

BIRKBECK
(University of London)

BSc EXAMINATION

SCHOOL OF SCIENCE

DEPARTMENT OF EARTH AND PLANETARY SCIENCES

PALAEOECOLOGY

EASC039H6

15 CREDITS

Tuesday 17 May 2016

10:00 – 13:00

INSTRUCTIONS

Answer THREE questions.

1. Discuss the most likely taphonomic pathways that would result in the preservation of the remains of terrestrial vertebrates living in upland areas of limestone hills and small lake and fluvial basins. Discuss the quality of our knowledge of extinct upland vertebrates, comparing and contrasting the Mesozoic and Pleistocene.
2. In what ways may Quaternary marine environments be poor analogues for those of the Jurassic?
3. 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.
4. Discuss the main environmental stresses experienced by organisms living within the oceanic realm, and how these change with increasing water depth.
5. Discuss the physical and chemical conditions required to preserve fossils as apatite group minerals and allow phosphatic remains to accumulate.
6. Give an account of the changes in structure, biotic composition, size and occurrence of reefs through the Palaeozoic.