INSTITUTE OF TECHNOLOGY

BLANCHARDSTOWN

Year	Year 3
Semester	Semester 1
Date of Examination	Monday 16 January 2012
Time of Examination	3.30pm – 5.30pm

Prog Code	BN302	Prog Title	Bachelor of Science in Computing in Information Technology	Module Code	COMP H3029
Prog Code	BN013	Prog Title	Bachelor of Science in Computing in Information Technology	Module Code	COMP H3029
Prog Code	BN104	Prog Title	Bachelor of Science (Honours) in Computing	Module Code	COMP H3029

Module Title	Project Skills

Internal Examiner(s):   *Ms Aoife Fox*

External Examiner(s):   *Dr Richard Studdert*

Instructions to candidates:

1) To ensure that you take the correct examination, please check that the module and programme which you are following is listed in the tables above.
2) Answer any <u>two</u> questions.
3) This paper is worth 100 marks. Each question is worth 50 marks.

DO NOT TURN OVER THIS PAGE UNTIL YOU ARE TOLD TO DO SO

Question 1:

a) Define Project Management in the context of Information Technology. Explain clearly the importance of Project Management within the IT discipline.

(5 Marks)

b) *Scoping the Project* is a huge part of project planning. What is a scope document and list its contents.

(10 Marks)

c) A Work Breakdown Structure is a results-oriented family tree that captures all the work of a project in an organized way. Using the "grocery store" example, generate a WBS.

(5 Marks)

d) As part of Team communication, list the advantages of effective communication.

(4 Marks)

e) Define the SDLC. List two contrasting approaches to the SDLC.

(4 Marks)

f) Two widely used SDLC models are the **Prototype** and **Throwaway** model. Describe the functionality of each type and list their advantages and disadvantages. Use diagrams to illustrate your answer.

(16 Marks)

g) All projects use some variation of SDLC. Give any two criteria for selecting the most appropriate SDLC.

(6 Marks)

[Total 50 Marks]

Question 2:

a) A literature review document is usually written as a chapter for a thesis or dissertation. Discuss in detail the type of information you would normally expect to be included in a literature review chapter?

(10 Marks)

b) Outline the main aims of a literature review and list the features of a good literature review.

(10 Marks)

c) There are several ways to organize and structure a literature review. Two common ways are **chronologically** and **thematically.** Describe each of these methods in detail.

(10 Marks)

d) During the literature review process, consideration should be given to *provenance, objectivity, persuasiveness* and *value*. Discuss this statement.

(10 Marks)

e) What is an *abstract* and discuss how it can be used in academia.

(5 Marks)

f) Given the following sample abstract:

Abstract

"This paper presents and assesses a framework for an engineering capstone design program. We explain how student preparation, project selection, and instructor mentorship are the three key elements that must be addressed before the capstone experience is ready for the students. Next, we describe a way to administer and execute the capstone design experience including design workshops and lead engineers. We describe the importance in assessing the capstone design experience and report recent assessment results of our framework. We comment specifically on what students thought were the most important aspects of their experience in engineering capstone design and provide quantitative insight into what parts of the framework are most important."

(i) Construct a suitable title.

(ii) Identify and list 5 key words.

(iii) Identify at least one possible weakness of the above abstract.

(5 Marks)

[Total 50 Marks]

Question 3:

(a) What is **research** and describe in detail <u>two</u> common research methodologies.

(6 Marks)

(b) Discuss the term *plagiarism* and list the methods used to avoid it.

(6 Marks)

(c) Describe briefly the differences between a thesis document and a research paper in terms of their aims, contents and review processes.

(6 Marks)

(d) Differentiate clearly between citation and reference.

(6 Marks)

(e) Using the Harvard Referencing system, give guidelines and show examples of how you would reference the following sources:

(i)   Webpage

(ii)   Newspaper

(iii)   E-book

(iv)   DVD/Video

(16 Marks)

(f) I have sourced the following article in an **online journal**. Using the Harvard Referencing system, discuss how you could reference this source to avoid plagiarism.

Network Security
Volume 2002, Issue 1, 1 January 2002, Pages 12-13

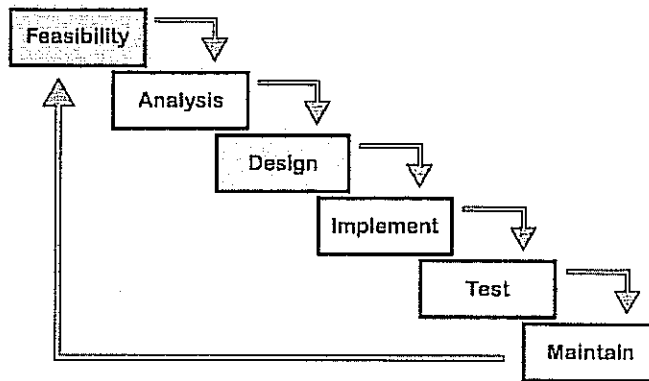### How To Secure, An ,Office,,Wireless,,Network,

David Pollino[1]

Available online 8 January 2002.

Abstract

Hackers have got a new trick and its worrying organizations with ,wireless, networks. With numerous reports of user identities and passwords being grabbed out of thin air, the so-called 'drive-by' hack, where an attacker attempts to access data from outside an organization's building, is causing a panic across the ,wireless, industry. Here, we will evaluate the real risks associated with implementing a ,wireless,,office,,network, and offer some practical tips for improving ,security,.

(5 Marks)

(g) While researching Systems Development for a class project, you have sourced the following graphic. How could you reference the image correctly to avoid plagiarism?

Website used: http://www.c3ns.com/images/sdlifecycle.jpg

Title of Image: Waterfall Model

(5 Marks)

[Total 50 Marks]