

Name:	
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2018

Course: B. Tech. CSE with Cyber Security and Forensics/MFT/OSS&OS/GG/MI

Semester: VII

Subject: Introduction to Virtualization and Cloud

Time: 03 hrs.

Subject Code: CSIB 274

Max. Marks: 100

Instructions: The marks for each question are given before.

SECTION A

S. No.	Question	Marks	CO
Q 1	Explain virtual machine.	4	CO1
Q 2	How resource pooling is used in virtualization?	4	CO2
Q 3	Discuss server sprawl and ways to deal with it.	4	CO3
Q 4	Discuss the various jobs of Operating Systems?	4	CO2
Q 5	Explain and Differentiate between Simulation and Emulation.	4	CO2

SECTION B

Q 6	How Application Virtualization helps optimize the IT Infrastructure expenditure? Explain with a suitable example.	10	CO2, CO4
Q 7	What are the various types of Operating systems? How Different system ISA can affect the execution of applications and programs?	10	CO2, CO3
Q 8	Explain the full functioning of Hypervisor. Explain the difference between the System call and Hyper call.	10	CO3
Q 9	Virtualization can be utilized to save the CAPEX and OPEX. Give a precise analysis. Prepare a case study to depict why Virtualization is required? And then propose a solution for it without increasing infrastructure.	10	CO2, CO3
<p>OR</p> <p>Discuss the functions of various components of Classic Data center.</p>			

SECTION-C

Q 10	Explain different type of virtualization in details with example and diagrams.	20	CO2, CO5
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Q 11	<p>Discuss the delivery models in cloud based systems. Support your answer with suitable examples and diagrams.</p> <p style="text-align: center;">OR</p> <p>Illustrated the hardware – software ring layer with respect to the following –</p> <ul style="list-style-type: none">a) Kernelb) Operating Systemc) Hypervisord) Applications	20	CO1, CO2, CO3
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