



DEDAN KIMATHI UNIVERSITY OF TECHNOLOGY
GEOHERMAL ENERGY TRAINING AND RESEARCH INSTITUTE
MSc IN GEOHERMAL ENERGY TECHNOLOGY

SPECIAL EXAMINATIONS

GET 4007: EARTH PROCESSES

DATE:

TIME: 3 HOURS

INSTRUCTIONS

- 1) TIME ALLOCATED – 3 hours
- 2) There are FIVE QUESTIONS in this paper
- 3) Attempt THREE questions
- 4) QUESTION 1 IS COMPULSORY and worth 30 marks. The other two questions have equal marks of 15 each
- 5) This Paper will count for 60% of the total score of GET 4007. The other 40% will be earned from CATS and assignments

Question 1 [30 marks] – This question is Compulsory

- a) Briefly describe the different types of faults *[6 Marks]*
- b) Briefly describe the driving forces of continental drift *[6 Marks]*
- c) Outline the factor which affect a stream ability to erode, transport and deposit sediment load *[6 Marks]*
- d) Describe the causes of earthquakes and their associated seismic waves *[6 Marks]*
- e) Describe characteristic differences of three types of volcanoes *[6 Marks]*

Question 2 [15 marks] – This question is Optional

- a) Briefly discuss the factors that affect the rate of weathering *[4 Marks]*
- b) Discuss erosion and give examples of agents of erosion *[5 Marks]*
- c) Discuss three different types of coasts *[6 Marks]*

Question 3 [15 marks] – This question is Optional

- a) Discuss the various types of internal heat energy *[9 Marks]*
- b) Discuss ways in which streams transport sediments *[6 Marks]*

Question 4 [15 marks] – This question is Optional

- a) Discuss at least six geological features resulting from wind processes *[10 Marks]*
- b) Discuss the various types of plate boundaries *[5 Marks]*

Question 5 [15 marks] – This question is Optional

- a) Discuss the different types of remnant magnetism *[8 Marks]*
- b) Discuss the geological features resulting from groundwater processes *[7 Marks]*