


Name:			
Enrolment No:			
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, December 2022			
Course: B.Tech CSE CCVT & B.Tech CSE CCVT (H)		Time : 03 hrs.	
Semester: 5 th		Max. Marks: 100	
Program: Cloud Performance Tuning			
Course Code: CSVT3015			
Instructions: All questions are compulsory.			
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q 1	Why do we need Cloud Performance Tuning?	4	CO1
Q 2	Draw and explain the architectural diagram of Intel multi core microarchitecture.	4	CO2
Q 3	Explain five important functions of an Operating system.	4	CO3
Q 4	Write a short note on Hypervisor tuning guidelines.	4	CO3
Q 5	Explain four database tunables.	4	CO4
SECTION B (4Qx10M= 40 Marks)			
Q 1	Discuss the different techniques used to manage the power in terms of Cloud Performance. Differentiate APM and ACPI.	10	CO1
Q 2	Discuss the different parameters for tuning the cloud performance. Explain the concept behind network redundant connectivity with the help of Active- Active high Clustering.	10	CO2
Q 3	Discuss load balancers in virtualization and explain their utility in the application of the cloud domain in improving the performance of an enterprise web application.	10	CO3
Q 4	What are the different techniques used for memory optimization and CPU optimization?	10	CO4
SECTION-C (2Qx20M=40 Marks)			
Q 1	Discuss different VM integration services with a suitable example. Also, justify the role of database tuning in VM configuration.	20	CO3

Q 2	<p>a) Explain consistency, eventual consistency, and real-time with suitable examples.</p> <p>b) Discuss response time and throughput and how do they affect the wait time.</p> <p style="text-align: center;">(OR)</p> <p>a) Discuss Row fetching, huge pages, and UTF8 charset. How these affect the performance tuning of Oracle.</p> <p>b) Discuss multitasking, threading, and multi-threading in the operating system with suitable examples.</p>	20	CO4
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