

UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For The Following Qualification:–

B.Sc.

ES2040: Quantity Surveying and Contract Procurement

COURSE CODE : ENV52040

UNIT VALUE : 0.50

DATE : 12–MAY–06

TIME : 10.00

TIME ALLOWED : 3 Hours

ENVS 2040 QUANTITY SURVEYING AND CONTRACT PROCUREMENT

Answer FOUR questions.
All questions carry equal marks.

QUESTION 1

“From a client’s perspective it is not enough to claim that the client’s quantity surveyor is delivering a better value service; this has to be demonstrated.”
Cartlidge D. (2002) New Aspects of Quantity Surveying Practice, Butterworth Heineman.

Discuss this statement relative to the work of the independent professional quantity surveyor working within traditional procurement methods.

(25 marks)

QUESTION 2

“The individual nature of many construction projects increases the inherent risks. These risks include completing a project which does not meet the client’s needs, which is delivered late or costs more than the client can pay or fund. All these risks can impact the client’s core business, seriously. The procurement strategy developed therefore, should balance risks against project objectives at an early stage.

The key criteria listed below are interdependent and often in tension:-

- time (speed or certainty of completion date)
- cost (price level or cost certainty)
- quality (functionality and performance)

Emphasis on only one of the key criteria will almost certainly have a negative effect upon the others. The business case will help determine which criteria are most important and which could constitute the greatest risk.” Constructing Excellence, Procurement 15/3/2004.

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

(25 marks)

QUESTION 3

During Stage D, the Detailed Proposal stage of the RIBA Plan of Work, the Quantity Surveyor is required to produce an elemental cost plan. This cost plan will serve two important purposes:-

- to confirm the budget already determined, and
- to allow the distribution of costs within the various functional elements to be made and to ensure that the distribution is appropriate for the needs of the building.

In principle the production of an elemental cost plan is quite straight forward, although in practice it needs judgement and experience because every building is unique.

Describe the process of establishing an elemental cost plan and explain how the historical information derived from cost analyses of similar buildings is adjusted from a quantitative, qualitative and a time and location point of view.

(25 marks)

QUESTION 4

An employer is going to commission, at some stage during the project, a stone sculpture as an external major artistic feature at the entrance to the company's new build head office complex, for which tender documentation is currently being prepared.

The employer would like to include the cost of this sculpture within the contract sum, if this is possible. If this is not possible the employer would welcome further suggestions as to how to deal with this commission contractually.

Therefore, appraise the alternatives available to the employer at both the 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 first floor level to roof level to the reinforced concrete framed office development building on the attached drawing. The work to be measured therefore are the columns from first floor level to roof level, the roof slab, attached beams and the concrete upstand. Do not measure or make any adjustments for the staircase.

(25 marks)

Specification information

| | | |
|---------------|---|---|
| Concrete | - | mix type 'D' to BS5328, 20mm aggregate |
| Formwork | - | finish type 'F' |
| Reinforcement | - | bars grade 460 to BS4449 as schedule |
| | - | fabric 3.049kg/m ² to BS4483 |

QUESTION 6

- a) The demands of good governance and indeed the survival of construction companies have lead to the increasing application of risk management within the Main Contractor's tender process. Risk management enables the main contractor to identify, quantify and manage risks and thereby to make better tendering decisions and achieve better outcomes. Outline the principle project risks which might be identified, at tender stage, by the Main Contractor.

(10 marks)

- b) These identified tender stage risks are then assessed for their severity (i.e. their impact if they were to occur) and the probability of occurrence. Strategies implemented during the tender process should lead to the fact that the risks will have, to a large extent, been managed by the time that the tender is adjudicated by the Directors of the Company.

Explain a typical tender stage Risk Register and discuss how some of the risks identified can be managed and/or costed within the Main Contractor's tender.

(15 marks)

END OF PAPER