

## NATIONAL OPEN UNIVERSTYOF NIGERIA, University Village, 91 Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi, Abuja FACULTY OF SCIENCE DEPARTMENT OFCOMPUTER SCIENCE 2021\_2 EXAMINATION

**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)** 

- 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