


Name:			
Enrolment No:			
<b>UNIVERSITY OF PETROLEUM AND ENERGY STUDIES</b> <b>End Semester Examination, May 2022</b>			
<b>Course: Data Centre Virtualization</b> <b>Program: B. Tech (CSE)</b> <b>Course Code: CSVT4011P</b>		<b>Semester: VIII</b> <b>Time : 03 hrs.</b> <b>Max. Marks: 100</b>	
<b>Instructions: Attempt All questions.</b>			
<b>SECTION A</b> <b>(5Qx4M=20Marks)</b>			
S. No.		Marks	CO
Q 1	Explain the term ‘Data Center’ and ‘Virtualization’. (2+2)	04	CO1
Q 2	Elucidate the need of data center virtualization	04	CO1
Q 3	Explain the storage architecture for the virtual environment.	04	CO2
Q 4	Discuss the benefits of using virtual machines in cloud data centers.	04	CO2
Q 5	Discuss the four general types of virtualization in brief?	04	CO2
<b>SECTION B</b> <b>(4Qx10M= 40 Marks)</b>			
Q 6	Explain various approaches for data recovery from virtual machines.	10	CO4
Q 7	Discuss the key advantages provided by storage virtualization during the migration of applications and data from one physical location to another?	10	CO2
Q 8	Explain the various important components of a data center infrastructure?	10	CO1
Q 9	Describe the need and process of public and private cloud deployment model.  <b>OR</b> Explain the benefits of switching to a hybrid cloud deployment model from a public/private cloud model.	10	CO4
<b>SECTION-C</b> <b>(2Qx20M=40 Marks)</b>			
Q 10	“Cloud is an essential foundation of successful digital transformation” with a suitable case study, justify the statement in your own words.	20	CO3
Q 11	Explain the requirements of application upgradation for cloud data centers using VMware. State various challenges encountered during the application upgradation.  <b>OR</b>	20	CO5

	<p>Discuss the following challenges of a cloud data center (4*5 =20)</p> <ul style="list-style-type: none"><li>a) Availability Challenges</li><li>b) Scalability Challenges</li><li>c) Management Challenges</li><li>d) Optimization Challenges.</li></ul>		
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