



Name:

Enrolment No:

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2019

Course: Introduction to IT Infrastructure and Landscape

Program: B.Tech (CSE-CCVT)

Course Code: CSIT 1001

Semester: I

Time : 03 hrs.

Max. Marks: 100

Instructions:

SECTION A

S. No.		Marks	CO
Q 1	Distinguish between IT and IT infrastructure.	4	CO1
Q 2	Discuss Data Warehousing, Data Mart and Data Mining? Explain with the help of suitable diagram	4	CO1
Q 3	Describe the hierarchical organization of computer memory.	4	CO2
Q 4	Define Virtualization in Cloud Computing? Explain its types.	4	CO1
Q 5	Differentiate between SAN, NAS and DAS technology with suitable example.	4	CO2

SECTION B

Q 6	Justify the reason, why storage virtualization is required? Explain its types and working with suitable architectural diagram.	10	CO2
Q 7	Explain operating system? Also mention need for an operating system? Discuss the major functions of an operating system with an example	10	CO3
Q 8	Define the term “bare-metal hypervisors and hosted hypervisors”? Explain using diagram.	10	CO3
Q 9	Compare and contrast client server and peer-to-peer architecture in detail with different components required to deploy it. OR Explain RAID technology and its levels in detail using diagrams.	10	CO4

SECTION-C

Q 10	Discuss with an example the impact of virtualization on cloud services and information technology infrastructure.	20	CO5
Q 11	Write short notes on the following: a) Data and information b) Switching and routing c) Cryptography d) Server virtualization. OR Explain the various design challenges for effective cloud computing environment. Write a note on security challenges in cloud computing.	20	CO1, CO2, CO3, CO4