



Course Title: CIT 303: Principles of Communication Technology
Instruction: Attempt any five (5) questions
Credit Unit: 3
Date: Friday 25th January
Time: 3hrs

- a) Outline the layers of Open System Interconnection Reference Model (OSI Model), in the right order. **(14 Marks)**
- b) Write briefly on the Data Link Layer. **(6 Marks)**

- Cryptography algorithms (ciphers) can be divided into two groups, True or False?
If True; **(2 Marks)**
- List the two groups. **(6 Marks)**
- Write briefly on the two groups **(12 Marks)**

Contrast between Analog Signal Processing and Digital Signal Processing (20 Marks)

Question 4

- a) Outline four (4) basic Network Topologies. **(1 mark each)**
 - i) Write briefly on any three **(6 Marks)**
- b) List three guided Media. **(3 Marks)**
 - i) Write short notes on the three listed. **(7 Marks)**

Question 5

A data communications system has five components, list and define these components.
(20 marks)

Question 6

The effectiveness of a data communications system depends on four fundamental characteristics.

- a) List these four fundamental characteristics. **(2 Marks each = 8 marks)**
- b) Write a brief on each of these four characteristics. **(12 Marks)**

Question 7

- a) Write briefly on Data Communications? **(10 Marks)**
- b) Write a short note on Protocols. **(10 Marks)**