. | Server 2 | 193.168.10.12 | | 5. | Server 3 | 193.168.10.13 | | 6. | switch |  | | Reception area (network2) | | | | | 1. | PC1 | 192.168.10.10 | 192.168.10.1 | | 2. | PC2 | 192.168.10.12 | | 3. | PC3 | 192.168.10.14 | | 4. | Laptop1 | 192.168.10.15 | | 5. | Laptop2 | 192.168.10.13 | | 6. | Printer | 192.168.10.11 | | 7. | switch |  | | Clinical area (network3) | | | | | 1. | PC1 | 194.168.10.13 | 194.168.10.1 | | 2. | PC2 | 194.168.10.11 | | 3. | Laptop1 | 194.168.10.12 | | 4. | Laptop2 | 194.168.10.10 | | 5. | Printer | 194.168.10.14 | | 6. | switch |  | | General ward (network4) | | | | | 1. | PC1 | 195.168.10.14 | 195.168.10.1 | | 2. | PC2 | 195.168.10.13 | | 3. | PC3 | 195.168.10.12 | | 4. | Laptop1 | 195.168.10.10 | | 5. | Printer | 195.168.10.14 | | 6. | switch |  | | Operation Theater (network5) | | | | | 1. | PC1 | 198.168.10.10 | 198.168.10.1 | | 2. | PC2 | 198.168.10.12 | | 3. | Laptop1 | 198.168.10.11 | | 4. | Laptop2 | 198.168.10.14 | | 5. | Printer | 198.168.10.13 | | 6. | switch |  | | Staff room (network6) | | | | | 1. | PC1 | 199.168.10.16 | 199.168.10.1 | | 2. | PC2 | 199.168.10.15 | | 3. | PC3 | 199.168.10.13 | | 4. | PC4 | 199.168.10.10 | | 5. | Laptop1 | 199.168.10.11 | | 6. | Printer1 | 199.168.10.14 | | 7. | Printer2 | 199.168.10.12 | | 8. | switch |  |     In above network , we can see that all departments of Hospital are interconnected with each other . Uppermost yellow regions are Operation Theater and Staff Room. Also , Both are connected by router with General Ward , Clinical Area , Reception and Server room . | |
| **Simulation**  **Result :** | 1. From the network in below , the packet is sent from **‘server room’** to **‘reception’** and from **‘general ward’** to **‘clinical area’**. (In progress).                1. The Networks shown in below , The packet is sent from **‘clinical area’** to ‘**operation theater’** and from **‘reception’** to **‘staff room’**.         packet reached at common router between two receiving networks.    packets are reached at their last network and distributed through the switch from their network.        Packets are successfully received in their destination.  Similarly , We can transfer the packet or any other information through this Network in any department of the Hospital. | |