



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF SPATIAL PLANNING**  
**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN**  
**WATER RESOURCE AND ENVIRONMENTAL MANAGEMENT**  
**SEMESTER 2016/2017 ACADEMIC YEAR**

**CENTRE: MAIN CAMPUS**

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**COURSE CODE: PES 3212**

**COURSE TITLE: EARTH MATERIALS PHYSICAL PROCESSES AND THE ENVIRONMENT**

**EXAM VENUE: STREAM: SPATIAL PLANNING**

**DATE: EXAM SESSION:**

**TIME: 2 HOURS**

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**Instructions:**

- 1. Answer question 1 ( compulsory ) and ANY other 2 questions.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

### **Question 1**

- a) With the aid of an illustration describe the components of the atmosphere (8 marks)
- b) Explain the formation of the first and the second atmospheres (8 marks)
- c) Describe evidences, which confirm that the earth was once one whole land (5 marks)
- d) Explain any two theories on the origin of the Earth (6 marks)
- e) Explain the meaning of non-renewable mineral resources (5 marks)

### **Question 2**

- a) Discuss the formation of the universe and our solar system (10 marks)
- b) Use a neat diagram to describe the location of any five plate boundaries of the earth (10 marks)

### **Question 3**

- a) Describe plate motion as an explanation for the formation of continents (10 marks)
- b) Describe the general conditions through which fossils are formed (10 marks)

### **Question 4**

- a) Discuss the geo-hazards associated with plate boundaries (10 marks)
- b) Describe the causes and process of earth quake occurrence (10 marks)

### **Question 5**

- a) Describe the process of volcanic eruption and its associated hazards (10 marks)
- b) Discuss the human factors responsible for soil erosion in Kenya (10 marks)