

IT301: Network Administration and Management

Continuous Assessment Course

Lecturer: Felix Nti Koranteng

GENERAL DESCRIPTION: The class is presented with a case/problem. Each student/group is required to tackle the problem by providing specific answers; detailing the theoretical foundations and implications for their answers and simulating these answers when required.

1ST Mini Project:

XYZ Limited is Construction Company. It is setting up a new office block and will require a network to facilitate its work. The company has five (5) departments and a staff strength of 50, each of whom has a computer and at least one (1) phone. They also want the network to support printers, storage devices, other network-based devices, server. Clients who visit their office should be able their connect to the network for internet needs. As the head of systems administration and networks, advise the management of the company based on the following:

- a. Recommend the most suitable network topology for the company.
- b. Give a detailed explanation of your choice of topology.
- c. Illustrate your explanation in (ii) above with a diagram to show the interconnectivity between the five (5) departments.
- d. Highlight five (5) major advantages of your recommended topology over other network topologies.
- e. Suggest an appropriate network type based on the relationships/functionality of computers on the network. Justify your answer.
- f. Propose and justify an IP address scheme for the computers and other devices on the network.
- g. Recommend a suitable media through which data will travel on the network.
- h. What type of intermediary devices would be fitting for the network? Justify your recommendation.
- i. Submit a detailed budget for the project.

Grading/Marking Schemes:

Complete project Document: 20 marks.

Total marks: 20 marks.

NB: No presentation, No grading.