



the
UNIVERSITY
of
GREENWICH

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

Campus: **Avery Hill**

School: **Architecture and Construction**

Department : **Building Economics & Management**

Course Code: **BUIL 1007**

Course Title: **STUDIO IIIA (Building Surveying)**

Level: **3**

Duration: **3 hours**

Date: **Friday 12th May, 2006, start at 2 pm**

INSTRUCTIONS TO CANDIDATES & FOR INVIGILATORS

Answer FOUR questions.

All questions carry equal marks.

Candidates must comply with the “Instructions to Candidates” printed on the examination answer book.

Where appropriate you should expand the answers to include examples from your own personal or professional experiences.

1. Innovative design requires designers having the freedom to experiment with new materials and construction techniques that complement the completed building function. The way that the current system of building legislation in England prevents such innovative design from taking place.

Discuss.

(25 marks)

2. A small building surveying practice is planning to expand its services and to relocate its offices. The new practice will employ a total of ten surveyors, including the two partners, and appropriate support staff. The partners have identified a site suitable for the construction of the new office building. The site located within a conservation area on the outskirts of town and all necessary services are available at the site boundaries.

Discuss the process of design, indicating how the space and other requirements will be determined and satisfied within the context of sustainable development and construction.

(25 marks)

3. A large three storey property, used as office accommodation, has recently suffered a fire on the first floor. The fire damage was contained within one section at the rear of the building but there has been substantial water and smoke damage to other parts of the building.

The client, who is in financial services, needs to continue trading from the building and he has approached your surveying practice to develop proposals for the reuse of the building as soon as possible.

a) Outline the steps that need to be taken to ensure that the building is safe for use.

(8 marks)

b) Develop proposals that will ensure a speedy reoccupation of the building. This must include reference to all the sequence of all remedial work required and an appropriate time line for such works to be carried out

(17 Marks)

(continued..)

4. All rehabilitation and conversion work requires a compromise between the facilities available in the existing building and the facilities and space requirements of the completed project.

Using the conversion of a “typical” three storey mid terraced house, currently occupied by a single family, to two self contained flats, discuss how this type of compromise may be achieved.

The building is of masonry construction, build in the mid 1950,s. It is located in a quiet street and enjoys a front garden, 10 metres long and a rear garden 20 metres long. Access to the rear garden is via the house only.

(25 marks)

5. Critically appraise the implementation of the Disability Discrimination Act (1995) on:

a) The design and use of new buildings. **(10 marks)**

b) The use of existing buildings **(15 marks)**

6. Sustainable construction requires the designer to ensure that all resources required to complete the project are used to the benefit of the building, the environment and society generally. For many this will mean a focus on recyclable materials or the use of materials that can be replenished while others may take a more holistic view.

Critically discuss the concept of sustainability in relation to the design and construction of complex buildings today.