Link: <http://www.studytonight.com/computer-networks/osi-model-application-layer>

**Application Layer**

#### Replace the content before : FUNCTIONS OF APPLICATION LAYER:

With the following :

It is the top most layer of OSI Model. Manipulation of data (information) in various ways is done in this layer which enables user or software to get access to the network. Some services provided by this layer includes: E-Mail, transferring files, distributing the results to user, directory services, network resources, etc.

The Application Layer contains a variety of protocols that are commonly needed by users. One widely-used application protocol is **HTTP (HyperText Transfer Protocol)**, which is the basis for the World Wide Web. When a browser wants a web page, it sends the name of the page it wants to the server using HTTP. The server then sends the page back.

Other **Application protocols** that are used are: **File Transfer Protocol (FTP), Trivial File Transfer Protocol (TFTP), Simple Mail Transfer Protocol (SMTP), TELNET, Domain Name System (DNS)**, etc.

**Design Issues with the Application Layer**

There are commonly reoccurring problems that occur in the design and implementation of Application Layer protocols and can be addressed by patterns from several different pattern languages:

* Pattern Language for Application-level Communication Protocols
* Service Design Patterns
* Patterns of Enterprise Application Architecture
* Pattern-Oriented Software Architecture

**Replace the given image with this and put it at the end of the page: (Rest of the content is fine and verified)**

