

**322746(22)**

**B. E. (Seventh Semester) Examination,  
April-May 2020/NOV-DEC 2020**

**(New Scheme)**

**(CSE, IT Branch)**

**CLOUD COMPUTING**

***Time Allowed : Three hours***

***Maximum Marks : 80***

***Minimum Pass Marks : 28***

***Note : Attempt all questions carrying equal marks.***

***Part (a) is compulsory from each question &  
carries 2 marks. Attempt any two parts from  
part (b), (c) and (d) of each question which  
carries 7 marks.***

**Unit-I**

1. (a) Give examples of public cloud services. 2

- (b) Some statements are given below regarding the cloud computing model. Mark each of them as either True or False. Justify your answer with proper argument, example or a counter example. Marks will be provided only if correct justification is provided. 7
- (i) Cloud computing is only for start-up organizations and small companies which cannot afford the cost of expensive servers and other IT infrastructure.
  - (ii) Deploying and application over the cloud model brings dependency of the client over the cloud vendor. If the cloud vendor's servers are down the client will have to incur a loss of business. The vendor becomes the owner of the client's data stored on servers and can use them for any purpose.
  - (iii) Cloud computing provides enhanced level of security and performances to any application. This is because cloud vendors use latest security softwares and load balancers to provide high security and performance.

- (iv) Private cloud deployment provides better security and control than public cloud for the client, so sensitive applications should be deployed only on private cloud services.
  - (c) Explain the most common scenario where : 7
    - (i) a private cloud is preferred over a public cloud.
    - (ii) a public cloud is preferred over private cloud.
  - (d) Describe the evolution of cloud computing. 7
- Unit-III**
2. (a) What is vendor lock-in? 2
  - (b) Explain Identity Access Management (IAM) in detail. 7
  - (c) What are the layers in security architecture design? Explain. 7
  - (d) What is Software-as-a-service? What advantages does the software vendor have by delivering a software-as-a-service using the SaaS based subscription model rather than selling the 'software as a packaged product? 7

**Unit-III**

3. (a) What is anything-as-a-service? 2
- (b) Describe the services provided by the MAAS and CAAS service providers. 7
- (c) Write notes on : 7
- (i) SaaS
- (ii) PaaS
- (d) Describe the various products and services offered by Google under cloud computing services. 7

**Unit-IV**

4. (a) What is SOAP? 2
- (b) Discuss the infrastructural requirements for establishing a modern data center. Also describe the environmental effects of data center. 7
- (c) Differentiate between MSP and Cloud Service Provider. 7
- (d) How SOA is helpful for promoting Cloud computing environment? Write advantages of SOA. 7

**Unit-V**

5. (a) What is Virtualization? 2
- (b) Write notes on Type-I Hypervisors and Type-II Hypervisors. 7
- (c) Write down the differences between Storage Area Networks (SAN) and Network Attached Storage (NAS). 7
- (d) Describe the features of Mobile Operating Systems for smart phones by taking a case study. 7