

Ollscoil na hÉireann, Gaillimh
National University of Ireland, Galway

Summer Examinations 2001/2002

EC378 Economics of Technological Change

Final B.A., B.Comm, visting students

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Time Allowed: TWO HOURS.

Please answer **three** of the following questions, with the proviso that you may not answer both question 1 (on the research project) and another question closely related to the topic of the research project.

1. Outline the motivation behind the topic chosen for your research project in this course, indicate the nature of the sources used, and summarise the key ideas involved in it. Comment, where relevant, on the implications of your work for the conduct of Science, Technology and Innovation (STI) policy.
2. Describe the central elements of the concept of a national (and/or regional) innovation system and comment on the extent to which this represents an advance on neo-classical ideas about technological change and innovation.
3. Why are indicators and evaluation techniques important for the analysis of Science, Technology and Innovation (STI) policy? To whom are they important? Select a few such indicators/evaluation techniques and describe their usefulness and limitations briefly.
4. 'The rationale for Science, Technology and Innovation (STI) policy depends on our underlying model of the innovation process'. Discuss this statement in the context of neo-classical and evolutionary/institutional models of innovation.
5. What are the key channels through which Information and Communications Technologies (ICT) influence economic outcomes?

or

What criteria should be used to answer the question of whether internet technologies have, (or will) lead to a 'New Economy' in the sense often claimed?

6. Outline at least two main types of models of the diffusion of technology, and comment on the implications, if any, of the analysis of diffusion for the conduct of public policy.
7. Describe the key developments in the evolution of Science Technology and Innovation policy in Ireland from the pre-Independence science system to present day funding and institutional initiatives.