

Ollscoil na hÉireann, Gaillimh
National University of Ireland, Galway

Summer Examinations, 2004/2005

Exam Code(s)	3BA1, 4BA4
Exam(s)	3 rd Arts, 4 th Arts International
Module Code	TI318
Module	Climate Change
External Examiner(s)	Professor M. Dunford
Internal Examiner(s)	Professor U. Strohmayer Professor M. Ó Cinnéide Dr. Marie Mahon
<u>Instructions:</u>	Answer any three questions All questions carry equal marks
Duration	3hrs
No. of Answer books	1
No. of Pages	2
Department	Geography

1. Outline and critically assess the use of proxy data in the reconstruction of the climate record.
2. Provide an illustrated explanatory account of the main elements of the astronomical theory of climatic change and briefly evaluate the supporting evidence.
3. Provide a synthesis of the most salient changes in climate being predicted for the period to 2100 in the Third Assessment Report (2001) of the IPCC. Comment briefly on the climate prediction models used as well as on the emission scenarios that were considered.
4. Provide an illustrated explanatory account of ENSO, including its global ramifications. Briefly explore any possible links with global warming.
5. Explain what is meant by: (a) sensitivity, (b) adaptive capacity, and (c) vulnerability of natural systems to climate change.
Give some examples of significant recent changes to natural systems that have been attributed to climate change and briefly evaluate the linking evidence.
6. Outline the Kyoto Protocol relating to global warming and discuss critically some of the major issues surrounding its practical implementation.