

## ABSTRACT

**SDH (Synchronous Digital Hierarchy) is standard multiplex of telecommunications network of optical being based on transmission synchronize with speed / beet of rate high and use principle of TDM (Time Division Multiplexing) dividing frame into slot time (Path/Channel). Different from system old ones, while PDH (Plesiochronous Digital Hierarchy) laboring with tick pulse of maximum in each node (Switching Node) as standard. SDH (Synchronous Digital Hierarchy) using pointer to mark early payload. Value of Pointer influence tension phasa at final dot of network.**

**In transmission system there are peripheral of multiplexer it's function to for merger some signal at one channel having a purpose same for this transmission referred as with process of multiplexing. In course of information signal (PDH signal) have to pass some step to form STM-1, that is to be the signal can in transmission by system of SDH.**

**Multiplexing in system of SDH need time duration 125 s for its process. Difficult him in study and understanding of multiplexing in system of SDH, hence to easy in study and understanding him can be done by using simulation.**

Keyword : System Transmission, SDH, Multiplexing