



STAMFORD COLLEGE
SCHOOL OF COMPUTER SCIENCES
DIPLOMA IN INFORMATION TECHNOLOGY

STC102 : INTRODUCTION TO INFORMATION TECHNOLOGY

Date : 7 November 2006 (Tuesday)

Time : 9.00 a.m. – 11.00 a.m.

Duration: 2 hours

Instructions to Candidates

Answer ALL questions.

Please ensure that this examination paper contains FIVE questions on TWO printed pages before you start the examination.

Books, papers and other written materials are not allowed to be brought into the examination hall. A candidate who violates the examination rules of Stamford College or commits a malpractice will be disqualified from the examination.

Candidates may use calculators provided the calculators give no printout, have no work display facilities, are silent and cordless.

Write your Examination Index Number on each page of your answer booklet.

Answer **ALL** questions.

The total marks allocated for each of the questions are shown in brackets.

Question 1

Computer hardware and software are equally important. Computers will be rendered useless without software.

- (a) What are the components of a contemporary computer system?
(10 marks)
- (b) What are the major types of software? How do they differ in terms of users and usage?
(10 marks)
(Total = 20 marks)

Question 2

A database is a collection of data organized to service many applications by storing and managing data so that they appear to be in one location.

- (a) Explain the importance of file management for overall system performance.
(10 marks)
- (b) Explain the problems of traditional file environment.
(10 marks)
(Total = 20 marks)

Question 3

Telecommunications technology serves as the foundation for electronic commerce and the digital economy.

- (a) What is a telecommunication system? What are the principal functions of all telecommunication systems?
(15 marks)
- (b) Distinguish between an analog and a digital signal.
(5 marks)
(Total = 20 marks)

Question 4

The Internet is an international network of nodes connecting hundreds of millions of people. The Internet is the primary infrastructure for e-commerce, e-business, and digital firms.

- (a) Explain the principal Internet capabilities. (10 marks)
- (b) What are Intranet and Extranet? How do they differ from the Web? (10 marks)
- (Total = 20 marks)

Question 5

The operating system manages and controls the general computing environment and the activities of the computer system.

- (a) What roles do multiprogramming, virtual storage, time sharing and multiprocessing play in the operation of an information system? (10 marks)
- (b) Describe what you feel are the FIVE most popular applications used in the business world. From a manager's viewpoint, which TWO are the most essential applications to learn? Explain your reason(s). (10 marks)
- (Total = 20 marks)

- END OF PAPER -

