**Part 1 (40 Marks)**

A new school network is being installed. There are **Three** classrooms with **61** computers each. **Two** offices will have **30** computers each. The reception desk will have **five** computers. A small study hall will include **9** connections. Giving the IP address **63.92.141.128/25** divide the network using **VLSM** and complete the following tasks:

**Complete the following table with your right Subnetting details**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Subnet # | Network  Address | Subnet Mask (/X) | First Usable  Host Address | Last Usable  Host Address | Broadcast  Address |
| 1 | 63.92.141.128 | /26 | 63.92.141.129 | 63.92.141.190 | 63.92.141.191 |
| 2 | 63.92.141.192 | /26 | 63.92.141.193 | 63.92.141.254 | 63.92.141.255 |
| 3 | 63.92.142.0 | /26 | 63.92.142.1 | 63.92.142.62 | 63.92.142.63 |
| 4 | 63.92.142.64 | /27 | 63.92.142.65 | 63.92.142.94 | 63.92.142.95 |
| 5 | 63.92.142.96 | /27 | 63.92.142.97 | 63.92.142.126 | 63.92.142.127 |
| 6 | 63.92.142.128 | /28 | 63.92.142.129 | 63.92.142.142 | 63.92.142.143 |
| 7 | 63.92.142.144 | /29 | 63.92.142.149 | 63.92.142.150 | 63.92.142.151 |