# BIRKBECK COLLEGE (University of London)

**BSc EXAMINATION** 

SCHOOL OF SCIENCE

**TECTONIC GEOMORPHOLOGY** 

EASC066H6

15 Credits

Thursday 14 May 2020 09:30-12:30

Time allowed: 3 hours

### **INSTRUCTIONS**

Answer question one in section A and TWO questions from the four questions provided in section B, using diagrams and examples to support your answers.

Allow 1 hour for each question.

Use diagrams and examples to illustrate your answers.

All questions carry equal marks.

Candidates must NOT bring any supplementary material into the examination.

Calculators are NOT permitted.

#### **SECTION A**

- 1. Answer **TWO** of the following:
  - a) Outline how parallax may be used to map and study surface terrains.
  - b) Define:
    - i) Geoid;
      - ii) Rock uplift;
      - iii) Surface uplift;
      - iv) Exhumation;
      - v) Denudation.
  - c) Describe two relative dating methods suited to studies of glacial retreat.
  - d) Outline Davis's model of landscape evolution.

#### **SECTION B**

## Answer TWO of the following questions:

- 2. Explain why denser rocks may occupy higher elevations in a landscape.
- 3. Discuss the processes and feedbacks that govern the evolution of rifted margin landscapes.
- 4. Explain how an asymmetric pattern of precipitation can affect the distribution of strain in a convergent mountain belt such as the Southern Alps of New Zealand.
- 5. Describe how rivers can be used to detect and interpret landscape change.