## Mid-West University

## **Examinations Management Office**

End-Semester Examinations -2080

Bachelor level/ B.E. Civil /3<sup>rd</sup> Semester

Time: 3 hours Pass Marks: 25

Full Marks: 50

**Subject: Engineering Geology (CE434/CE207)** 

- 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 is rock? How do you identify metamorphic rock in the field? Define the engineering significance of limestone, Quartzite, Phyllite. (10)
  - 2. What do you mean by engineering geology according to IAEG? Explain scope of geology in civil engineering briefly. (5)
  - 3. What is geological hazards? Differentiate between primary wave and secondary wave in earthquake. (5)
  - 4. Define Mohs' scale of hardness? Describe Cystal habit? (5)
  - 5. What is physical geology? Describe the geological work of groundwater. (5)
  - 6. Describe the major tectonic zones of Nepal Himalayas? (5)
  - 7. Describe the lithological characters of Karnali province. (5)
  - 8. Describe rock deformation. A quartzite bed is directed towards S20°W with a dip angle of 45°. Find out the strike of Quartzite bed. (5)
  - 9. Write short notes: (5)
    - a) Geological site investigation of dam
    - b) Field identification criteria of fault

The End