Scott Christian
UNIVERSITY
A Dynamic Centre of Academic Excellence

SCHOOL OF PROFESSIONAL STUDIES

BACHELOR OF BUSINESS INFORMATION TECHNOLOGY/ BACHELOR OF INFORMATION COMMUNICATION TECHNOLOGY

UNIT CODE/NAME: BBIT 422/BCT 123: COMPUTER OPERATING SYSTEMS/OPERATING SYSTEMS

January – April2021/2022End of Semester Exams - Time: 2 Hours

Instructions: Answer Question ONE (Compulsory) and any other TWO questions.

QUESTION ONE

a) Explain the following terms as used in Operating Systems **(10 Marks)**

i. Kernel

ii. Job control language (JCL)

iii. Process

iv. Virtual memory

v. Paging

b) Using a relevant example, describe what is meant by the following terms

i. Operating system **(3 Marks)**

ii. Turnaround time **(4 Marks)**

iii. Thread **(3 Marks)**

c) Describe the process states available for an operating system **(10 Marks)**

QUESTION TWO

a) Explain how caching improve system performance **(4 Marks)**

QUESTION FIVE

d) Describe how micro kernels promote portability **(2 Marks)**

e) Explain why user-level thread should promote portability **(4 Marks)**

f) When a process performs a blocking send, it must receive an acknowledgement to unblock. Explain the problem that might arise in this scheme and how can it be avoided **(5 Marks)**

g) Discuss reasons why processes must issue system calls to request operating system services **(4 Marks)**