

UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For the following qualifications :-

M. Sc.

ESGL5: Lighting Practice

COURSE CODE : **ENVSGLO5**

DATE : **08-MAY-02**

TIME : **14.30**

TIME ALLOWED : **2 hours**

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TURN OVER

UNIVERSITY OF LONDON

MSc DEGREE IN BUILT ENVIRONMENT 2002
for Internal Students of University College London

ESGL5: Lighting practice

Answer **TWO** questions.

All questions carry equal marks. Use annotated sketches.

1. Luminaire performance is described by its intensity distribution curve measured on a goniophotometer or polar curve photometer. Describe the basic components of such a photometer and the precautions taken to achieve accuracy.

Which further luminaire parameters may be derived from the intensity distribution data?

2. The Construction (Design and Management) Regulations 1994 have been implemented to ensure the planning, coordination and management of health and safety in the design, construction and post-construction phases of the construction process.

You are asked to assess the impact of this legislation on lighting design practice with special reference to the provision of information and the control of risk to contractors, installers and users.

3. Luminaires are tested by manufacturers to meet the requirements of the appropriate standards. Which electrical, mechanical and thermal tests would be applied to a new design for a direct/indirect fluorescent luminaire available in surface-mounted, suspended and wall-mounted versions?

4. The lighting design process parallels the construction process from client briefing through design installation and commissioning to post-occupancy evaluation. Prepare a matrix indicating the skills that a lighting designer brings to bear on the design process at each stage and identify the points at which the design is subject to constraints and is likely to be compromised.

END OF PAPER