# BINDURA UNIVERSITY OF SCIENCE EDUCATION FACULTY OF SCIENCE AND ENGINEERING DEPARTMENT OF COMPUTER SCIENCE MANAGING NETWORK PROJECTS - NWE216 2 HOURS 30 MINUTES

M. 114505.

## INSTRUCTIONS TO CANDIDATES

Answer <u>ALL</u> Questions. Total marks are 100

#### Question 1

Bindura University of Science Education has just finished constructing a building for electrical engineering department. As a network engineer, you have been tasked with the responsibility of installing the network in this building to support lecturers, students and guests that visit the building from time to time. In reference to this project, outline the <u>four</u> stages in the project management lifecycle that you must follow in order for you to deliver the best work. [20]

# Question 2

- a. There has been a lot of schools adopting the use of internet services to enhance learning. This has led to an increase in demand for the need of networking engineers across the country in the education sector. Most engineers have been found installing network in more than ten schools per week, charging different installation fees per school as well as spending more time on other schools. As a consultant in network project management, explain these variations in regards to:
  - i. Cost
  - ii. Time
  - ii. Scope

[15]

b. Based on the response you gave in 2a. (Above), give a scenario in which scope, time and cost affects quality of work.

# Question 3

The application of precedence diagram has helped project managers all over the world manage their time effectively at the same time meeting their timelines. This success has been as a result of understanding and applying this model of problem solving. With the aid of a diagram and an example, explain the following terms:

- a. Start to Finish
- b. Finish to Start
- c. Finish to Finish
- d. Start to Start

[20]

## Question 4

CBZ bank has requested your team to come up with a budget for a network project. However your team thinks that they will be able to draft the budget and buy the required equipment two days before installing the network. Using your knowledge of network project management, explain the risks and challenges involved with such an approach.

- a. Cost
- b. Performance
- c. Availability
- d. Maintainability

[20]

## Question 5

The university has a new campus for the Data related degree programs. Due to the increase in demand for Data experts, the university has more students across the globe who are pursuing various degrees online which includes Data Analytics, Data Science as well as Data Engineering. To accommodate the increase in enrolment, the university has a number of requirements which includes, storage requirements, reliability requirements, security requirements, transmission speed requirements and load variation estimates. Outline the importance of having such requirements. [20]

\*\*\* End of Exam \*\*\*