



"Investing in Africa's Future"

COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE

CSC303-NETWORKS AND COMMUNICATIONS

END OF SECOND SEMESTER EXAMINATIONS

JANUARY /MAY 2020

LECTURER: MR A .KANDIERO

DURATION: 3 HRS

INSTRUCTIONS

Answer **ALL** Questions

Create a Microsoft Word FILE on your desktop and enter your Student Number as the folder name (for example 190708) Save your work in this FILE and upload the PDF version of the file in MOODLE

Credit will be awarded for logical, systematic and neat presentations

Question 1: Introduction to Computer Networks and OSI Model [20 Marks]

Explain the rationale behind the OSI seven-layer model. Briefly describe the role of each layer and its main functions.

Question 2: The Physical Layer [20 Marks]

Consider the problem of providing a 2 mbps physical connection between two LAN sites which are 10 kms apart and are located in the same city. Discuss the merits of using different types of transmission media for this purpose.

Question 3: The Transport Layer [20 Marks]

Define and describe the transport layer of the OSI model. Include transport service primitives and see how these define the transport service. Then describe the transport protocol and related issues, such as segmentation, multiplexing, addressing, error control, and flow control. Finally, discuss TCP as an example of a popular transport layer standard.

End of Question Paper!