

# Atal Bihari Vajpayee Indian Institute of Information Technology & Management, Gwalior

## IT401: Cloud Computing

Minor Examination (Session 2024–25)

**Maximum Time: 1.5 Hours**

**Max Marks: 25**

---

*Note: Attempt all questions. Accuracy in diagrams and examples is essential.*

1. Explain the difference between horizontal and vertical scaling in cloud systems with an example. (5 Marks)
2. Assume a cloud provider charges 2 per GB/month for storage. (a) Calculate the monthly bill for 2 TB storage. (b) Discuss why cloud providers prefer “pay-as-you-go” billing. (5 Marks)
3. With the help of a neat diagram, explain cloud reference architecture. (5 Marks)
4. Compare server virtualization and containerization. State where each is more effective. (5 Marks)
5. Write short notes on: (a) Cloud elasticity (b) Federated cloud systems (5 Marks)