


Name:			
Enrolment No:			
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES Supplementary Examination, Dec 2023			
Course: Introduction to Virtualization and Cloud Computing Program: B. Tech. (CSE) spec. in CCVT Course Code: CSVT 2001		Semester : 3rd Time : 03 hrs. Max. Marks : 100	
Instructions: Attempt all questions			
SECTION A (5Qx4M=20Marks)			
S. No.	Question	Marks	CO
Q 1	Give the NIST definition of Cloud Computing. How is it different from Grid Computing?	4	CO1
Q 2	List the factors a business considers before deploying a particular cloud.	4	CO2
Q 3	Elaborate VPN? Classify and explain its types.	4	CO3
Q 4	Differentiate among emulation, simulation, and virtualization.	4	CO4
Q 5	Differentiate between block-level storage virtualization and File-level storage Virtualization.	4	CO1
SECTION B (4Qx10M= 40 Marks)			
Q 6	What are the different types of workloads? Explain each in detail.	10	CO1
Q 7	Why Cloud-based IT infrastructure is better than traditional IT infrastructure? What are the problems Traditional IT infrastructure faces? OR Explain in detail the characteristics of a virtualized environment.	10	CO2
Q 8	Define Hypervisor. Explain its components and types in detail.	10	CO3
Q 9	(a) Differentiate full virtualization and para-virtualization. (b) Differentiate between container and virtual machines.	5*2=10	CO4

SECTION-C
(2Qx20M=40 Marks)

Q 10	What is hardware virtualization? Discuss the different types of hardware virtualization in detail.	20	CO3
Q 11	What is cloud computing? Discuss its anatomy in detail. OR Discuss the different cloud deployment decision factors in a hybrid cloud context.	20	CO2