



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2014/2015

INSTITUTIONAL BASED PROGRAMME (IBP) – AUGUST 2014 SESSION

EXAMINATION FOR THE DEGREE OF MASTER OF ARTS

AGE 812: METHODS AND TECHNIQUES OF CLIMATOLOGY

DATE: Friday 2nd January 2015

TIME: 2.00p.m-5.00p.m

INSTRUCTIONS

Answer FOUR questions. Use illustrations where appropriate. All questions carry equal marks

1. a) Briefly explain how the international meteorological observing network works.
(7.5 marks)
b) Explain the importance of historical weather data in agro-climatic studies. (10 marks)
2. a) Using examples compare and contrast indicating and recording weather instruments.
(10 marks)
b) Examine the merits and demerits of the different types of temperature measuring instruments.
(7.5 marks)
3. Using specific examples discuss the merits and demerits of remote sensing techniques in weather observation in Africa.
(17.5 marks)
4. Examine the instrumentation and measurement of radiation and evaporation and explain how to archive the data.
(17.5 marks)
5. Discuss the importance of statistical analysis of scalar and vector quantities of climatic data.
(17.5 marks)
6. Discuss the significance of Thermal Efficiency (TE) and Precipitation Effectiveness (PE) indices in climatic studies.
(17.5 marks)