

Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination – ONLINE MODE, May2020

Course: Cloud Computing Semester: VI

Program: BCA Time : 03 hrs.
Course Code: CSVT3003 Max. Marks: 100

Instructions: Attempt all questions. Assume any missing data and provide appropriate examples.

SECTION A [30 Marks]

S. No.		Marks	CO
Q1.	UPES Data Centre is running on Virtual Servers. Yes/No		
Q2.	A server is typically composed of four major physical components – Processor, memory, network and storage. (Choose one correct from the below options.) a. Application b. Virtual c. Web d. Physical	5	CO1
Q3.	The is responsible for allocating memory, CPU resources, network and storage to each virtual machine.	5	CO2
Q4.	connect remote users with their central company servers over the public network while maintaining security and confidentiality of data that is being transmitted. This gives the effect of being connected directly to the company's LAN. (Choose one correct from the below options.) a. VPN b. Remote Desktop c. TELNET d. FTP	5	CO3
Q5.	virtualization solutions such as VMware Desktop, VirtualBox, and Parallels provide the ability to create a virtual computer with customized virtual hardware on top of which a new operating system can be installed. (Choose one correct from the below options.) a. Hardware b. Software c. Network d. Storage	5	CO4

Q6.	Type II hypervisors require the support of an operating system to provide virtualization services. Yes/No.	5	CO4
	SECTION B [50 Marks]		
Q7.	Illustrate the benefits of Virtualization Technology for UPES data Centre.	10	CO1
Q8.	Analyze, review and explain the figure shown below: Virtual Machine Operating System Operating System Hypervisor Hypervisor Network Storage Actual hardware layer	10	CO2
Q9.	Describe in detail " <i>IaaS</i> , <i>PaaS and SaaS</i> ". How can be it useful in organizations like UPES?	10	CO3
Q10.	Compare virtualization with cloud technology. Is hybrid cloud technology preferable for UPES(Yes/No)? Analyze and justify your views.	10	CO4
Q11.	How VPN and VLAN can be beneficial for UPES?	10	CO3
	OR		
	Illustrate the difference between Type-I and Typer-II hypervisors with suitable examples.	10	CO3
	SECTION-C [20 Marks]		
Q 12.	A cloudburst took place on one night at Uttarakhand State Data Centre. The State Data Centre severely damaged due to that disaster. You as a System Architect of Uttarakhand State Data Centre, discuss your action plan and strategies. How will you recover from such disasters, what are the precautions you have taken earlier, what are your disaster recovery strategies etc. Discuss and elaborate with optimum solution with the implementation of Virtualization and cloud technology. (Hint: Virtualization, VPN, Storage, Cloud, IaaS/SaaS/PaaS)	20	CO4