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**PRESIDENCY UNIVERSITY**

**Bengaluru**

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| **End - Term Examinations – JANUARY 2025** |
| **Date:** 08/ 01/ 2025 **Time:** 09:30 am – 12:30 pm |

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| **School:** SOE | **Program:** B.Tech CIV/CII | |
| **Course Code :** CIV2039 | **Course Name :** Construction Quality & Safety | |
| **Semester**: V | **Max Marks**: 100 | **Weightage**: 50% |

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| **CO - Levels** | **CO1** | **CO2** | **CO3** | **CO4** | **CO5** |
| **Marks** | **14** | **14** | **46** | **26** | **-** |

**Instructions:**

1. *Read all questions carefully and answer accordingly.*
2. *Do not write anything on the question paper other than roll number.*

**Part A**

|  |  |  |  |  |
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| **Answer ALL the Questions. Each question carries 2marks. 10Q x 2M=20M** | | | | |
| **1** | List any four principles of project organization. | **2 Marks** | **L1** | **CO1** |
| **2** | What are the three main phases of a construction project? | **2 Marks** | **L1** | **CO1** |
| **3** | List the activities included in Total Quality Management (TQM). | **2 Marks** | **L1** | **CO2** |
| **4** | Define benchmarking in construction quality management. | **2 Marks** | **L1** | **CO2** |
| **5** | Describe the role of Personal Protective Equipment (PPE) in minimizing construction site hazards. | **2 Marks** | **L2** | **CO3** |
| **6** | What are the direct and human costs associated with accidents in construction projects? | **2 Marks** | **L2** | **CO3** |
| **7** | What are safety performance indicators like LTIFR and TRIR, and how are they used? | **2 Marks** | **L2** | **CO3** |
| **8** | Provide an example of a situation where uncertainty might occur during a construction project. | **2 Marks** | **L2** | **CO4** |
| **9** | Why is financial risk particularly critical in construction? | **2 Marks** | **L2** | **CO4** |
| **10** | List few common Areas of Risk Identification in Construction. | **2 Marks** | **L2** | **CO4** |

**Part B**

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| **Answer the Questions Total 80 Marks** | | | | | |
| **11.** | **a.** | List and explain the Characteristics of a construction project. | **10 Marks** | **L2** | **CO1** |
| **or** | | | | | |
| **12.** | **a.** | What are the three main phases of a construction project. Explain? | **10 Marks** | **L2** | **CO1** |
|  |  |  |  |  |  |
| **13.** | **a.** | Explain the difference between Quality Assurance (QA) and Quality Control (QC) in construction. Provide examples. | **10**  **Marks** | **L2** | **CO2** |
| **or** | | | | | |
| **14.** | **a.** | List and explain different techniques used in TQM for analysis (any three in detail). | **10 Marks** | **L2** | **CO2** |

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| **15.** | **a.** | List and explain five key aspects of safety in construction. | **10 Marks** | **L2** | **CO3** |
| **Or** | | | | | |
| **16.** | **a.** | List the key components of an accident report and explain their significance. | **10 Marks** | **L2** | **CO3** |

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| **17.** | **a.** | Classify construction site accidents based on nature, cause, and outcome with examples. | **15 Marks** | **L2** | **CO3** |
| **Or** | | | | | |
| **18.** | **a.** | Why is risk assessment critical on construction sites? Provide examples of risks commonly found on high-rise building sites. | **15 Marks** | **L2** | **CO3** |

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| **19.** | **a.** | Outline the key steps involved in a safety audit and discuss the benefits of safety auditing in proactively preventing accidents. | **15 Marks** | **L2** | **CO3** |
| **Or** | | | | | |
| **20.** | **a.** | What are the essential components of an effective safety program for construction and explain the importance of monitoring and enforcement in a construction safety program | **15 Marks** | **L2** | **CO3** |

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| **21.** | **a.** | What are some strategies to minimize risks and mitigate losses in construction projects and how do safety risks differ from quality risks in construction projects? | **20 Marks** | **L2** | **CO4** |
| **Or** | | | | | |
| **22.** | **a.** | What are some common reasons for risks in construction projects and discuss some Necessary Permits in Construction & Civil Works. | **20 Marks** | **L2** | **CO4** |

**\*\*\*\*\* BEST WISHES \*\*\*\*\***