# **UNIVERSITY COLLEGE LONDON**

# University of London

# **EXAMINATION FOR INTERNAL STUDENTS**

For The Following Qualification:-

B.Sc.

**ES2040: Quantity Surveying and Contract Procurement** 

COURSE CODE : ENV\$2040

UNIT VALUE

: 0.50

DATE

: 25-MAY-05

TIME

: 10.00

TIME ALLOWED : 3 Hours

## ENVS 2040 QUANTITY SURVEYING AND CONTRACT PROCUREMENT

Answer FOUR questions.
All questions carry equal marks.

#### **OUESTION 1**

"In construction procurement, the relationship of parties involved in the process may vary, according to the procurement route chosen. There will always remain the client but various consultants and contractors involved may or may not have a direct contract with him and their duties will probably be different, from one procurement system to another." Turner A., <u>Building Procurement</u>, Second Edition 1997, MacMillan, page 30.

Discuss, illustrate and explain this statement relative to the traditional, design and build, and construction management procurement systems.

(25 marks)

### **QUESTION 2**

"For many years (private) quantity surveyors have been seen as accountants to the construction industry, knights in shining armour, safeguarding clients to ensure that they receive a building as close as possible to the initial agreed target price." Cartlidge D., (2002), New Aspects of Quantity Surveying Practice, Butterworth Heinemann, Page 34.

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(25 marks)

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**TURN OVER** 

### **QUESTION 3**

As part pf the project appreciation stage during the estimating and tender preparation process, the main contractor is strongly advised to visit the proposed construction site in order to determine whether the proposed site itself or its surroundings are likely to have implications on the contractors construction cost, the construction method, the construction programme and the overall construction time, etc.

Discuss. (25 marks)

#### **QUESTION 4**

An employer would like to include within a project a major artistic feature incorporating a carved masonry of the company's logo.

Appraise the alternatives available to the employer at both pre-contract and post-contract stages to have this specialist work undertaken.

(25 marks)

### **QUESTION 5**

Take off the quantities for the concrete, formwork and reinforcement from ground floor to first floor level to the reinforced concrete frame on the attached drawings. The work to be measured therefore is the:-

- columns from ground floor to first floor
- first floor perimeter, primary and secondary beams
- suspended first floor.

Adjust the suspended floor and attached beam measurements to take account of the staircase openings.

(25 marks)

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**CONTINUED** 

### **QUESTION 6**

The following is taken from a bill of quantities for a reinforced concrete framed building:

Type 'J' formwork to columns; isolated; plain rectangular; In 36 No columns ..... 167m<sup>2</sup>

Analyse a gross unit rate per m<sup>2</sup> for the formwork to the columns.

### (25 marks)

# Data and information for Question 6 above

The column sizes are 400mm x 400mm x 2.90m high and the method statement assumes 4 uses per column shutter mould on a 7 day cycle.

19mm shuttering plywood Sawn timber Nails		£145/10m <sup>2</sup> £400/m <sup>3</sup> £1.50/kg
Weekly hire rates for adjust	table steel props	
and column clamps	• •	35p each per week
Shuttering carpenter		£13.50/hr
Labourer		£7.50/hr
Expected labour outputs	<ul> <li>making shutter</li> <li>oiling shutter</li> <li>cleaning shutter</li> <li>fixing shutter</li> <li>striking shutter</li> </ul>	1.30 hrs/m <sup>2</sup> 0.08 hrs/m <sup>2</sup> 0.11 hrs/m <sup>2</sup> 0.80 hrs/m <sup>2</sup> 0.40 hrs/m <sup>2</sup>
Overheads and profit	- allow 15%	

Candidates are to assume all other information required and to show these assumptions within their answers.

#### **END OF PAPER**

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