

2056

B.E. (Information Technology) Eighth Semester
PCIT-802: Cloud Computing

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I. Answer the following:-

- a) Define cloud computing and differentiate it with utility computing.
- b) Name any two deployment models of cloud computing.
- c) What is the role of a hypervisor in virtualization?
- d) Outline the concept and requirement of storage virtualization?
- e) When should an organization choose public cloud?
- f) Enlist few security issues in cloud computing.
- g) Define authentication w.r.t cloud security. How it differs from authorization?
- h) Write any one challenge in managing heterogeneous clouds.
- i) What is meant by Big Data Analytics on cloud?
- j) Mention the benefits of integrating AI with cloud? (10x1)

UNIT - I

- II. Describe different cloud deployment models (Public, Private, Hybrid, Community). Suggest suitable scenarios for each. (10)
- III. Explain hypervisors in detail. Compare Type-1 and Type-2 hypervisors with examples and use cases. (10)
- IV. Describe the key components of a Public Cloud architecture and discuss the characteristics of multi-Tenant architecture along with its implementation challenges. (10)

UNIT - II

- V. Explain major security concerns in cloud computing. Discuss application, server, and network security issues in detail. (10)
- VI. Describe the cloud security reference model. How does it help in mitigating risks in cloud environments? (10)
- VII. Analyze the financial and technological implications of adopting cloud computing platforms. How do cost models, scalability, and vendor lock-in impact business decisions? (10)

x-x-x