KOLEJ UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF COMPUTING AND INFORMATION TECHNOLOGY

ACADEMIC YEAR 2019/2020

SEPTEMBER EXAMINATION

INFORMATION TECHNOLOGY BAIT1173 IT FUNDAMENTALS

FRIDAY, 13 SEPTEMBER 2019

TIME: 9.00 AM - 10.00 AM (1 HOUR)

BACHELOR OF COMPUTER SCIENCE (HONOURS) IN INTERACTIVE SOFTWARE TECHNOLOGY

BACHELOR OF INFORMATION SYSTEMS (HONOURS) IN ENTERPRISE INFORMATION SYSTEMS

BACHELOR OF INFORMATION TECHNOLOGY (HONOURS) IN INFORMATION SECURITY BACHELOR OF INFORMATION TECHNOLOGY (HONOURS) IN INTERNET TECHNOLOGY BACHELOR OF INFORMATION TECHNOLOGY (HONOURS) IN SOFTWARE SYSTEMS DEVELOPMENT

BACHELOR OF SCIENCE (HONOURS) IN MANAGEMENT MATHEMATICS WITH COMPUTING

Instructions to Candidates:

Answer ALL questions. All questions carry equal marks.

BAIT1173 IT FUNDAMENTALS

Question 1

- a) There are different categories of utility program and application software installed on computer, laptop and mobile devices nowadays.
 - (i) Prepare a table as below to state the cost and the copyright status of various forms of application software.

Form of application software	Cost (expensive/cheap/free)	Copyrighted (Yes/No)
Shareware		
Custom software		
Open source software		
Freeware		
Public-domain software		

(10 marks)

(ii) Prepare a table as below to differentiate between mobile app and web app.

Mobile app	Web app	

(4 marks)

(iii) File fragmentation problem slows down hard disk access and the performance of the entire computer. Explain what file fragmentation is. Discuss how disk defragmenter utility program helps to solve the problem and increase the computer performance.

(2+3 marks)

- b) Discuss the following areas of the computer industry that provides different career opportunities to IT personnel:
 - Technology equipment field
 - Software and apps field
 - Technology service and repair field

(6 marks)

[Total: 25 marks]

Question 2

- a) You would like to set up a small network for your office to connect printers, photocopiers, communication devices and a few personal computers together in this month.
 - (i) Prepare a table to differentiate *star*, *bus* and *ring* network topologies. Include topology diagram, **ONE** (1) advantage and **ONE** (1) disadvantage for each network topology in the table.

BAIT1173 IT FUNDAMENTALS

Question 2 a) (i) (Continued)

Topology	Star	Bus	Ring
Description			
Diagram			
ONE (1) advantage			
ONE (1) disadvantage			

(15 marks)

- (ii) Based on your answer in Question 2 a) (i), briefly describe which topology that you would use to set up your office network. Justify your answer. (2+2 marks)
- (iii) Discuss THREE (3) benefits of setting up a small office network. (6 marks)

[Total: 25 marks]