Name:

**Enrolment No:** 



## UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

**End Semester Examination, December 2019** 

Course: IT Business Continuity & Disaster Recovery Planning

**Semester: VII** 

Program: B. Tech CSE+CSF

Course Code: CSIB 446

Time : 03 hrs.

Max. Marks: 100

## **SECTION A**

S. No.		Marks	СО
Q 1	<ol> <li>John is the security administrator for company X. He has been asked to oversee the installation of a fire suppression sprinkler system, as recent unusually dry weather has increased the likelihood of fire. Fire could potentially cause a great amount of damage to the organization's assets. The sprinkler system is designed to reduce the impact of fire on the company. In this scenario, the likelihood and damage potential of a fire is considered as?</li> <li>A fiber-optic cable running between two buildings being cut by a maintenance worker affects only the cable and the productivity for its cut, which might be only 20% of the organization's infrastructure. Calculate EF for the given asset.</li> </ol>	4	CO2, CO3
Q 2	1) Uncertainty about outcomes that can be either positive or negative is known as:  a) Hazard b) Risk c) Speculation d) Adverse selection  2) Who has the final approval of the business continuity plan?  a) The planning committee b) Each representative of each department c) Management d) External authority  3) Arrange the different phases of disaster in correct order: a) Emergency response phase, Crisis phase, restoration phase, recovery phase b) Crisis phase, emergency response phase, restoration phase, recovery phase c) Crisis phase, emergency response phase, recovery phase, restoration phase	4	CO2, CO4

	d) Emergency response phase, Crisis phase, recovery phase, restoration phase		
	4) Risk management is a responsibility of the		
	a) Customer b) Investor c) Developer d) Project team		
Q 3	Explain the terms RTO, RPO, WRT, downtime.	4	CO1
Q 4	How business continuity differs from disaster recovery?	4	CO1
Q 5	Consider a scenario that threat possible in a fiber-optic cable asset that is running between two buildings is being cut by a maintenance worker affects only the cable and the productivity for its cut, which might be only 20% of the organization's infrastructure. The asset value is \$15,000. Calculate Single Loss Expectancy (SLE).	4	CO3
	SECTION B		
Q 6	Explain the importance of Business Continuity Plan with the help of at least 3 industry illustrations.	10	CO1
Q 7	Identify the business and operational risks inherent in an entity's disaster recovery/business continuity plan.	10	CO2
Q 8	Explain the difference between Risk Assessment and Business Impact Analysis. What are the benefits of BIA?	10	CO2, CO3
Q 9	What factors/practices helped the investment company to recover from the incident. Explain your answer.		
	OR	10	CO4
	Discuss different BCM & DR teams responsible for disaster recovery with their roles and responsibilities.		
	SECTION-C		
Q 10	Imagine you are a manager responsible for the business continuity management program for a major mobile telecoms company based in Hanover, Germany. You are part of a management team responsible for ensuring the safety and security of over 6,000 employees and ensuring they are able to continue providing a much-needed service to nearly 8 million customers. Now picture the chaos that would ensue if there was a fire at an important site that caused a service outage affecting fixed line telephony and ADSL across a large region of the country. What would you do to	20	CO1, CO2, CO3, CO4
Q 11	continue the business as normal?  a) Explain the different phases of disaster with the help of examples. (10 marks)	20	CO1, CO3

b) What do you understand by Business Continuity & Disaster Recovery? Explain different types of disaster. (10 marks)

OR

a) Explain the requirements for Cost Benefit Analysis. (5 marks)

b) Explain Exposure Factor, Single Loss Expectancy, Annualized Rate of Occurrence, Annualized Loss Expectancy, Annual Cost of Safeguard with the help of examples. (15 marks)