



CEX7112 - Management Information Systems for the Construction Industry

FINAL EXAMINATION - 2010/2011

Time Allowed: Three Hours

Date: 2011 - 03 - 27 (Sunday)

Time: 1400 - 1700 hrs

Answer any Four (04) questions.

Q1.

- i.) State the salient features of the 'Systems Concept' and describe the main characteristics of the 'Systems Method'. You may use an island wide Super Market chain as an example to demonstrate your answer.

(Marks 08)

- ii.) Describe the 'Bottom - up' approach in the development of a Master Plan for an MIS and discuss the advantages and disadvantages of the method.

(Marks 08)

- iii.) GCE (Advanced Level) curriculum was recently introduced with a subject titled "General Information Technology" (GIT). Assuming that you are invited to deliver a one hour Seminar on Management Information Systems to students of a National school, just about to sit for this paper, develop an outline draft on what you should educate the student on, so that they will have a sound founding on the concepts of an MIS.

(Marks 09)

Q2.

- i.) Clearly describe and contrast the differences between the *three (03)* common levels found in a hierarchical Structure of a Management Information System.

(Marks 08)

- ii.) In the "Development Process" for a system, three (03) major stages are identified. Describe these stages with specific references to Management Information System development.

(Marks 08)

- iii.) One of the most common techniques adopted in the development of "Systems" such as a Management Information System is "Systems Development Life Cycle Model". Describe the four (04) phases of this technique highlighting the bearing on Management Information System development.

(Marks 09)

Q3.

- i.) Write a descriptive note on application of "Flow Charts" in the development of Management Information Systems.

(Marks 08)

- ii.) Write descriptive notes on the following;

- a.) Decision Tables  
b.) Structured walkthrough

(Marks 08)

- iii.) Describe the concepts and principles of Programming with special reference to the *four (04)* classifications to which programming instructions are grouped.

(Marks 09)



Q4.

- i.) Describe the functions expected of an "Operating System" for a microcomputer and present an account of the development of operating systems to the sophistication of present day, indicating levels of utility and user-friendliness of these systems at each stage.  
(Marks 08)
- ii.) Computers with multimedia capabilities have lately influenced Presentation of ideas to other people at a lecture or a seminar. To utilize the full power of the multimedia capabilities of computers for these purposes a category of programs called "Presentation Software" has evolved. Describe the features expected of such software to be used in the construction industry for conceptual explanations, technical briefings, site meetings, etc.  
(Marks 08)
- iii.) Engineering applications often require data handling through multiple stages of calculations. One of the very versatile tools made available to the Engineer from the early days of computers is an application software called a "Spread Sheet", which are designed to manipulate data on a two dimensional plane. After describing the salient features that should be present in such a software package, establish the steps involved in the development of a computer based tool for extracting quantities from Structural & Layout drawings for a housing project and preparing the Bill of Quantities (BOQ).  
(Marks 09)

Q5.

- i.) E-mail is the personal written communication system that gained wide acceptance in the information age. Describe how e-mail system works and useful features available with the system. Further, describe how large files can be made smaller (such as AutoCAD drawing files, audio or video files), so that they can be sent through e-mail.  
(Marks 08)
- ii.) "Micro Processors" for computers have evolved tremendously from early 1980s' to the present day. It is one of the major factors that contributed in the information revolution. Describe the chronological evolution of the famous 'Intel' range of Micro Processors with particular reference to clock speeds and data bus widths.  
(Marks 08)
- iii.) One of the reasons for the popularity of microcomputers is the substantial advances made in the 'storage media' technologies. Discuss the types, storage technologies and capacities of currently popular storage media for use with microcomputers.  
(Marks 09)

Q6.

- i.) Discuss the conceptual meaning of "Artificial Intelligence" (AI) as applied to computer and information technology. Use a possible application of AI in the construction industry to illustrate the future use of such technology.  
(Marks 08)
- ii.) Recent trend in communication between computing and communication devices has shifted from Cables to Wire-less technologies. Describe *two* (02) such wire-less technologies popular in the present day.  
(Marks 08)
- iii.) Describe the historical development and working concept of "Internet". What are the possibilities available for the construction industry to exploit the worldwide coverage of Internet?  
(Marks 09)





**CEX7113 - Real Estate & Property Development**

*FINAL EXAMINATION - 2010/2011*

Time Allowed: Three Hours

Date: 2011 - 03 - 26 (Saturday)

Time: 1400 - 1700 hrs

Answer Five (05) questions with at least One (01) from each section.

**Section A - Valuation of Property**

**Q1.**

One of the four main stages of a property development project is the 'preparation' stage. Several activities should be carried out during this stage to ensure proper completion of the project. Identify five such activities need to be carried out during the preparation stage and briefly describe them. (20 Marks)

**Q2.**

In the 'investment' method of valuation of property, the property is considered as an investment capable of yielding an annual return. Explain briefly the four main steps of the investment method of valuation and illustrate with an example. (20 marks)

**Section B - Finance for Property Development**

**Q3.**

Lending institutions may provide short term loans (bridging finance) to property developers to build houses for sale. These institutions take a cautious approach and usually request the developer to forward a project report in this connection. Discuss the important aspects which the developer should include into this Project Report. (20 marks)

**Q4.**

Describe the aspects taken into consideration by the lending institutions when approving long-term loans to persons who wish to buy houses built by property developers. (20 marks)

**Section C - Property Law and Acts**

**Q5.**

Set out the modes of acquisition of property and discuss the various types of improvements which enhance the value of property. (20 Marks)

**Q6.**

Define the term condominium property and set out the requisites of a condominium plan. (20 Marks)

**Section D – Town Planning**

Q7.

What are the main features found in the 'Housing and Town Planning Ordinance'? Give a brief description of preventive and remedial measures introduced by the same ordinance to prevent the deterioration of towns and to improve the already deteriorated areas. (20 marks)

Q8.

An important planning tool introduced by the Urban Development Authority (UDA) Law no. 41 of 1978 is the concept of a "Development Plan" for areas declared as "development areas" under the UDA law. Describe the procedure adopted from preparation to publishing of the above mentioned development plan for a particular development area. (20 Marks)