Code: 20A05701a

B.Tech III Year II Semester (R20) Regular Examinations August 2023

CLOUD COMPUTING

(CSE (Internet of Things))

Time: 3 hours Max. Marks: 70 PART – A (Compulsory Question) Answer the following: $(10 \times 02 = 20 \text{ Marks})$ 1 2M (a) Define cloud computing. (b) Define Software as a Service (SaaS). 2M (c) What is Package in python? 2M (d) Define Date/Time Operations in python. 2M (e) Can I use Python in AWS? 2M What is image processing in cloud computing? 2M (f) (g) What are the benefits of clustering big data? 2M (h) Define video Streaming. 2M (i) How do you Analyse application performance? 2M Define Auditing in cloud. 2M (j) PART - B (Answer all the questions: $05 \times 10 = 50 \text{ Marks}$) 2 (a) Write the various Characteristics of cloud computing. 5M (b) Explain Cloud Services with an example. 5M OR (a) Explain Content delivery services. 5M 3 (b) Discuss in detail about Deployment and Management Services. 5M Describe Hadoop Map Reduce Job Execution. 10M 4 OR 10M 5 Write the steps to install Python. 6 Explain Python for Amazon web services for cloud. 10M 7 Illustrate Python for Google Cloud platform. 10M 8 Explain the Classification of Big data Recommendation of systems. 10M OR Describe Design Considerations for a Benchmarking Methodology. 9 10M 10 Illustrate Cloud Computing for Transportation Systems. 10M 11 Write the various Legal issues in cloud computing. 10M

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B.Tech III Year II Semester (R20) Regular Examinations August 2023

CLOUD COMPUTING

(Common to IT, AI&DS, CSE (AI), CSE (AI&ML) and CSE (DS))

Time: 3 hours Max. Marks: 70

PART – A

(Compulsory Question)

1	(a)	Answer the following: (10 X 02 = 20 Marks) Give a brief note on Virtualization.	2M
	(b)	Define Load balancing.	2M
	(c)	How are cloud reference architectures helpful?	2M
	(d)	What is Hadoop scheduler?	2M
	(e)	How do you use Python in Google Cloud Platform?	2M
	(f)	Is Python good for Azure?	2M
	(g)	What is benchmarking in Hadoop?	2M
	(h)	How do you Analyse application performance?	2M
	(i)	Define Data Security.	2M
	(j)	Give a brief note on Key Management in cloud.	2M
		PART – B	
		(Answer all the questions: 05 X 10 = 50 Marks)	
2	(a)	Explain Network function virtualization.	5M
	(b)	•	5M
		OR	
3		Illustrate Cloud Based services and applications.	10M
4		Describe Cloud Application Design Methodologies. OR	10M
5		Explain Hadoop Cluster setup.	10M
6		Explain Python web application frame work. OR	10M
7		Describe the Designing a RESTful web API.	10M
8		Write the case study for load testing and bottleneck detection.	10M
_		OR	
9		Illustrate Streaming protocols in detail.	10M
10		Draw a neat sketch of CSA Cloud Security Architecture.	10M
		OR	
11		Explain various Broad Approaches to migrating into the cloud.	10M

Max. Marks: 70

5M

Time: 3 hours

B.Tech IV Year I Semester (R20) Regular Examinations December/January 2024

CLOUD COMPUTING

(Computer Science & Engineering)

PART – A (Compulsory Question) Answer the following: $(10 \times 02 = 20 \text{ Marks})$ 1 List down the characteristics of cloud computing. 2M (a) (b) Define para-virtualization. 2M (c) List out Hadoop's three configuration files. 2M 2M (d) Mention five benefits of using Python. (e) Explain the component design for Image Processing App. 2M What are the functionalities of MapReduce App? 2M (f) (g) Describe the characteristics of Big Data. 2M (h) List out the streaming Protocols used in multimedia cloud. 2M (i) Outline the benefits of Cloud for healthcare. 2M List the different phases of the key management lifecycle. 2M (j) PART – B (Answer all the questions: $05 \times 10 = 50 \text{ Marks}$) (a) Describe the Open Source Private Cloud Software – OpenStack. 7M 2 (b) Explain the characteristics of cloud computing. 3M (a) Define virtualization. Explain what is hypervisor and its features with steps to show how it 3 5M virtualizes CPU and memory. (b) Define Software defined networking. Explain SDN architecture with the help of a diagram. 5M 10M 4 Explain the workflow of MapReduce Job Execution. OR 5 Explain a typical deployment architecture for content delivery applications with a neat 10M diagram. Write a python program for launching an RDS instance. 10M 6 7 Explain design methodology for MapReduce App. 10M 8 Illustrate the working of the k-means algorithm on a distributed file system with a neat 10M diagram. OR (a) Define Benchmarking and explain why benchmarking of cloud applications is important. 5M (b) Discuss the steps involved in cloud application benchmarking. 5M (a) Explain the workflow of token based SSO authentication. 3M (b) Distinguish between cloud computing from outsourcing and provision of Application services. 7M OR (a) Describe the jurisdictional issues raised by virtualization and data location. 5M 11

(b) Explain how encryption can be achieved at various levels in cloud computing.