S. D. M. COLLEGE OF ENGINEERING AND TECHNOLOGY

Department of Computer Science and Engineering
Continuous Assessment Test – 1
MAMS (Model Answers and Marking Scheme)

Q. 1   (co 1)
   A. Name 10 workloads suitable for public clouds.   **5 M**
   Please Refer Chap-2, Slide 42 (10*0.5) (Ans Points * Marks)

Application workloads

–Public facing web pages-

–Public wiki's, blogs etc

–Batch processing jobs with limited security requirements

–Data intensive workloads

–SaaS applications

–Online storage/backup/restore solutions

–Isolated workloads where latency between application components is not an issue

   B. Why does testing take too long in traditional computing environment? How does
      cloud computing overcome that challenge?   **3 M**
      Please Refer Chap-2, Slide 29 (3*1)

      ■   procure new hardware and software
      ■   schedule time with IT configuration
      ■   Set up the systems
      ■   Configuration and setup are manual processes
      ■   Poor governance to poor collaboration
      ■   Wrongly configured test environments

   C. Name 4 workloads not suitable for public clouds.
         2 M
      Please Refer Chap-2, Slide 45 (4*0.5)

Workloads that are **not suitable for public clouds**

•Workloads composed of multiple, co-dependent services

•High throughput online transaction processing

•Workloads requiring a high level of auditability and accountability

Q. 2   (co 1)
   A. Private clouds provide more control. Justify.   **4 M**
      Please Refer Chap-2, Slide 53 (4*1)

•In traditional security model, location implies ownership, which, in turn implies control when
security is location-specific.

•The location, ownership and control are aligned and tightly coupled.

•Need for strong control and security, usually drive a preference for a private cloud – own the resources

•Government may not allow their application,data to be stored outside its geographic borders`

•Clouds rely on virtualization and in the public model, this delinks or decouples location, application and data. This reduces the perceived ownership and control .

B. What are the different ways in which cloud vendors can promote cloud computing   within organization?
6 M
Please Refer Chap-2, Slide 18 (6*1)

- Prioritizing workloads based on business impact and risk
- Maximising business return by identifying applications that are well suited for cloud computing and have high business impact.
- Addressing problematic workloads
- Helping avoid costly implementation issues by identifying potential difficulties during migration
- Mitigating risk of costly implementation delays by identifying potential problems and addressing them before migration
- Avoiding inadequate performance of highly complex and integrated workload

Q. 3   (co 1)
A. Describe the following in 2 or 3 sentences: **6 M**
1. Community cloud
2. Shared private cloud
3. Dedicated private cloud

Please Refer Chap-2, Slide 61,62, 63 (3*2)

Community cloud

A community cloud is controlled and used by a **group of organizations** that have shared interest- such as **specific security** requirements or a common mission.

•The members of the community share access to the data and application in the cloud

Shared private cloud

•This is a shared compute capacity with variable usage based pricing to business units that are based on service offerings, accounts data-centers.

•It requires **internal profit-center** to take over or buy infrastructure made available through account consolidation.

Dedicated private cloud

- Dedicated private cloud has IT services catalog with dynamic provisioning.
- It depends on standardized SO architecture assets that can be broadly deployed into new and existing accounts and is a lower cost model.

B. Compare and contrast public and private clouds.

4 M

Please Refer Chap-2, Slide 80 (4*1)

•A public cloud is a shared cloud computing infrastructure that anyone can access.

- It provides hardware and virtualization layers that are owned by the vendor and are shared between all customers.
- It is connected to the public internet and presents an illusion of infinitely elastic resource