

<b>Name:</b>	 <b>UPES</b> UNIVERSITY WITH A PURPOSE
<b>Enrolment No:</b>	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**Online End Semester Examination, May 2021**

<b>Course: IT Business Continuity and Disaster Recovery Planning</b>	<b>Semester: VI</b>
<b>Program: B. Tech. CSE+CSF</b>	<b>Time 03 hrs.</b>
<b>Course Code: CSIB-446</b>	<b>Max. Marks: 100</b>

**SECTION A**

- 1. Each Question will carry 5 Marks**
- 2. Instruction: Complete the statement / Select the correct answer(s)**

S. No.	Question	CO
Q 1	Which of the following actions is least important when quantifying risks associated with a potential disaster? a) Gathering information from agencies that report the probability of certain natural disasters taking place in that area b) Identifying the company's key functions and business requirements c) Identifying critical systems that support the company's operations d) None of the above	CO1
Q2	Why is a truly quantitative risk analysis not possible to achieve? a) It is possible, which is why it is used b) It assigns severity levels. Thus, it is hard to translate into monetary values. c) It is dealing with purely quantitative elements d) Quantitative measures must be applied to qualitative elements	CO3
Q3	The main object of an audit is? a) Expression of opinion b) Detection and Prevention of fraud and error c) Depends on the type of audit d) Both (a) and (b)	CO4
Q4	Full form of BIA is in context to BC&DRP is? a) Business Immigration Analysis b) Business Improvement Area c) Board of Immigration Appeals d) None of these	CO2
Q5	Which one is not a phase of project life cycle? a) Project Initiation b) Business Impact analysis c) Mitigation strategy development d) Emergency response team formation	CO3
Q6	When exiting the building after an earthquake, you should use elevators to reach lower levels. a) True b) False	CO4

**SECTION B**

1. Each question will carry 10 marks
2. Instruction: Write short / brief notes

Q 7	What are the different data backup methods? Explain.	<b>CO4</b>
Q 8	What is the purpose of using ISO 22301 standard? Explain all the clauses of this standard also.	<b>CO2</b>
Q 9	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 40% of the organization's infrastructure. Calculate EF for the given asset?	<b>CO1</b>
Q 10	What do you understand by Business Continuity & Disaster Recovery? Explain different types of disaster?	<b>CO3</b>
Q 11	Discuss some industry illustrations that shows the importance of Business Continuity & Disaster Recovery planning?	<b>CO1</b>

**Section C**

1. Each Question carries 20 Marks.
2. Instruction: Write long/short answer.

Q 12	<p><b>Explain threat, asset value, Exposure Factor, Annualized Rate of Occurrence (ARO), Single-Loss Expectancy (SLE) and Annualized Loss Expectancy (ALE)? In below shown table, different assets like network operations center, web servers, web data and customer data are given with their value, Exposure factor (EF) and Annualized Rate of Occurrence (ARO). Calculate Single-Loss Expectancy (SLE) and Annualized Loss Expectancy (ALE) of all the given assets.</b></p> <table border="1"> <thead> <tr> <th>Asset</th> <th>Threat</th> <th>Asset Value</th> <th>EF</th> <th>SLE</th> <th>ARO</th> <th>ALE</th> </tr> </thead> <tbody> <tr> <td>Network Operations Center</td> <td>Fire</td> <td>\$500,000</td> <td>0.45</td> <td></td> <td>0.2</td> <td></td> </tr> <tr> <td>Web Servers</td> <td>Power Failure</td> <td>\$25,000</td> <td>0.25</td> <td></td> <td>0.5</td> <td></td> </tr> <tr> <td>Web Data</td> <td>Virus</td> <td>\$150,000</td> <td>0.33</td> <td></td> <td>1</td> <td></td> </tr> <tr> <td>Customer Data</td> <td>Disclosure</td> <td>\$250,000</td> <td>0.75</td> <td></td> <td>0.66</td> <td></td> </tr> </tbody> </table>	Asset	Threat	Asset Value	EF	SLE	ARO	ALE	Network Operations Center	Fire	\$500,000	0.45		0.2		Web Servers	Power Failure	\$25,000	0.25		0.5		Web Data	Virus	\$150,000	0.33		1		Customer Data	Disclosure	\$250,000	0.75		0.66		<b>CO1, CO2</b>
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