**COURSE CODE: CIT 722**
**COURSE TITLE: COMPUTER NETWORKS**
**COURSE UNIT: 3 UNITS**
**TIME ALLOWED: 2 ½ Hrs**
**INSTRUCTION: ANSWER QUESTION 1 AND ANY OTHER FOUR (4) QUESTIONS**

1a: What were the problems encountered during the early communication and the solutions. *6 marks*

1b      What were the principles that were applied to arrive at the seven (7) layers of the OSI model? 5 marks.

1c      Critically analyze the TCP/IP model. 3 marks

1d      With the help of a well labeled diagram write briefly on the types of network.

(8 mark)

2a       Write briefly on each networking hardware used for setting up a small network. (7 marks)

2b      With the aid of a diagram, describe a typical network. 5 marks

3a      Explain how the data link accomplishes its task? 2 marks

3b      With the help of diagram list and explain any four of the 7 layers of the OSI model

(10 marks)

4a      What are the advantages and disadvantages of peer-to-peer network?  4 marks

4b      Describe the OSI model. 8 marks

5a      State the advantages and disadvantages of the star topology.6 marks

5b      Compare the OSI and TCP/IP in a tabular form 6 marks

6a      List the five (5) common topologies and explain any three of them: 10 marks

6b      State 4 benefits LAN technology offers to system users 2 marks