

Mid-West University
Examinations Management Office

End Semester Examinations 2081

Bachelor level/ B.E. Civil/ 3rd Semester

Time: 3 hours

Subject: Engineering geology (CE434/CE207)

Full Marks: 50

Pass Marks: 25

- *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 engineering geology? Why do civil engineers carry out engineering geological studies in Nepal? [1+4]
 2. Define plate tectonics. Describe the physical features of earth. [1+4]
 3. What is mineralogy and crystallography? Describe the symmetry elements of crystals? [1+1+3]
 4. What are the components of the earth? Describe the internal structure of the Earth with a diagram. [1+4]
 5. Define rock cycle. How do you identify metamorphic rocks in the field? Define the different structure of metamorphic rock? [1+2+3]
 6. What is earthquake? Differentiate between magnitude and intensity. [1+3]
 7. Differentiate between Anticlines and Synclines fold. What are the identification criteria of secondary geological structure in the field? [2+3]
 8. What is geological hazard? How do plate tectonics influence the formation of volcanoes? [2+3]
 9. Describe the major discontinuities system of the Nepal Himalaya and their engineering significance. [5]
 10. Write short notes on: [5]
 - a) Erosion and types
 - b) Geology of Karnali Province

The End