

B.E. INFORMATION TECHNOLOGY
THIRD YEAR FIRST SEMESTER Examination – 2024
Subject: **Cloud Computing**

Time: Three hours

Full Marks: 100

Different parts of the same CO should be answered together.

CO1 [30]	<p>[I] <u>Answer any one between 1 & 2, along with 3 of this block as mentioned below.</u></p> <p>1. (a) Briefly explain the cloud Computing with the diagram. (b) Describe the properties of cloud computing. (c) Make a comparative study between grid computing and parallel computing. [2+5+3]</p> <p>2. Summarize the Cloud Service Models with diagrams. [5+5]</p> <p>3. Write a short note on (any four): [5X4] (a) Parallel Computing (b) Cluster Computing (c) Centralized Computing (d) Distributed Computing (e) Grid Computing</p>
CO2 [10]	<p>[II] <u>Answer any one of this block as mentioned below</u></p> <p>1. Define the Virtualization with architecture. Categorized the Virtualization based on resources. [2+2+6]</p> <p>2. Explain the Hypervisor. Describe the types of hypervisor. Examine the necessity of hypervisor in virtualization. [2+4+4]</p>
CO3 [40]	<p>[III] <u>Answer any 2 among 1, 2, & 3 of this block along with 4 as mentioned below.</u></p> <p>1. Describe the CDN. Outline the work procedure of CDN with figure. Exemplify the CDN services via Amazon CloudFront. [2+3+5]</p> <p>2. Illustrate AaaS as hybrid service. Identify the benefits of AaaS. Estimate it by using any AaaS platform of Amazon. [3+2+5]</p> <p>3. Distinguish between Amazon EC2 and Amazon EBS. Estimate the three types of STaaS solutions. [4+6]</p> <p>4. Write a short note on (any four): [4X5] (a) Big Bang Deployment Strategy (b) Rolling Deployment Strategy (c) Blue-green Deployment Strategy (d) Canary Deployment Strategy (e) Feature toggle Deployment Strategy</p>
CO4 [10]	<p>[IV] <u>Answer any 1 from this block.</u></p> <p>1. Write a short note on (any two): [5X2]</p>

[Turn over

	(a)Service Level Agreement (b)Data Center Management (c)Troubleshooting 2. Explain the purpose of Cloud Management. Describe any two metrics of QoS assessments.	[2+4+4]
CO5 [10]	[V] <u>Write a short note on (any two):</u> 1. Infrastructure Security 2. Identity and Access Management 3. Data Security	[5X2]

CO1: Define Cloud Computing and assess different Cloud Computing and deployment models(K3)

CO2: Examine and assess importance of different types of virtualization along with their technologies (K4)

CO3: Use and Examine different Cloud computing services (K4)

CO4: Analyze algorithms for management of cloud resources including scheduling, placement and assess their performance. (K3)

CO5: Understand and explain various security solutions for web and cloud infrastructure.(K2)
