

School of Civil Engineering

Civil Engineering
ETE - Jun 2023

Time : 3 Hours

Marks : 50

Sem VI - BCEUCT1005 - Disaster Management

Your answer should be specific to the question asked

Draw neat labeled diagrams wherever necessary

1. Explain the importance of site selection in disaster-resistant house construction K2 CO5 (2)
2. Discuss the importance of early warning systems in mitigating the impact of natural disasters. K1 CO1 (2)
3. Summarize the impact of a bridge failure on transportation and infrastructure. K2 CO3 (2)
4. Compare and contrast the effects of a nuclear accident and a chemical spill as man-made disasters. K1 CO2 (2)
5. List three components of a risk assessment process. K2 CO4 (2)
6. Utilize your expertise in damage assessment to implement three distinct procedures for examining the impact of a wildfire on natural ecosystems, including vegetation, wildlife habitats, and water sources. K3 CO2 (5)
7. Evaluate the ethical considerations in search, rescue, evacuation, and logistic management activities. K4 CO2 (6)
8. Analyze the concept of vulnerability in disaster management and its significance in assessing disaster risks. Provide examples of how vulnerability can vary across different communities or regions. K3 CO1 (5)
9. Examine the ethical considerations involved in providing psychological support to victims after a disaster. K4 CO3 (8)
10. Critically evaluate the ethical considerations that engineers must navigate in the field of disaster management. Discuss the potential conflicts between professional responsibilities, public safety, and the needs and priorities of affected communities during various stages of a disaster. K5 CO5 (8)
11. Apply your knowledge of disaster response and describe the key actions you would undertake to provide medical triage, establish medical facilities, coordinate patient transport, and address public health concerns in the aftermath of the earthquake. K5 CO4 (8)