

Candidates are admitted to the examination room ten minutes before the start of the examination. On admission to the examination room, you are permitted to acquaint yourself with the instructions below and to read the question paper.

Do not write anything until the invigilator informs you that you may start the examination. You will be given five minutes at the end of the examination to complete the front of any answer books used.

April 2010

Data Sheet
Answer Book

Any bilingual English language dictionary permitted
Calculators and programmable calculators are permitted

THE UNIVERSITY OF READING

MSc/Diploma

Course in Applied Meteorology

Course in Atmospheric, Ocean and Climate

MSc in Mathematics and Numerical Modelling of the Atmosphere and Oceans

PAPER MTMG44

Hydrology and global environmental change

Two Hours

Answer any TWO questions.

The marks for the individual components of each question are given in [] brackets. The total mark for the paper is 100.

1. Describe how you would measure the components of the water balance in a small catchment, and evaluate the relative accuracy of the different measurements
[50 marks]

2. Compare and contrast the mechanisms generating river flows in a temperate and a semi-arid catchment
[50 marks]

3. Assess the contribution of hydrological processes at the land surface to processes in the atmosphere. Back up your arguments with examples.
[50 marks]

(End of Question Paper)