BIRKBECK COLLEGE (University of London)

BSc EXAMINATION

SCHOOL OF SCIENCE

Department of Earth and Planetary Sciences

PALAEOECOLOGY

EASC039H6

15 credits

Thursday 7 May 2015

10.00 -13.00

INSTRUCTIONS

Answer THREE questions.

- 1. Compare and contrast the most likely causes of two different Phanerozoic mass extinction events. Give a reasoned argument for what you consider the most likely cause where there is a divergence of opinion.
- 2. Discuss the most likely taphonomic pathways that would result in the preservation of the remains of terrestrial vertebrates living in lowland floodplain areas and discuss the quality of our knowledge of extinct lowland vertebrates.
- 3. Discuss the main environmental stresses experienced by marine organisms inhabiting a sandy macrotidal beach.
- 4. Using examples, give an account of biogeographical changes that have occurred during the Holocene.
- 5. Explain how the presence and morphology of different diagenetic minerals can be used to interpret the conditions within the uppermost layers of sediment at the time of deposition.
- 6. Give an account of the changes in structure, biotic composition, size and occurrence of reefs through the Palaeozoic.