Name:

**Enrolment No:** 



## **UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, May 2023**

**Course: Data Centre Virtualization** 

Program: B.Tech-CSE-BD Course Code: CSVT4011P Semester: VIII Time: 03 hrs.

Max. Marks: 100

**Instructions: Explain in short. (60-70 words)** 

SECTION A
(5Qx4M=20Marks)

S. No.		Marks	CO
Q 1	Discuss the need for data center virtualization.	4	CO1
Q 2	Explain the significance of software management interfaces in monitoring enterprise level virtual servers.	4	CO2
Q 3	Briefly discuss the functioning of VSAN.	4	CO3
Q 4	Deliberate the use of virtualization in disaster recovery.	4	CO4
Q 5	Discuss any two industry standard protocols used in a virtualized environment.	4	CO2

## **SECTION B**

(4Qx10M = 40 Marks)

**Instruction: Write brief notes.** (100-150 words)

Q 6	Distinguish the role of hypervisor in virtualization in detail.	10	CO1
Q 7	Discourse regarding the role virtual machine monitor and virtual machine with the help of an example.	10	CO3
Q 8	Differentiate in between SAN and NAS in detail with a neat diagram.  OR  Discuss network and server virtualization with the help of an example.	10	CO2
Q 9	Explain full virtualization and paravirtualization in detail.	10	CO3

## **SECTION-C**

(2Qx20M=40 Marks)

Instruction: Write long answer. (Up to 350 words while explaining) Attempt any part of question no. 10 as there is an option "a" OR "b".

There is no choice for question no.11.

Q 10	Explain resource partitioning and service partitioning with a suitable example.	20	CO4
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	OR		
	Discuss monitoring and performance backup considerations to be taken into account during server virtualization an appropriate example.		
Q 11	Discuss any four major challenges in terms of data center virtualization in complete detail.	20	CO5