



Roll No																			
---------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**PRESIDENCY UNIVERSITY  
BENGALURU**

**SET – B**

**SCHOOL OF ENGINEERING  
END TERM EXAMINATION – MAY/JUNE 2024**

**Semester :** Semester VI - 2021

**Course Code :** CSE2025

**Course Name :** Business Continuity and Risk Analysis

**Program :** B.Tech. Computer Science and Engineering

**Date :** June 10, 2024

**Time :** 01.00pm to 04.00pm

**Max Marks :**100

**Weightage :** 50%

- 
- Note:** 1. Answer ALL 5 FULL Questions.  
2. Each Full Question carries 20 Marks  
3. Scientific and non-programmable calculator are permitted.  
4. Do not write any information on the question paper other than Roll Number.
- 

- 1.a. What is a disaster? Explain types of disasters with examples. **[Knowledge]** (C01) (04 Marks)
- 1.b. Why is monitoring and evaluation important during disaster recovery? Explain their main goals. **[Comprehension]** (C01) (06 Marks)
- 1.c. Flash floods and landslides in June 2013 severely impacted the state of Uttarakhand. Thousands of people were stranded, and infrastructure, including roads and bridges, was damaged. Under which category you would classify this type of disaster? What steps were taken to quickly recover from this disaster? **[Application]** (C01) (10 Marks)
- or**
- 2.a. A disaster causes disturbance in the normal working of business operations, in this situation what is the role of disaster recovery plan in minimizing the impact of interruption. **[Knowledge]** (C01) (04 Marks)
- 2.b. Why testing a disaster recovery plan is important? What are the different types of tests that could be performed? **[Comprehension]** (C01) (06 Marks)
- 2.c. Explain the 6 R's of disaster recovery life cycle. **[Application]** (C01) (10 Marks)
- 3.a. Explain the major differences between disaster recovery and business continuity. **[Knowledge]** (C02) (04 Marks)
- 3.b. Explain Business Impact Analysis (BIA) as one of the key elements of business continuity management. **[Comprehension]** (C02) (06 Marks)
- 3.c. How cloud-based solutions contribute to business continuity? Explain their major advantages. **[Application]** (C02) (10 Marks)

**or**

- 4.a. In 2005, Hurricane Katrina struck the Gulf Coast of the United States, causing widespread devastation Hancock Bank, headquartered in Mississippi, was directly in the path of the hurricane. How was the bank able to recover from this disaster? **[Knowledge]** (C02) (04 Marks)
- 4.b. Explain any 3 Key Strategies to Maintain Business Continuity **[Comprehension]** (C02) (06 Marks)
- 4.c. Explain the general process of building a BCP. **[Application]** (C02) (10 Marks)
- 5.a. What is the role of risk appetite in IT risk management, and how is it determined? **[Knowledge]** (C03) (04 Marks)
- 5.b. What is risk management? Explain any four strategies of risk mitigation. **[Comprehension]** (C03) (06 Marks)
- 5.c. What is a risk matrix and a risk register? Explain their roles in contingency planning. How risk level can be used as an indicator of risk impacts? **[Application]** (C03) (10 Marks)

**or**

- 6.a. What is mean by quantitative and qualitative risk assessment? Explain the benefits of each. **[Knowledge]** (C03) (04 Marks)
- 6.b. XYZ Manufacturing Company is a medium-sized company specializing in producing automotive parts. The company operates multiple manufacturing facilities, and its operations heavily rely on automated machinery and computer systems. During a routine maintenance operation, a critical server failure occurred, disrupting the production line and causing a temporary halt in manufacturing operations. The downtime resulted in delayed shipments and potential financial losses. Explain how contingency planning helped this company in maintaining business continuity and minimize the impact of the server failure? **[Comprehension]** (C03) (06 Marks)
- 6.c. A company is considering investing in an IT security solution to mitigate the risk of data breaches. The proposed solution would cost \$50,000 to implement annually. However, it's estimated that this solution would reduce the likelihood of a data breach from 10% to 2% per year. The potential financial loss per data breach incident is estimated to be \$300,000. Should the company invest in the security solution based on cost-benefit analysis? **[Application]** (C03) (10 Marks)
- 7.a. Explain the goals of security requirements and information categorization. **[Knowledge]** (C04) (04 Marks)
- 7.b. What are automated security tools? Give their advantages. **[Comprehension]** (C04) (06 Marks)

7.c A healthcare organization is implementing a new electronic health records (EHR) system to improve patient care and streamline operations. Explain the key risk identified and risk management approach that can be applied to the reduce the impact of the risks. **[Application]** (C04) (10 Marks)

**or**

8.a What is Request for Proposal (RFP)? what important role it plays during system acquisition. **[Knowledge]** (C04) (04 Marks)

8.b. Define security requirements. Why information categorization is important when planning for information security for your organization? **[Comprehension]** (C04) (06 Marks)

8.c Your organization is planning to acquire a new Customer Relationship Management (CRM) system to improve customer interactions and streamline sales processes. As the acquisition manager, you are tasked with initiating the Request for Proposal (RFP) process. What key steps and considerations would you include in the RFP to ensure a successful acquisition? **[Application]** (C04) (10 Marks)

9.a What is mean by auditing? Why auditing should be done for system acquisition process. **[Knowledge]** (C04) (04 Marks)

9.b Zoom experienced a surge in demand during the COVID-19 pandemic as organizations adopted remowork and virtual collaboration. Despite the unprecedented increase in usage, explain how Zoom was able to maintain its service reliability **[Comprehension]** (C03) (06 Marks)

9.c In 2011, Japan experienced a massive earthquake and tsunami that disrupted supply chains and manufacturing operations across the country. Toyota, one of the world's largest automakers, faced significant challenges. Explain Toyota's BCP, outcome and lesson learned. **[Application]** (C02) (10 Marks)

**or**

10.a What is business continuity and why is it important? Explain in brief. **[Knowledge]** (C02) (04 Marks)

10.b Explain the role of senior management and project managers in risk assessment. **[Comprehension]** (C03) (06 Marks)

10.c Information Assurance (IA) is essentially protecting information systems, and is often associated with the five pillars. Explain these five pillars. **[Application]** (C04) (10 Marks)