

HALL TICKET NUMBER

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PACE INSTITUTE OF TECHNOLOGY & SCIENCES::ONGOLE
(AUTONOMOUS)

IV B.TECH I SEMESTER END REGULAR EXAMINATIONS, NOV-2022

CLOUD COMPUTING

(Common to CSE, CSIT, IT Branches)

Time: 3 hours

Max. Marks: 60

Note: Question Paper consists of Two parts (Part-A and Part-B)

PART-AAnswer **all** the questions in Part-A (5X2=10M)

Q.No.	Questions	Marks	CO	KL
1.	a) What is the message passing interface?	[2M]	1	1
	b) Distinguish parallel and distributed programming models.	[2M]	2	4
	c) What are the cloud services provided by Microsoft Azure?	[2M]	3	1
	d) What is the role of the mapper and reducer in the Hadoop platform?	[2M]	4	1
	e) Write about the Apache Hadoop storage model.	[2M]	5	2

PART-BAnswer **One Question from each UNIT (5X10=50M)**

Q.No.	Questions	Marks	CO	KL
UNIT-I				
2.	a) What are the applications of HPC and HTC? Discuss.	[5M]	1	1
	b) Explain Multicore CPUs and Multithreading technologies.	[5M]	1	2
OR				
3.	a) Discuss clusters of cooperative computers and Grid computing infrastructures.	[5M]	1	4
	b) Discuss the Service Oriented Architecture (SOA) in detail.	[5M]	1	4
UNIT-II				
4.	a) Explain Implementation levels of virtualizations.	[5M]	2	2
	b) Why OS level Virtualization required? Discuss the advantages and disadvantages of OS extensions.	[5M]	2	1
OR				
5.	a) What is Memory virtualization? Explain two-level memory mapping procedure.	[5M]	2	1
	b) What is I/O virtualization? Explain the three types of I/O Virtualization.	[5M]	2	1
UNIT-III				
6.	a) List and explain service models of cloud computing with architectures.	[5M]	3	1
	b) Discuss the IaaS (Infra Structure as a Service) and its public cloud offerings.	[5M]	3	4
OR				
7.	a) Illustrate a neat sketch of the Google cloud platform and explain.	[5M]	3	2
	b) Explain the AWS architecture and its applications in detail.	[5M]	3	2
UNIT-IV				
8.	a) Explain two runtime software environments developed by Microsoft i) Dryad ii) DryadLINQ	[5M]	4	2
	b) Explain Google file systems.	[5M]	4	2
OR				

9.	a)	Explain Amazon Elastic Block Structure (EBS) & Simple DB.	[5M]	4	2
	b)	What about Amazon EC2 instances? Explain the Amazon EC2 execution environment with a neat diagram.	[5M]	4	1
UNIT-V					
10.	a)	Explain two-level resource allocation architecture with a neat diagram.	[5M]	5	2
	b)	Discuss the start-time fair queuing scheduler for multimedia operating systems.	[5M]	5	4
OR					
11.		What is Bigtable? How it is related to GFS?	[10M]	5	1
