Department of Electrical Engineering
Assignment
Date: 14/04/2020

Course Details

Course Title: _____ **Module:** _____
Instructor: _____ **Total Marks:** _____

Student Details

Name: _____ **Student ID:** _____

Part A (Objective Type)

1. _____ is the regulation of the amount of data that can be sent.
   a. Line Discipline
   b. Flow Control
   c. Error Control
   d. All of the above

2. Forty-five physical channels link _____ devices arranged in a mesh topology.
   a. Nine
   b. Ten
   c. Twelve
   d. Fifteen

3. Signals reflection at the taps can cause signal degradation in a _____ topology.
   a. Ring
   b. Bus
   c. Mesh
   d. Star

4. _____ layer allows a process to add synchronization points into steam of data.
a. Network
b. Transport
c. Presentation
d. Session

5. If the maximum value of a simple sine wave is 10 volts, the minimum value is _____ volts.

a. 10
b. 5
c. Square root of 10
d. -10

6. Choose the correct association between a device and its functionality
   a. Computer Printer
   b. CPU Input
   c. LCD Input
   d. Modem Modulation and Demodulation

Fill in the Blanks

7. Baud rate is always less than or equal to ____ rate.
8. Stop-and-wait is a _____ technique.
9. A _____ is uniquely identified by an IP address and a port number.
10. In _____ layer of TCP/IP model port address are defined.

Part B (Subjective Type)

<table>
<tr><td>Q1</td><td></td><td>In terms of OSI Model please explain the role of Shayan, Tariq, Nawaz and Danish below with proper examples.
(5)

Sender — Receiver

<table><tr><td>Andy</td><td>Application layer</td></tr><tr><td>Parvez</td><td>Presentation layer</td></tr><tr><td>Shayan</td><td>Session layer</td></tr><tr><td>Tariq</td><td>Transport layer</td></tr><tr><td>Nawaz</td><td>Network layer</td></tr><tr><td>Danish</td><td>Data link layer</td></tr><tr><td>Paul</td><td>Physical layer</td></tr></table></td></tr>
<tr><td></td><td>(b)</td><td>Data is independent of signal levels and it cannot achieve data higher than channel capacity. Please elaborate this statement. (5)</td></tr>
<tr><td>Q2</td><td></td><td>Sometimes the sender sent the information to the receiver but the receiver does not receive the exact information which sender sent to it. How to overcome this problem?? (5)</td></tr>
<tr><td>Q3</td><td></td><td>For transmitting huge amount of data over long distances which type of technique we usually use? Explain with the help of example. (5)</td></tr>
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