



(Knowledge for Development)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS 2019/2020 ACADEMIC YEAR

END OF SEMESTER EXAMINATIONS YEAR FOUR SEMESTER TWO

FOR THE DEGREE OF COMPUTER SCIENCE

COURSE CODE : CSC 466E
COURSE TITLE : CLOUD COMPUTING

DATE: 10/11/2020

TIME: 2.00 P.M – 4.00 P.M

INSTRUCTIONS:

ANSWER QUESTIONS ONE AND ANY OTHER TWO

QUESTION ONE [COMPULSORY] [30 MARKS]

- a) Define the following terms
- i. Cloud computing [2 marks]
 - ii. Virtualization [2 marks]
 - iii. Data center [2 marks]
 - iv. Hypervisor [2 marks]
- b) Outline FIVE characteristics of cloud [10 marks]
- c) Discuss THREE cloud computing service models [6 marks]
- d) Productivity applications replicate in the cloud some of the most common tasks that we are used to performing on our desktop: from document storage to office automation and complete desktop environments hosted in the cloud. Outline any THREE productivity application [6 marks]

QUESTION TWO [20 MARKS]

- a) What is the major revolution introduced by Web2.0 [2 marks]
- b) State any two examples of Web2.0 applications. [2 marks]
- c) With the aid of a diagram describe the Cloud Computing Reference Model. [12 marks]
- d) Distinguish between hybrid cloud and public cloud [4 marks]

QUESTION THREE [20 MARKS]

- a) Describe the following terms as used in AWS [6 marks]
- i. S3
 - ii. EC2
 - iii. EBS
- b) Explain any five benefits of using AWS to organization [10 marks]
- c) Describe two disadvantages of using a public cloud [4 marks]

QUESTION FOUR [20 MARKS]

- a) Describe the two main characteristics of a service oriented computing [4 marks]
- b) Describe any five components of the Eucalyptus cloud [10 marks]
- c) Describe any three properties of distributed systems that also characterize cloud computing [6 marks]

QUESTION FIVE [20 MARKS]

- a) Describe any five Security risks associated with Cloud computing [10 marks]
- b) Outline mitigation measures for each of the security risks mentioned in question 5a above. [10 marks]