

DipIETE – CS (New Scheme)

Time: 3 Hours

DECEMBER 2018

Max. Marks: 100

PLEASE WRITE YOUR ROLL NO. AT THE SPACE PROVIDED ON EACH PAGE IMMEDIATELY AFTER RECEIVING THE QUESTION PAPER.

NOTE: There are 9 Questions in all.

- **Question 1 is compulsory and carries 20 marks. Answer to Q.1 must be written in the space provided for it in the answer book supplied and nowhere else.**
- **The answer sheet for the Q.1 will be collected by the invigilator after 45 minutes of the commencement of the examination.**
- **Out of the remaining EIGHT Questions answer any FIVE Questions. Each question carries 16 marks.**
- **Any required data not explicitly given, may be suitably assumed and stated.**

Q.1 Choose the correct or the best alternative in the following: (2×10)

- a. Which of the following is essential concept related to Cloud?

(A) Reliability	(B) Productivity
(C) Abstraction	(D) All of these
- b. Cloud computing is an abstraction based on the notion of pooling physical resources and presenting them as a _____ resource.

(A) real	(B) virtual
(C) cloud	(D) None of these
- c. Which of the following type of virtualization is also characteristic of cloud computing?

(A) Application	(B) CPU
(C) Storage	(D) All of these
- d. Which of the following will be host operating system for Windows Server?

(A) VirtualLogix VLX	(B) Xen
(C) Microsoft Hyper-V	(D) None of these
- e. Which of the following is most important area of concern in cloud computing?

(A) Security	(B) Storage
(C) Scalability	(D) All of these
- f. Which of the architectural layer is used as front end in cloud computing?

(A) Cloud	(B) Soft
(C) Client	(D) All of these
- g. Communication between services is done widely using _____ protocol.

(A) SOAP	(B) REST
(C) RESTFUL	(D) None of these
- h. _____ is a cloud computing service model in which hardware is virtualized in the cloud.

(A) IaaS	(B) CaaS
(C) PaaS	(D) None of these

- i. Which of the following is IaaS service provider?
(A) EC2 (B) EC1
(C) EC10 (D) Hybrid
- j. The most commonly used set of protocols uses _____ as the messaging format.
(A) XML (B) JSON
(C) BSON (D) All of these

**Answer any FIVE Questions out of EIGHT Questions.
Each Question carries 16 marks.**

- Q.2** a. What is the role of Virtualization in Cloud Computing? (6)
b. Explain Hardware as a Service in Cloud Computing. (5)
c. What are the Limitations of Cloud Computing? Explain in detail. (5)
- Q.3** a. How Cloud computing Applications help businesses? (8)
b. What is Amazon EC2? Explain in detail. (8)
- Q.4** a. What are the Security issues that come when you use Cloud Computing? (8)
b. What is APIs? How it works? Explain with the help of one Example. (8)
- Q.5** a. What is Security as a Service? Explain Security issues in it. (6)
b. Explain REST and SOAP in detail. (10)
- Q.6** a. What are the advantages of using Software as a service? (8)
b. Which are the applications offered by Google for Saas? (8)
- Q.7** a. How Google Gear help you in Development of offline Web Application? (8)
b. What is VMware? How it helps to build cloud computing Environment? (8)
- Q.8** a. List out the features of VMotion. (4)
b. Explain in brief about Skytap Virtual Lab. (6)
c. Which are the applications available for migrating the organization to the cloud? (6)
- Q.9** a. Which are the available tools for checking cloud performance? (8)
b. List out the components of the Service Cloud. (8)