**OSI Model – Open Systems Intercommunications Model**

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| **Layer** | **Description** | **Main Areas** |  |
| **7. Application Layer** | Interacts with Operating system or application when you want to transfer files, read messages or any network related activities | **HTTP, SMTP, Telnet, FTP** | **Application Set** |
| **6. Presentation Layer** | Takes the data the application layer gives it and will change it into a standard format that the other layers can understand. Eg into email format. |  | **Application Set** |
| **5. Session Layer** | Ends and maintains communication with the receiving device. |  | **Application Set** |
| **4. Transport Layer** | Maintains flow control of data and error checks and the recovery of the data between devices | **TCP and UDP – User Diagram Protocol** | **Transport Set** |
| **3. Network Layer** | Decides the way that data is sent to the recipients device , routes and addressing and logical protocols. (path) | IP Addresses | **Transport Set** |
| **2. Data Layer** | Physical protocol assigned to data and type of network and packet sequence defined. Message put into a frame with a header and it finds the next destination device on the network. | Comprises of (LLC) Logical Link Control, and Media Access control (MAC). LLC manages upper and lower layer and MAC deals with the physical address of the devices on the network. – 48 bit address burned into the NIC on the device by the creator. | **Transport Set** |
| 1. **Physical layer** | Hardware layer and defines the physical characteristics of the network like connectors, voltage levels and timing |  | **Transport Set** |