

**Sample End Semester Question Paper  
'T' Scheme**

**Programme name: Computer Engineering / Information Technology**  
**Programme code: CO / IF**  
**Semester: Sixth**  
**Course Title: Cloud Computing**  
**Max. Marks: 70**

**22624**

**Time: 3 Hrs.**

**Instructions:**

- (1) All questions are compulsory.
- (2) Illustrate your answers with sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.

**Q.1) A) Attempt any FIVE of the following. (10 Marks)**

- a) Enlist any two characteristics of cloud computing.
- b) State any two benefits of Virtual Data Centre.
- c) Give any two types of SLA.
- d) State any two features of open source cloud eucalyptus.
- e) Differentiate between Public cloud and Private cloud.(any two points)
- f) Define VSAN.
- g) State any two uses of Cloud portal.

**Q.2) Attempt any THREE of the following. (12 Marks)**

- a) What is Virtualizations? Give any one application of virtualization.
- b) Differentiate between GFS and HDFS.
- c) Describe life cycle of SLA.
- d) Describe Cloud Risks.

**Q.3) Attempt any THREE of the following. (12 Marks)**

- a) State features of Cloud Service Models (any four points).
- b) Describe Storage system architecture.
- c) Describe federated cloud computing.
- d) Describe the working of Microsoft Azure with diagram.

**Q.4) Attempt any THREE of the following. (12 Marks)**

- a) Analyze how virtual operating systems in VMware help users.
- b) List any four general issues in securities of cloud computing.
- c) List any four innovative applications of Cloud with Internet of Things.
- d) List and explain any two advantages of Storage virtualization.
- e) Differentiate between OpenNebula and OpenStack (any four points).

**Q.5) Attempt any TWO of the following.**

**(12 Marks)**

- a) Suppose you are designing Virtual Data Centre. What key elements you need? Draw the Block Diagram for it.
- b) What phases of cloud service life cycle are required to provide cloud services in your institute. Justify your answer.
- c) Examine Security-As-A-Cloud Service with advantages and disadvantages.

**Q.6) Attempt any TWO of the following.**

**(12 Marks)**

- a) Differentiate between Block level storage virtualization and File level storage Virtualization. (Any six points)
- b) Give appropriate example for the techniques used in cloud computing for managing IT resources.
- c) Which IoT technologies can be used for home automation? Relate home automation with cloud computing.

**Sample Test Paper I  
'T' Scheme**

**Programme name: Computer Engineering / Information Technology**  
**Programme code: CO / IF**  
**Semester: Sixth**  
**Course Title: Cloud Computing**  
**Max. Marks: 20**

**22624**

**Time: 1 hour**

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**Instructions:**

1. All questions are compulsory
2. Illustrate your answers with neat sketches wherever necessary
3. Figures to the right indicate full marks
4. Assume suitable data if necessary
5. Preferably, write the answers in sequential order

**Q.1 Attempt any FOUR.**

**(08 Marks)**

- a) List any four Cloud Deployment Models.
- b) List any two advantages of Block-level storage virtualization.
- c) Define Virtualization.
- d) Give any two differences between VMWare and Microsoft Hyper-V.
- e) Enlist any two advantages and disadvantages of Virtualization.
- f) Define Virtual Data Centre (VDC).

**Q.2 Attempt any THREE.**

**(12 Marks)**

- a) Differentiate between GFS and HDFS. (Any four points)
- b) Draw and explain Storage System Architecture of Cloud.
- c) Explain Virtual Storage Area Network.
- d) What is Hypervisor? Draw and explain working of Type 1 hypervisor.
- e) Draw and explain Cloud Computing Architecture.

**Sample Test Paper 2**  
**'T' Scheme**

**Programme name: Computer Engineering / Information Technology**  
**Programme code: CO / IF**  
**Semester: Sixth**  
**Course Title: Cloud Computing**  
**Max. Marks: 20**

**22624**

**Time:1 hour**

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**Instructions:**

1. All questions are compulsory
2. Illustrate your answers with neat sketches wherever necessary
3. Figures to the right indicate full marks
4. Assume suitable data if necessary
5. Preferably, write the answers in sequential order

**Q.1 Attempt any FOUR.**

**(08 Marks)**

- a) Define Amazon Simple Storage Service (S3).
- b) List types of Service Level Agreement (SLA).
- c) Give any two differences between ZigBee and RFID.
- d) Enlist any four risks of storing data in a cloud.
- e) List any two innovative applications of Cloud with Internet of Things.
- f) Define Security-As-A-Cloud.

**Q.2 Attempt any THREE.**

**(12 Marks)**

- a) List and discuss Security implications of Cloud Computing.
- b) Explain Energy aware cloud computing with an example.
- c) Explain Cloud resource management.
- d) Discuss with example the elastic utility computing architecture for linking your programs to useful systems. (EUCALYPTUS)
- e) Draw and explain Life Cycle of Service Level Agreement (SLA).