



COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE

NCSC302–ADVANCED NETWORKS AND COMMUNICATION

END OF FIRST SEMESTER EXAMINATIONS

NOVEMBER 2021

LECTURER: MRS L. TEMBANI-FUNDISI

DURATION: 5 HOURS

INSTRUCTIONS

Answer four questions

Begin your answer to each question on a fresh page.

Question 1

Consider an organization with many departments, show/demonstrate how VLAN can enable safe sharing of packet within departments and outside departments (25marks)

Question 2

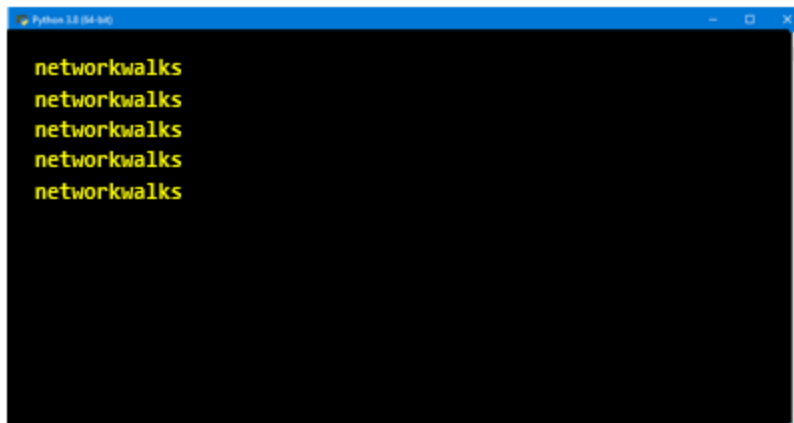
An Application Programming Interface (API) is considered as RESTful API if it meets the “**6 Guiding Constraints**” of the REST Architecture. Using relevant and factual examples, explicitly explain the 6 guiding constraints. (25 marks)

Question 3

Demonstrate how Audit Command Language (ACL) enable security in an organization with both frequent visitors and designated users. (25marks)

Question 4

Write a Python Program (script) that will produce following output using for Loop (25marks)



```
Python 3.8 (64-bit)
networkwalks
networkwalks
networkwalks
networkwalks
networkwalks
```

Question 5

Using specific and relevant examples, demonstrate how the Layer 2 and 3 protocols ensure safe broadcasting of packet and efficient connectivity. (25marks)

END OF EXAMINATION
