

QUESTION ONE (COMPULSORY) [30 MARKS]

- a) Define the following terms as used in cloud computing
- i. Cloud (2 marks)
 - ii. Utility computing (2 marks)
 - iii. Service oriented computing (2 marks)
 - iv. Virtualization (2 marks)
 - v. Grid computing (2 marks)
- b) Describe four desired features of a cloud (8 marks)
- c) List any three major vendors of public cloud and for each vendor give one product or service that they offer. (6 marks)
- d) Describe the components of cloud computing architecture. (4 marks)
- e) Distinguish between a “private cloud and a public cloud” (2 Marks)
- f) Explain what the term vendor lock-in means in cloud computing environment (2 marks)

QUESTION TWO [20 MARKS]

- a) Define PaaS as used in cloud computing? (2marks)
- b) What are the main characteristics of Infrastructure as -a-Service solution (8 marks)
- c) Define SaaS as used in cloud computing? (2 marks)
- d) Outline any four basic benefits of PaaS-based solution to organizations or individuals (8 marks)

QUESTION THREE [20 MARKS]

- a) Kibabii University is contemplating migrating its data to the cloud. Describe any three advantages and two disadvantages of the university will from the endeavor. (10 marks)
- Advantages
- b) i) Explain what AWS is? (2 marks)
- ii) Describe the types of services provided by AWS? (6 marks)
- c) State the most important advantage that cloud technologies offer to social networking applications (2 marks)

QUESTION FOUR [20 MARKS]

- a) Describe four cloud deployment models (12 marks)
- b) Storing the data in cloud is not that simple task. Apart from its flexibility and convenience, it is faced by several challenges. Explain any three such challenges. (6 marks)
- c) Explain the role of the internet in cloud computing (2 marks)

QUESTION FIVE [20 MARKS]

- a) Describe five benefits of implementing a community cloud (10 marks)
- b) Security in cloud computing is a major concern to organizations wishing to use the cloud. For an organization to move a resource to the cloud, it must understand analyze important attributes about this resource. Explain any four attributes that should be analyzed. (8 marks)
- c) Describe any two cloud computing applications. (2 marks)