



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

Course: Cloud Security and Management

Program: BT-CSE-CCVT

Course Code: CSVT 3008

Semester: V

Time: 03 hrs

Max. Marks: 100

Instructions: Attempt each question with suitable representation of concepts.

SECTION A
(Scan and upload)

(5Qx4M = 20 Marks)

S. No.		Marks	CO
Q 1	Define and differentiate SLAs and OLAs	4	CO4
Q 2	Draw Chef Architecture Diagram. List components in each architectural block.	4	CO5
Q 3	Outline different aspects involved in physical security of data center.	4	CO1
Q 4	Describe the concept of Security as a Service	4	CO2
Q 5	State what is Industry 4.0? List Technological Pillars of Industry 4.0.	4	CO3

SECTION B
(Scan and upload)

(4Qx10M = 40 Marks)

Q 1	Illustrate diagrammatically the ITIL Framework for Service Management with steps and activities within each step. Describe Continuous Process Improvement.	10	CO4
Q 2	List what are the different elements involved in Cloud Infrastructure Provisioning. Detail Network Provisioning in your own words.	10	CO5
Q 3	Identify the top security risks in cloud computing. Explain the best security practices to reduce the risks associated with public cloud?	10	CO1
Q 4	Explain how Business Continuity and Disaster Recovery is achieved? OR Analyze the life cycle and challenges of Identity and Access Management.	10	CO1

SECTION C
(Scan and upload)

(2Qx20M = 40 Marks)

Q 1	Detail what is Cyber Physical System? List and describe potential risks in cloud migration.	20	CO3
Q 2	Suppose a company A decides to setup a cloud to deliver Software-as-a-Service to its clients from a remote location. Answer the following. a) Analyze the security risks that a customer should to be careful about. b) Discuss the kind of infrastructural setup that will be required to set up a cloud. c) Interpret the kind of billing model, used by the cloud service provider for payment purpose. OR Compare different encryption techniques. Justify the usage of each technique by giving application in different scenarios.	20	CO2