**CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY**

**DEPARTMENT OF INFORMATION TECHNOLOGY**

**Sub: Computer Networks (20ITC20)**

**Question Bank Part-2**

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| **S. No.** | **Description** |
|  | Differentiate flow control and error control |
|  | Explain about Error control in Transport layer. |
|  | Explain about flow control in Transport layer. |
|  | Explain about Multiplexing in Transport Layer. |
|  | Explain the Crash recovery in the Transport layer with a neat tabular representation |
|  | Describe the goals of congestion control. |
|  | How goodput and delay vary as a function of offered load. |
|  | Explain how congestion control is implemented in Transport Layer. |
|  | How Transport layer error control will differ from Data link layer Error control? |
|  | List the common functions of Data link layer and Transport Layer? How the common functions differ in these layers. |
|  | Mention the causes of congestion. |
|  | Explain the process of Additive Increase Multiplicative Decrease in congestion control in detail? |
|  | Suppose a TCP connection is transferring a file of 5000 bytes. The first byte is numbered 10001.What are the sequence numbers for each segment if data are sent in five segments, each carrying 1000 bytes. |
|  | Describe the fields of UDP Header. List the flags used in TCP segment header mentioning their purpose. |
|  | Explain the header format of Real-time Transport Protocol. |
|  | Mention the features of Real-time Transport Control Protocol (RTCP). |
|  | Draw and explain the fields of TCP segment header. |
|  | What is the need of TCP timers. |
|  | Explain the concept of TCP timer management. |
|  | What is “Silly-window Syndrome”? Discuss the solution given by Nagle’s algorithm. |
|  | Describe how TCP implements congestion control. |
|  | State about Slow Start Algorithm. |
|  | Describe the working of DNS. |
|  | With neat sketches, show how Real-time interactive audio/video streaming is performed |
|  | Define the Name Server? |
|  | What is HTTP protocol used for? What is the default port number of HTTP protocol? |
|  | Explain in detail about HTTP operation. |
|  | List the MIME extension header fields |
|  | Draw the header format of Real-time Transport Protocol mentioning the significance of each field |
|  | Explain about various fields of DNS resource records mentioning their significance. |
|  | Explain WWW architecture with neat diagram? |
|  | Explain content delivery network in detail? |
|  | Discuss the different approaches in streaming stored Media? |
|  | How does MIME enhance the features of SMTP? |
|  | Discuss the role of server farm in detail? |
|  | Explain the functions of User Agent and Message Transfer Agent. |
|  | Mention the different components of URL with an example? |
|  | Examine how SMTP transfers messages from one host to another with suitable illustration. |
|  | Explain the role of POP3 in Electronic mail applications. |
|  | Describe the message format, message transfer and the underlying protocol involved in the working of the electronic mail. |