

Mid-West University  
**Examinations Management Office**  
End Semester Examinations-2080

Master level/ M. Sc. (Structural Engineering)/ 2<sup>nd</sup> Semester

Time: 3 hours

Subject: Disaster and Risk Management (ELE526/MSTR606)

Full Marks: 60

Pass Marks: 30

- *Attempt all the questions.*
- *Figures in the margin indicate full marks.*
- *Assume suitable values, with a stipulation, if necessary.*
- *Candidates are required to answer the questions in their own words as far as possible.*

1. What are the main elements of Disaster Risk Management cycle? Explain in details with examples of each? [5+5=10]
2. What do you mean by "Hazard", "Vulnerability" and "Risk"? Illustrate with examples. Write different types of Disasters that may occur in Nepal. [7+3=10]
3. Why disaster risk assessment is necessary for the development of projects? Explain the different components for the risk assessment before during and after the field work. [5+5=10]
4. Nepal has faced huge devastating earthquake last year. Different national and international media were reported that Nepal has done very good in rescue and recovery phase. As an Earthquake and Structural Engineer How do you analyze the situation in this context with examples? [10]
5. Differentiate between Hazard and disaster with some examples and write down the importance of disaster risk management in Nepal, is it satisfactory in case of risk management? [10]
6. What is Liquefaction? Explain the affecting Factors and selection criteria for liquefaction, as a Structural and Geotechnical Engineer how to prevent, mitigation during liquefaction with examples. [3+7=10]

**The End**