UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For The Following Qualification:-

M.Sc.

ESGL6: Lighting: Applied Calculations

COURSE CODE	:	**ENVSGL06**
DATE	:	**19-MAY-03**
TIME	:	**14.30**
TIME ALLOWED	:	**2 Hours**

TURN OVER

UNIVERSITY OF LONDON

MSc DEGREE IN BUILT ENVIRONMENT 2003
for Internal Students of University College London

ESGL6: Lighting: applied calculations

Answer **TWO** questions.

All questions carry equal marks. Use annotated sketches.

1. State the formula for the calculation of Unified Glare Rating (UGR).

   Outline the steps necessary to calculate a standard UGR table from luminaire intensity data.

2. What are the requirements for the lighting of major and minor roads ? Explain why they are different and describe the areas over which calculations are made.

3. Describe the main features of a spectroradiometer.

   Outline the stages in determining the chromaticity coordinates of an unknown test filter illuminated by a full radiator (2856K) by measuring its spectral power absorptance.

4. Field measurements are undertaken in both interior and road lighting applications. Discuss the requirements for meter performance and measurement procedure for both interior *illuminance* measurement and road *luminance* measurement.

END OF PAPER