



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2016/2017

**FOURTH YEAR SECOND SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN INFORMATION
TECHNOLOGY**

MAIN CAMPUS

CIT 414: CLOUD COMPUTING AND EMERGING APPLICATIONS

Date: 25th July, 2017

Time: 3.30 - 6.30 pm

INSTRUCTIONS:

- Answer ALL questions in PART A and any THREE questions in PART B

Instructions: There are **TWELVE** (12) questions in this paper. Answer **ALL** questions in **PART A**, and any **THREE** (3) questions in **PART B**.

TIME: 3 HOURS

PART A: (40 MARKS)

QUESTIONS

1. List any five benefits of cloud computing strategy. (5 Marks)
 2. Identify three basic cloud computing service models. (6 Marks)
 3. Differentiate distributed computing and grid computing. (6 Marks)
 4. What is paravirtualization? How does it differ from full virtualization? (6 Marks)
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5. Highlight five defining characteristics of cloud computing. (5 Marks)
 6. List any five emerging applications in cloud computing. (6 Marks)
 7. Use appropriate diagram to illustrate a cloud computing reference architecture (CCRA) implementation. (6 Marks)

PART B: (60 MARKS)

8. As a manager in-charge of Infrastructure as a Service (IaaS) in a local cloud computing service provider, highlight some of the security challenges your company is likely to experience. (20 Marks)
 9. Discuss any four cloud computing drivers. (20 Marks)
 10. Write short notes on the following cloud computing standards: (20 Marks)
 - a. OpsWorks
 - b. OpenStack
 - c. Amazon's Elastic Computing Cloud (EC2)
 - d. Microsoft Azure
 11. Does cloud computing pose threats to development of open source software? Discuss. (20 Marks)
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12. Describe the six of principles of cloud computing strategy. (20 Marks)

END