

# INFORMATION TECHNOLOGY MANAGEMENT

Answer **ANY FOUR** questions

## Question 1

- (a) What is the rationale for using a CASE tool from the organization point of view? [5 marks]
- (b) Describe the features of CASE as a tool in system development. [12 marks]
- (c) Describe the benefits of using CASE. [6 marks]
- (d) Identify two advantages of acquiring off the shelf CASE tools as compared to developing them yourself. [2 marks]

[Total 25 marks]

## Question 2.

- (a) Summarise five disadvantages of Electronic Commerce. [5 mark]
- (b) Describe five web challenges that are caused by the rapid expansion of WWW. [5 marks]
- (c) What are the most common revenue sources for B2C e-commerce companies? [5 marks]
- (d) An effective site is one that creates an attractive presence that meets the objectives of the business or other organization. Give five possible objectives of achieving web presence goals. [5 marks]
- (e) In implementing business plan for e-commerce web site, what could be the objectives that inspire business to undertake challenging activities to improve their competitive positions in the business world? Identify at least five activities that most companies could do to achieve this.

[Total 25 marks]

### **Question 3**

- (a) Define the term project management. What is the main objective of project management? **[5 marks]**
- (b) Your company have started a new project but encountered the problem of experienced technical staff within the team.
  - (i) List three sources from which temporary expert help may be sought to improve on this situation. **[3 marks]**
  - (ii) State three reasons for bringing in temporary expert help. **[3 marks]**
  - (iii) Describe four possible problems with bringing in such temporary expert assistance. **[4 marks]**
- (c) Projects and project management have been subjected to unprecedented levels of change and increasing levels of complexity over the last two decades. Describe five sources of changes that are apparent in relation to project management. **[10 marks]**

**[Total 25 marks]**

### **Question 4**

- (a) Describe four ways in which users may be involved in the different stages of the system development life cycle. **[8 marks]**
- (b) At what stage during the system development life cycle would the verification of controls take place? **[2 marks]**
- (c)
  - (i) What is the main purpose of a preliminary investigation? **[1 mark]**
  - (ii) How is a preliminary investigation conducted? **[2 marks]**
  - (iii) What is the end product of a preliminary investigation? **[1 mark]**
- (d) Identify six problems typically associated with classical SDLC. **[6 marks]**
- (e)
  - (i) Expand the term CASE. **[2 marks]**
  - (ii) Briefly describe three limitations of CASE in relation to supporting the full SDLC. **[3 marks]**

**[Total 25 marks]**

### **Question 5**

- (a) In the context of Database Management System, define the term database recovery and database security. **[4 marks]**
- (b) Identify three disadvantages of using database. **[3 marks]**
- (c) The database management system (DBMS) is the software that builds and maintains the database. Describe four functions performed by a DBMS. **[12 marks]**
- (d) In addressing management issues in dealing with cost savings, outsourcing could be another management option to deal with high IT costs. Give three advantages and disadvantages of outsourcing. **[6 marks]**

**[Total 25 marks]**

### **Question 6**

- (a) Most computer systems cannot be made secure even after the application of extensive "computer security" measures. Furthermore, if they are made secure, often it is to the detriment of usability.  
  
What are the eight special characteristics or problems of data processing that calls for the need for security and controls? **[8 marks]**
- (b) In ensuring proper information disseminated to internal staff in your organisation, you are advised by the security department to briefly outline how the organisation could be protected against viruses. Summarise your description by providing six guidelines on how such protection could be accomplished. **[6 marks]**
- (c) Administrative controls are controls over data and data security that are achieved by administrative measures. Identify seven controls that should be included in controlling computer hardware, software and files in an organisation. **[7 marks]**
- (d) (i) Another area of concern addressed by the management is the transmission of data over the communication link within the organisation network. List three possible security dangers that are apparent to this security issue. **[3 marks]**  
  
(ii) What is the secure way to prevent eavesdropping? **[1 mark]**

**[Total 25 marks]**

**Question 7**

- (a) Share your expertise in explaining to your working colleague on how a spreadsheet works.
- (i) Briefly describe what you could expect when the application software is loaded and run. **[9 marks]**
  - (ii) Give an example of a common application that makes use of spreadsheet packages. **[1 mark]**
- (b) All computer languages must be translated and converted to machine language that can be later executed by a computer. Name the translator that is used for such conversion. Describe briefly how high level languages are converted to machine code. **[4 marks]**
- (c) (i) Define briefly what is meant by the term “packaged software”. **[1 mark]**
- (ii) Describe three advantages and two disadvantages of using packaged software. **[10 marks]**

**[Total 25 marks]**

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