

UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For The Following Qualification:–

B.Sc.

ES2223: Technology Studies

COURSE CODE : ENVS2223

UNIT VALUE : 0.50

DATE : 18-MAY-06

TIME : 10.00

TIME ALLOWED : 3 Hours

ENVS 2223 TECHNOLOGY STUDIES

Answer 5 questions only

1. Regardless of the information provided in the contract documents, bills of quantities, specifications and soil reports, a visit to the site for a detailed study is an essential preliminary to any planning or pricing action. List and describe the information, which should be gathered in a 'Site Inspection Report'.
(20 marks)
2. Most commercial developments in town centre areas involve the construction of deep basements, both for car parking facilities and other uses. Describe the problems associated with work of this nature and illustrate a method of construction suitable in this situation.
(20 marks)
3. Structural steel has proved a major competitor to reinforced concrete construction in recent years in the provision of high rise structures. Discuss the merits and problems associated with these systems of construction, with particular emphasis on speed and quality.
(20 marks)
4. The range of cladding materials and methods available today is very wide, briefly describe some of the alternatives available for both low rise industrial and high rise commercial buildings, and list the key issues in design and fixing.
(20 marks)
5. Some degree of waste of materials is inevitable in the construction process. Describe the main reasons for waste and suggest what steps site management may take to control this problem.
(20 marks)
6. Over recent years the term 'buildability' has become associated with the influence of design on construction cost and practicability of execution. What is buildability and how can it bring cost benefits to the clients of the construction industry.
(20 marks)
7. Describe and discuss the main influences that current health and safety requirements have on the design, construction and management of the construction process.
(20 Marks)
8. Predicted climate changes may necessitate a greater amount of protection on site during both the summer and winter building periods. Describe the main problems that may occur during the construction process if the predicted climate change becomes a reality, and discuss measures that could be adopted to minimise the effects of adverse weather conditions on site.
(20 marks)

END OF PAPER