


<b>Name:</b>	 <b>UPES</b> <small>UNIVERSITY WITH A PURPOSE</small>
<b>Enrolment No:</b>	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Semester Examination , December 2021**

**Course: Introduction to Virtualization and Cloud Computing**

**Semester: III**

**Program: B. Tech. CCVT**

**Time 03 hrs.**

**Course Code: CSVT2001**

**Max. Marks: 100**

**SECTION A**

- 1. Each Question will carry 5 Marks**
- 2. Instruction: Write short answers**

S. No.	Question	CO
Q 1	<p>(A) Applications and services that run on a distributed network using virtualized resources is known as _____ computing.</p> <p>a) Parallel b) Soft c) Distributed d) Cloud</p> <p style="text-align: center;">&amp;</p> <p>(B) Which of the following type of virtualization is also characteristic of cloud computing?</p> <p>a) Storage b) Application c) CPU d) All of the mentioned</p>	<b>CO2</b>
Q2	<p>(A) Which of the following is an example of a SaaS service?</p> <p>a) Google Workspace b) Dropbox c) Salesforce d) All of the above</p> <p style="text-align: center;">&amp;</p> <p>(B) Point out the correct statement.</p> <p>a) A client can request access to a cloud service from any location. b) A cloud has multiple application instances and directs requests to an instance based on conditions. c) Computers can be partitioned into a set of virtual machines with each machine being assigned a workload. d) All of the mentioned.</p>	<b>CO2</b>
Q3	<p>(A) The most important area of concern in cloud computing is _____</p> <p>a) Scalability b) Storage</p>	<b>CO3</b>

	<p>c) Security d) All of the mentioned</p> <p style="text-align: center;">&amp;</p> <p>(B) Type ..... VM is full virtualization.</p> <p>(a) 1 (b) 2 (c) 3 (d) All of the above</p>	
Q4	<p>(A) The essential element in cloud computing by CSA is _____</p> <p>a) Virtualization b) Multi-tenancy c) Identity and access management d) All of the mentioned</p> <p style="text-align: center;">&amp;</p> <p>(B) Which of the following terms describes a situation in which many virtual machines are deployed without proper IT oversight?</p> <p>a. Server sprawl b. Server consolidation c. Network virtualization d. Virtual machine sprawl</p>	<b>CO3</b>
Q5	<p>(A) When the cost of infrastructure and management is _____, cloud computing is a suitable choice.</p> <p>a) high b) moderate c) low d) none of the mentioned</p> <p style="text-align: center;">&amp;</p> <p>(B) Which of the following characteristics should you consider when deciding whether to deploy an application or service to a virtual machine?</p> <p>a. Hardware requirements b. Software support and compatibility c. Licensing d. All of the above</p>	<b>CO4</b>
<b>SECTION B</b>		
<p><b>1. Each question will carry 10 marks</b> <b>2. Instruction: Write brief notes</b></p>		
Q 6	Define Virtualization and different techniques to perform virtualization.	<b>CO1</b>

Q 7	Discuss classification of Distributed and Parallel Computing Systems	<b>C03</b>
Q 8	Justify why Workload Categorization is important in Cloud Computing Environment? Explain the various categories of Workloads suitable for cloud environment	<b>C02</b>
Q 9	Define Hypervisor? Explain its components and types in detail.	<b>C03</b>
<b>SECTION C</b>		
<p><b>1. Each Question carries 20 Marks.</b></p> <p><b>2. Instruction: Write long answer.</b></p>		
Q10	<p>a) Discuss the benefits of the cloud over traditional IT infrastructure with detail.</p> <p>a) Define Grid Computing, Desktop Virtualization, Network Virtualization and the role of VPN in Cloud.</p>	<b>C04</b>
Q11	<p>a) Define various services model with Detail.</p> <p>b) Discuss the importance of Server Virtualization with its execution environment with detail.</p>	<b>C01</b>