Name:

Enrolment No:

UPES
UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2019

Course: Backup&DR **Semester: VIII**
Program: B.Tech-CSE(ALL Branches) **Time 03 hrs.**
Course Code: CSIB493 **Max. Marks: 100**

Instructions: Attempt all the questions.

SECTION A

S. No.		Marks	CO
Q 1	”BC is proactive strategy while DR is reactive. “Justify the statement.	5	CO1
Q 2	What is meant by Private Interconnect or Heart Beat of a HA cluster?	5	CO2
Q 3	Describe **RAID**. How it is helpful in availability and reliability.	5	CO3
Q 4	Illustrate the benefits of proper BCP implementation of a company?	5	CO4

SECTION B

Q 5	Analyze the disaster in reference with the IT industry? Write down the requirements of the Drive the DR methods.	10	CO4
Q 6	Explain and give full taxonomy of redundancy in DR. Explain Cascade 3 site topology. What is DR Drill write down its importance?	10	CO2
Q 7	Describe the role of replication in Disaster Recovery. Differentiate between synchronous and asynchronous Replication.	10	CO3
Q 8	What is BIA .Write down all the phases? Explain RTO and WRT with proper example. **OR** Construct an appropriate model for disaster recovery that can be used by IT Industry.	10	CO5

SECTION-C

Q 9	Calculate the value of MTTR and MTBF .Also find availability of the system a).UPTIME = 300hrs DOWNTIME = 15 hrs Number of failures =6. b)  A1 = 15 min A2 = 20min A3 = 10 min (Value of time for the down level)	20	CO3

	B1= 25 hrs. B2 = 10 hrs. B3 = 20 hrs. (Value of time for the UP level) **OR** Explain High availability with reference to the storage. Give the Storage architecture in Cloud Computing. Write down all the RAID levels with proper explanation. Difference between 1+0 and 0+1.		**CO3**
Q 10	Write Short notes on the following a) Two Army Problems b) Service models of cloud computing. c) Data compression and Data Deduplication d) LTO and VTL e) Incremental and Progressive Incremental Backup	**20**	**CO2** **CO1** **CO4** **CO5** **CO5**