Enrollment No......................................

Faculty of Engineering
End Sem (Even) Examination May-2022
CS3EY01 Introduction to Cloud Computing
Programme: B.Tech.   Branch/Specialisation: CSE

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.   _____ computing refers to applications and services that run   **1**
on a distributed network using virtualized resources.
(a) Distributed   (b) Cloud   (c) Soft   (d) Parallel

ii.   Which of the following is essential concept related to Cloud?   **1**
(a) Reliability   (b) Productivity
(c) Abstraction   (d) All of these

iii.   Which of the following is best known service model?   **1**
(a) SaaS   (b) IaaS   (c) PaaS   (d) All of these

iv.   Which of the following is the deployment model?   **1**
(a) Public   (b) Private   (c) Hybrid   (d) All of these

v.   Point out the false statement of the following: **1**
(a) Cloud Computing has two distinct sets of models
(b) Amazon has built a worldwide network of data centres to service its search engine
(c) Azure enables .NET Framework applications to run over the Internet
(d) None of these

vi.   Which of the following is Cloud Platform by Amazon?   **1**
(a) Azure   (b) AWS   (c) Cloud-era   (d) All of these

vii.   _____ cloud is one where the cloud has been organized to serve   **1**
a common function or purpose.
(a) Public   (b) Private
(c) Community   (d) All of these

viii. Which of the following is related to the service provided by Cloud? **1**
(a) Sourcing   (b) Ownership
(c) Reliability   (d) AaaS

ix. Which of the following benefit is related to creates resources that are **1**
pooled together in a system that supports multi-tenant usage?
(a) On-demand self-service   (b) Broad network access
(c) Resource pooling   (d) All of these

x. Which of the following architectural standards is working with cloud **1**
computing industry?
(a) Service-oriented architecture   (b) Standardized web services
(c) Web-application frameworks   (d) All of these

Q.2   i.   What are the advantages of using cloud computing? **2**

     ii.   Explain the key steps in cloud implementation planning process with **3**
example.

    iii.   Explain different models for deployment in cloud computing. **5**

OR   iv.   List the different cloud application available in market. Briefly explain **5**
the scenarios/situation of" when to not use clouds".

Q.3   i.   Differentiate between Salesforce and Google G suite with their **2**
criteria.

     ii.   Design the architecture of PaaS and SaaS in cloud computing. Also, **8**
explain the different categories of PaaS and SaaS with example.

OR   iii.   What are the various identity and access management (IAM) practices **8**
followed for authentication, authorization and auditing of the users
accessing cloud services?

Q.4   i.   Explain in brief cloud desktop infrastructure in brief with its services. **3**

     ii.   How testing under cloud can be performed? Explain it by taking **7**
service-based models of cloud computing under consideration.

OR   iii.   Explain the services provided by Amazon infrastructure cloud from **7**
user perspective

Q.5   i.   Describe the top threats identified by cloud security alliance (CSA) of **4**
cloud computing.

     ii.   Explain the Cloud Computing security architecture using suitable **6**
block diagram.

OR   iii.   Explain the Cloud information security fundamental introduced in **6**
cloud security management.

Q.6   Attempt any two:

     i.   What do you understand by hypervisors? **5**

     ii.   Write the difference between block and file level storage **5**
virtualization.

    iii.   Describe different types of hypervisors with example and block **5**
diagram.

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Marking Scheme
CS3EY01 Introduction to Cloud Computing

Q.1 i. _____ computing refers to applications and services that run on a distributed network using virtualized resources. **1**
(b) Cloud

ii. Which of the following is essential concept related to Cloud? **1**
(c) Abstraction

iii. Which of the following is best known service model? **1**
(d) All of these

iv. Which of the following is the deployment model? **1**
(d) All of these

v. Point out the false statement of the following: **1**
(b) Amazon has built a worldwide network of data centres to service its search engine

vi. Which of the following is Cloud Platform by Amazon? **1**
(b) AWS

vii. _____ cloud is one where the cloud has been organized to serve a common function or purpose. **1**
(c) Community

viii. Which of the following is related to the service provided by Cloud? **1**
(a) Sourcing

ix. Which of the following benefit is related to creates resources that are pooled together in a system that supports multi-tenant usage? **1**
(a) On-demand self-service

x. Which of the following architectural standards is working with cloud computing industry? **1**
(a) Service-oriented architecture

Q.2 i. Any four advantages of using cloud computing **2**
0.5 mark for each (0.5 mark * 4)

ii. Five steps in cloud implementation planning process with example. **3**

iii. Models for deployment in cloud computing **5**
As per the explanation

OR iv. Four cloud application 2.5 marks **5**
Scenarios/situation 2.5 marks

Q.3 i. Difference between Salesforce and Google G suite **2**
Four differences 0.5 mark for each (0.5 mark * 4)

ii. Architecture of PaaS and SaaS **8**
2 marks for each (2 marks * 2) 4 marks
Explanation of each
2 marks for each (2 marks * 2) 4 marks

OR iii. Identity and access management (IAM) 4 marks **8**
Diagram 4 marks

Q.4 i. Virtual desktop infrastructure 1.5 marks **3**
Diagram 1.5 marks

ii. Testing / Evaluation 3 marks **7**
Service-based models of cloud computing 4 marks

OR iii. Seven services provided by Amazon infrastructure **7**
As per explanation

Q.5 i. Four threats identified by cloud security alliance (CSA) **4**
1 mark for each (1 mark * 4)

ii. Cloud Computing security architecture 3 marks **6**
Explanation 3 marks

OR iii. Cloud information security fundamental introduced in cloud security management. **6**
2 marks for each (2 marks * 3)

Q.6 Attempt any two:
i. Hypervisors **5**
Explanation 3 marks
Example 2 marks

ii. Difference between block and file level storage virtualization. **5**
1 mark for each difference (1 mark * 5)

iii. Types of hypervisors 3 marks **5**
Block diagram 2 marks

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