

2055

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. I which is compulsory and selecting two questions from each Unit.

x-x-x

I. Answer the following:-

- a) Define cloud computing and identify its core features.
- b) Differentiate between public cloud model and community cloud model.
- c) What is the role of a hypervisor in virtualization?
- d) What is on-demand self-service in cloud computing?
- e) How does virtualization improve resource utilization?
- f) Discuss the concept of VM migration and its benefits.
- g) Name two benefits of using a multi-cloud strategy.
- h) Define orchestration and automation in multi-cloud environments.
- i) What is data encryption in cloud security?
- j) How do cloud computing and big data analytics complement each other? (10x1)

UNIT - I

- II. With the help of appropriate examples, describe different types of virtualization i.e., hardware, server, storage, network, application, and desktop virtualization. (10)
- III. When should we opt for a public cloud model? Further, describe the key features of IaaS, PaaS and SaaS giving examples of cloud service providers for each model. (10)
- IV. What is a Virtual Private Cloud (VPC)? Discuss its implementation using any open-source platform. Also, outline the advantages and challenges of using a VPC. (10)

UNIT - II

- V. Describe the challenges in cloud computing in terms of Application security. Also, outline the complete architecture of cloud security reference model. (10)

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- VI. Highlight the major advantages of multi-cloud management systems. Further, introduce the concept of Business Intelligence and Big Data Analytics with respect to cloud. (10)
- VII. Discuss the future technology trends in cloud computing focusing on cloud service models and deployment models. (10)

x-x-x