

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, May 2022

Semester: VI

Course: Introduction to Virtualization and Cloud Computing

Program: B. Tech. AIML,OSS,CSF

Course Code: CSVT2001P

Time : 03 hrs.

Max. Marks: 100

Instructions: All Questions are mandatory.

SECTION A (50x4M=20Marks)

	(5QX4M=20Marks)		
S. No.		Marks	CO
Q 1	(A) Applications and services that run on a distributed network using	4	
	virtualized resources is known as computing.		
	1. Parallel		
	2. Soft		
	3. Distributed		
	4. Cloud		~~1
			CO ₁
	(B) Which of the following type of virtualization is also characteristic of		
	cloud computing?		
	1. Storage		
	2. Application		
	3. CPU		
	4. All of the mentioned		
Q2	(A) Which of the following is not a type of cloud?	4	CO2
	1. Private		
	2. Public		
	3. Protected		
	4. Hybrid		
	(B) Point out the wrong statement:		
	Load balancing virtualizes systems and resources by mapping a logical		
	address to a physical address.		
	2. Multiple instances of various Google applications are running on different		
	hosts.		
	3. Google uses hardware virtualization.		
	4. All of the mentioned.	1	
Q3	(A) The essential element in cloud computing by CSA is	4	CO3

	1. Virtualization		
	2. Multi-tenancy		
	3. Identity and access management		
	4. All of the mentioned		
	(B) Which of the following terms describes a situation in which many virtual		
	machines are deployed without proper IT oversight?		
	1. Server sprawl		
	2. Server consolidation		
	3. Network virtualization		
	4. Virtual machine sprawl		
Q4	Explain 'Self-Service Provisioning'.	4	CO1
Q5	State the examples of IaaS.	4	CO3
	SECTION B		
	(4Qx10M= 40 Marks)		
Q 6	Explain what does the delivery model - PaaS comprise of? Use suitable example.	10	CO1
Q 7	Define Virtualization? Decode the relationship between Virtualization and Cloud Computing?	10	CO2
Q 8	Describe in detail the benefits of the cloud over traditional IT infrastructure.	10	CO2
Q 9	Define various services model with Detail.		
	OR	10	CO4
	Discuss the role of Live Migration and the Importance of Server Virtualization with detail.		
	SECTION-C		
	(2Qx20M=40 Marks)		
Q 10	(A) Define Hypervisor? Explain its components and types in detail.		
		20	CO4
	(B) Analyze the Anatomy of Cloud in detail.		
Q 11	(A) Elaborate on the steps followed when preparing for virtualization.	20	CO3
	(B) Discuss your understanding of the following:		
	1. Dropbox		
	2. VM		
	3. SLA4. Service Catalog		
	Service causes		

OR		
(A) Demonstrate your understanding on 'BPAAS' with an example of your own choice'.		
(B) Define Desktop Virtualization, Grid Computing, Network Virtualization and the role of VPN in Cloud.		