

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA - SEMESTER-IV EXAMINATION – WINTER 2018

Subject Code: 2640020

Date: 29/11/2018

Subject Name: Virtualization and Applications of Cloud

Time: 10.30 am to 1.00 pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** Write Short note on the following: **07**
(i) Virtual Cluster
(ii) Multi-tenancy
(iii) Virtualization
(iv) Virtual Machine
(v) NAS
(vi) ubiquitous computing
(vii) SaaS
- (b)** Explain the similarities and the differences between the service models of cloud computing. **07**
- Q.2 (a)** Define File system. Explain the different file systems available for cloud storage. **07**
- (b)** What do you understand by Virtualization? Explain the characteristics of x86 system before virtualization and after virtualization with the help of diagram. **07**
- OR**
- (b)** List and explain the 5 essential things to be known while migrating to cloud. **07**
- Q.3 (a)** Differentiate centralized data storage and distributed data storage. Explain the various distributed cloud storage options available in market **07**
- (b)** Compare the virtualization software's available in the market in tabular format. **07**
- OR**
- Q.3 (a)** Explain the similarities and the differences between NAS, SAN and DAS in detail. **07**
- (b)** List and explain the deployment models of cloud computing. How the public cloud deployment differs from private cloud deployment. **07**
- Q.4 (a)** Explain the similarities and the differences between the various open source tools for building cloud. **07**
- (b)** What do you mean by multi-tenancy? Explain the advantages and disadvantages of the same. **07**
- OR**
- Q.4 (a)** List all the services provided by GoogleApp Engine Cloud. Explain the storage system of GoogleApp Engine in detail. **07**
- (b)** Define Cloud Computing. Explain the applications of cloud in real life. **07**

- Q.5** (a) What is risk management? Explain the steps involved in risk management process. **07**
- (b) Explain the various security advantages and disadvantages of cloud environment. **07**

OR

- Q.5** (a) Explain the steps of developing scalable web application on Google's cloud. **07**
- (b) What do you understand by EC2 and S3 services provided by Amazon cloud? **07**
