



the
UNIVERSITY
of
GREENWICH

EXAMINATION PAPER: **ACADEMIC SESSION 2005 / 2006**

Campus **Avery Hill**

School **Architecture and Construction**

Title of Programme **BA (Hons) LANDSCAPE ARCHITECTURE**
BA (Hons) LANDSCAPE ARCHITECTURE with ARCHITECTURE
BA (Hons) LANDSCAPE ARCHITECTURE with LANGUAGE
BSc (Hons) LANDSCAPE MANAGEMENT
BA (Hons) GARDEN DESIGN
CERT in LANDSCAPE DESIGN
HND / C LANDSCAPE MANAGEMENT
HND / C GARDEN DESIGN

Level **Undergraduate**

Academic Stage of the Course **1**

TITLE OF PAPER **HARD AND SOFT MATERIAL**

COURSE CODE **ENVT 1002**

Date and Time **Wednesday 3rd May 2006, start 9.30 am**

Duration **3 hours**

Answer TWO questions from Part A and TWO questions from Part B. Use separate answer books for Part A and Part B. Ensure all parts of each question are answered. You should use diagrams / sketches where appropriate.

All questions carry equal marks.

Candidates must comply with the ‘Instructions to Candidates’ printed on the examination answer book.

Part A: Hard Landscape

1. (a) Using diagrams and sketches describe the characteristics and differences between the following brickwork bonds including examples of when you would use them:

Stretcher Bond

Flemish Bond

English Bond

English Garden Wall Bond

Flemish Garden Wall Bond

English Cross Bond

(12 marks)

- (b) Explain what is meant by the following terms:

Coping

Capping

Damp proof course

Foundation

Engineering Brick

Facing Brick

Weep Hole

(13 marks)

/continued

- 2 (a) Discuss how the formless nature of concrete makes it an ideal construction material, giving examples of when you would use it. (9 marks)
- (b) Choose three of the following materials and explain how their specific properties contribute to their use as a construction material.
- Clay
 - Copper
 - Granite
 - Mild steel
 - Oak
 - Polyester
 - Portland Limestone
 - Slate
 - Stainless steel
 - Western red cedar
 - Yorkstone
- (12 marks)
- (c) Describe the main four criteria that you would consider when choosing any material for a project. (4 marks)
3. (a) Describe the process of polymerization and how this affects the properties of thermosets and thermoplastics (10 marks)
- (b) Using specific examples compare the properties of ferrous and non-ferrous metals as construction materials. (9 marks)
- (c) Draw a diagram to show the stages in modern glass production (6 marks)

Part B – Soft Landscape

- 1 a) List the different types of pruning that are commonly practised on shrubs in gardens and landscapes. In each case give a brief description of the purpose of the operation, and give at least one named example of a suitable plant. (16 marks)
- b) Describe the pruning and training of a late-flowering clematis planted against a 3 metre high wall. (5 marks)
- c) Briefly describe the differences in use and application of the herbicides glyphosate and paraquat. (4 marks)
2. When designing with plants, outline the value of the plant lists in the back of the Hillier Manual of Trees and Shrubs. Ensure that your answer is illustrated by the use of a full range of examples to show the scope of these lists. Where appropriate include examples of named plants. (25 marks)
3. Describe the visual characteristics and seasonal features of **SIX** of the following plants:
- i) Quercus robur
 - ii) Vitis coignetiae
 - iii) Daphne bholua
 - iv) Prunus laurocerasus ‘Otto Luyken’
 - v) Juniperus communis ‘Depressa Aurea’
 - vi) Prunus serrula
 - vii) Cornus sanguinea “Winter Beauty”
 - viii) Arbutus unedo
- (25 marks)