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| Module Code | DWD 501 | Module Title | OSI Activity |
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# OSI Activity

**What does OSI stand for?**

a) Open Systems Interconnection✔️

b) Open Source Interconnection

c) Open Systems Integration

d) Open Source Integration

**How many layers are there in the OSI model?**

a) 5

b) 6

c) 7 ✔️

d) 8

**Which layer is responsible for data encryption and decryption?**

a) Physical Layer

b) Data Link Layer

c) Presentation Layer ✔️

d) Application Layer

**Which layer handles error detection and correction?**

a) Network Layer

b) Transport Layer ✔️

c) Data Link Layer ✔️

d) Session Layer

**What is the primary function of the Network Layer?**

a) Data formatting

b) Routing and forwarding ✔️

c) Error detection

d) Physical addressing

**Which layer establishes, manages, and terminates connections between applications?**

a) Session Layer ✔️

b) Transport Layer

c) Network Layer

d) Data Link Layer

**In your own words briefly describe the purpose of using an OSI reference model (50 to 100 words)**

The Open Systems Interconnection model, or OSI for short, is a model that provides a way for different computers to communicate with each other. It does this through a process that transfers data over a network from one device to another, sending the data through the seven layers of the OSI model, those being, application, presentation, session, transport, network, datalink, and physical.

**In your own words briefly describe 2 of the OSI model layers(50 to 100 words)**

Physical Layer.

The Physical layer includes all the physical equipment involved in the data transfer process, including parts like cables and switches. This layer also convers data into bit stream, which is a string of 1’s and 0’s.

Network layer.

The network layer oversees facilitating the process of data transfer between two different networks. It does this by breaking up segments from the transport layer into packets, then reassembling them on the receiving end. The network layer is also in charge of a process named routing, which is the process of finding the best physical path for the data to take to reach its destination.