Faculty of Engineering / Science
End Sem (Even) Examination May-2022
CA3EL16 Cloud Computing

Programme: BCA / BCA+MCA (Integrated)   Branch/Specialisation: Computer Application

Duration: 3 Hrs.   **Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

Q.1 i. Which of the following is a cloud stake holder? **1**
(a) Cloud providers   (b) Clients
(c) End users   (d) Cloud users

ii. In _____ type of cloud, the cloud is composed of multiple internal and external clouds. **1**
(a) Private   (b) Public   (c) Protected   (d) Hybrid

iii. _____ model consists of the particular types of services that you can access on a cloud computing platform. **1**
(a) Service   (b) Deployment
(c) Application   (d) None of these

iv. When you add a software stack such as an operating system and applications to the service, the model shifts to_____ model. **1**
(a) SaaS   (b) PaaS   (c) IaaS   (d) All of these

v. Which of the following can be considered PaaS offering? **1**
(a) Google Maps   (b) Gmail
(c) Google earth   (d) All of these

vi. Which of the following is a pure infrastructure play? **1**
(a) Azure   (b) Google App
(c) AWS   (d) None of these

vii. Which of the following type of virtualization are also characteristics of cloud computing? **1**
(a) Storage   (b) Application
(c) CPU   (d) None of these

viii. Which of the following is another name for the system virtual machine? **1**
(a) Hardware virtual machine (b) Software virtual machine
(c) Real machines   (d) None of these

ix. Which of the following is the operational domain of CSA? **1**
(a) Scalability   (b) Portability and Interoperability
(c) Flexibility   (d) None of these

x. Which of the following is considered an essential element in cloud computing by CSA? **1**
(a) Multi tenancy   (b) Identity and Access management
(c) Virtualization   (d) All of these

Q.2 i. What do you mean by scalability, portability and fault tolerance in cloud computing? **3**

ii. Define cloud computing. Enlist the challenges of cloud computing and explain any three of it. **7**

OR iii. Explain in detail cloud computing reference architecture with a neat diagram. **7**

Q.3 i. What is meant by resource broker in cloud? Give example. **2**

ii. Enlist and explain any four cloud services with example. **8**

OR iii. Enlist and explain any four cloud providers. **8**

Q.4 i. What is meant by collaborating via social network in cloud? Give example. **3**

ii. Explain Amazon EC2 in detail with a neat diagram. **7**

OR iii. Explain Google App Engine in detail with a neat diagram. **7**

Q.5 i. What is meant by process, host and native in virtualization? **3**

ii. Explain in detail about desktop and application virtualization. **7**

OR iii. What is meant by server virtualization? Explain with example. **7**

Q.6 i. What is meant by security level of third party in cloud? Give example. **2**

ii. Explain cloud computing security architecture using suitable block diagram. **8**

OR iii. Enlist and explain any four security challenges in cloud computing. **8**

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P.T.O.

Q.1 i.   (b) Clients   **1**
    ii.   (d) Hybrid   **1**
    iii.   (a) Service   **1**
    iv.   (a) SaaS   **1**
    v.   (a) Google Maps   **1**
    vi.   (c) AWS   **1**
    vii.   (d) All of these   **1**
    viii.   (a) Hardware virtual machine   **1**
    ix.   (b) Portability and Interoperability   **1**
    x.   (a) Multi tenancy   **1**

Q.2 i.   Scalability, portability and fault tolerance in cloud computing   **3**
    Definition 1 Mark for each   (1 Mark*3)
    ii.   Cloud computing   **7**
    Definition   1 Mark
    Challenges of cloud computing
    Any three -   2 Marks for each
    (2 Marks*3)

OR iii.   Cloud computing reference architecture   **7**
    Explanation   5 Marks
    Diagram   2 Marks

Q.3 i.   Resource broker in cloud   **2**
    Definition   1 Mark
    Example   1 Mark
    ii.   Any four cloud services with example   **8**
    Explanation with example-   2 Marks for each
    (2 Marks*4)

OR iii.   Any four cloud providers   **8**
    Explanation-   2 Marks for each
    (2 Marks*4)

Q.4 i.   Collaborating via social network in cloud   **3**
    Definition   2 Marks
    Example   1 Mark
    ii.   Amazon EC2 in detail with a neat diagram.   **7**
    Explanation   5 Marks
    Diagram   2 Marks

OR iii.   Google App Engine in detail with a neat diagram.   **7**
    Explanation   5 Marks
    Diagram   2 Marks

Q.5 i.   Process, host and native in virtualization   **3**
    Definition 1 Mark for each   (1 Mark*3)

    ii.   Desktop and application virtualization   **7**
    Explanation   3.5 Marks for each
    (3.5 Marks*2)

OR iii.   Server virtualization   **7**
    Definition   1 Mark
    Explanation with example   6 Marks

Q.6 i.   Security level of third party in cloud.   **2**
    Definition   1 Mark
    Example   1 Mark
    ii.   Cloud computing security architecture.   **8**
    Explanation   6 Marks
    Diagram   2 Marks

OR iii.   Any four security challenges in cloud computing.   **8**
    Explanation-   2 Marks for each
    (2 Marks*4)

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