



the  
UNIVERSITY  
of  
GREENWICH

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

**Campus**                            **Avery Hill**

**School**                             **Architecture and Construction**

**Title of Programme**            **BSc (Hons) BUILDING SURVEYING**  
**BSc (Hons) ESTATE MANAGEMENT**  
**BSc (Hons) FACILITIES MANAGEMENT**  
**BSc (Hons) HOUSING STUDIES**

**Level**                               **Undergraduate**

**Academic Stage of the Course**   **3**

**TITLE OF PAPER**                **FACILITIES MANAGEMENT**

**COURSE CODE**                 **BUIL 0100**

**Date and Time**                 **Monday 15<sup>th</sup> May 2006, start 9.30 am**

**Duration:**                        **3 hours**

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**Answer ALL questions. Questions do not carry equal marks.**

**All of the questions are based on the same scenario but they are independent of each other.**

**Each question may be answered without reference to any other answers or restrictions placed because of any other answer.**

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

## Scenario:

This scenario relates to a large national organisation that owns and manages the buildings it occupies. The organisation has recently appointed you as its first facilities manager as they wish to develop a coherent estates strategy for the business and how this can assist it in carrying out its core business.

The organisation operates through a number of regional assembly / production sites in three different locations. Each site is currently working at full capacity and contains an assembly / production area, storage area for components, distribution warehouses, dining and rest facilities for employees as well as accommodation for a Sales Department, a Finance Department and a Human Resources Department.

The organisation assembles / manufactures computers and other related products for sale to organisations and the public. Goods can be ordered on the internet, by mail or in person at each site. While some activities are shared between sites they also operate independently of each other producing a variety of computer related products.

The business strategy of the organisation includes a proposal to refurbish and modernise its production units by upgrading the assembly processes and equipment. There is also a strong desire from senior managers to explore if there are any benefits to rationalising its property portfolio and for centralising in a single location the Sales, Finance and Human Resource functions of the organisation.

The geographical locations of the sites are as follows:

Site A: Located in Ruchazie, a major industrial and commercial centre. The area has a very small number of low quality houses close to the centre. Most of the existing employees live in nearby areas and require the use of a car or public transport to get to work. There are sufficient car parking facilities on site to accommodate them.

Site B: Located to 400 kilometres to the east of Ruchazie, on the outskirts of a major city. Until recently the area was a prosperous commercial and industrial centre but it has suffered from the effects of some large organisations moving out of the area. Most of the current workforce live within a short distance of the site. There are good public transport facilities and some car parking for employees on site

Site C: Located approximately 500 kilometres to the north of Ruchazie within an industrial area near the centre of a large town. The location of this site restricts the employees to the use of public transport as there is no facility for employees to park cars nearby. There is a small car park for customer use.

In order to maintain its customer base and market presence, it is proposed that the refurbishment and modernisation of the various production assembly units will take place sequentially so that the organisation will still be able to meet customer demand across the organisation as a whole. This may mean that, despite working at full capacity, consideration will need to be given to how the current level of production can be maintained while a site is being refurbished.

It is anticipated that the refurbishment / modernisation will be extensive including upgrading or renewing services, providing an appropriate networking infrastructure, replacing the air-conditioning system, commissioning new equipment etc. Your organisation will also take the opportunity to bring the buildings up to compliance of all statutory building standards.

As the facilities manager you will be responsible for preparing proposals for how the work may be carried out and for preparing proposals for the rationalisation of the various processes and project managing the works. The proposals are to be presented by you to senior managers for approval prior to any work being started.

The following points have been raised by various managers or employees of the organisation and you have been asked to address each of them within your proposals.

**Property:**

As you are aware, the company is considering whether there are any benefits in rationalising or reducing its property base. Using the information given above regarding each site and its location produce a report for the directors of the organisation advising them of a suitable disposal strategy and recommend which of the sites you would dispose off.

**(20 Marks)**

**Health and Safety:**

The issue of ensuring the health and safety for those working in the storage, assembly and distribution areas during the refurbishment work was also raised by the employee representatives. These concerns have resulted in the agreement to carry out a health and safety risk assessment of the proposed works.

Discuss the most significant health and safety issues involved and indicate how these may be assessed and any action that you will take to mitigate them.

**(20 Marks)**

**Benchmarking:**

The Directors have instructed you to carry out an investigation into how the various departments (Sales, Finance and Human Relations) perform in relation to both best practice and each other. They have indicated that the investigation should include mention of any benefits that may be gained from rationalising or centralising the processes so that they are not duplicated on each site.

Prepare a confidential report for the Directors detailing how you propose to carry out this exercise and why you selected this method for doing so. Your report should also include mention of any benefits or disadvantages of rationalisation and how such a rationalisation may be successfully achieved including recommendations as to which site should be used for centralised activities.

**(20 marks)**

**Disruption:**

The managers of each site have expressed concerns that the refurbishment / modernisation works will disrupt the normal working pattern of the site. They are worried that there will be an increased risk to the processes involved. Some of this risk will be physical while other risks will be more commercial in nature. They are concerned that the disruption may have far reaching consequences.

Your response is that the organisations has a long standing “disaster recovery” plan in place. The managers have therefore asked for information on this plan and the part they are expected to play.

Through a critical appraisal of the potential for the works to encounter significant problems inform the managers of the actions that will take place in the event of a “disaster”. The appraisal must clearly show how the organisation will minimise the risk and effect of any “disaster” and the consequences for the organisations.

**(10 marks)**

**Legislation:**

Many countries throughout the world have made changes in legislation so that buildings to be accessible by those with disabilities. Normally the responsibility to comply with this legislation rests with employers and owners of buildings. While accepting that the existing buildings do not meet these requirements the employee representatives have asked for reassurance that the refurbishment work will provide a workplace that will comply with this type of legislation.

In order to provide this reassurance you have asked you to carry out research into the requirements of relevant legislation and to write a report demonstrating clearly the principles that will be applied during the design process to ensure that the refurbished buildings ensure complete compliance with relevant legislation. The report must show clearly how all building users will be able to use the facility.

**(10 marks)**

**Cleaning of workplaces:**

The organisation currently undertakes the responsibility for the cleaning and other hygiene aspects within the buildings through the use of directly employed workers.

It has been suggested that all hygiene / cleaning arrangement should be provided by the use of independent specialist organisations.

You have been requested to investigate the potential benefits of such a change and to produce a confidential report of your conclusions to the Directors. The report must clearly show recommendations on how the organisation should proceed, giving clear reasons for such recommendations.

**(10 marks)**

**Asset management:**

Strategic asset management has an important role to play in the company's success. Discuss what it means and how it may influence the company's approach to facilities management.

**(10 marks)**