

OLLSCOIL na hEIREANN, GAILLIMH
NATIONAL UNIVERSITY OF IRELAND, GALWAY

SEMESTER 1 EXAMINATIONS, 2000-2001

SECOND ARTS EXAMINATION

GEOGRAPHY

TI 215 Hydrology

Weight : 5 ECTS

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Dr. Kieran Hickey
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Time allowed : 3 hours

Use a separate answer book for each section

Answer two questions from Section A and two questions from Section B, four in total.

SECTION A

1. Discuss the importance of vegetation in influencing the operation of the hydrological cycle.
2. Describe the main physical factors involved in infiltration.
3. "Even at the end of long dry periods, soils in natural conditions will always contain some water". Assess this statement with reference to the main forces involved.
4. Analyse the principal mechanisms by which groundwater storage occurs.

SECTION B

5. Identify and describe the three main groups of rocks which are vulnerable to karstification.
6. Caves in karst regions can be described as phreatic or vadose or a mixture of the two". Discuss this statement with reference to the cave solution processes involved.
7. Outline the principal causes of flooding in rural areas.
8. Flooding in Cork city is as a result of a combination of human and natural causes. Critically assess this statement.