FINAL EXAMINATION
JANUARY 2016 SEMESTER

COURSE CODE : JGB 11703
COURSE TITLE : INFORMATION TECHNOLOGY AND COMPUTING CONCEPTS
PROGRAMME LEVEL : BACHELOR
DATE : 31 MAY 2016
TIME : 9.00 AM – 12.00 PM
DURATION : 3 HOURS

INSTRUCTIONS TO CANDIDATES

1. Please read the instructions given in the question paper CAREFULLY.
2. This question paper is printed on both sides of the paper.
3. This question paper consists of TWO (2) sections.
4. Answer ALL questions in Section A. Choose THREE (3) questions in section B.
5. Please write your answers on the answer booklet provided.
6. Please answer all questions in English only.

THERE ARE 4 PAGES OF QUESTIONS EXCLUDING THIS PAGE.
SECTION A (Total: 40 marks)

INSTRUCTION: Answer ALL questions. Please use the answer booklet provided.

Question 1

A demand for computer professionals continues to grow. Information Technology (IT) is predicted to be the fastest growing industry for the next 10 years. Job opportunities in the computer industry generally are available in one or more areas including general business and government organizations and their IT departments, computer equipment field, computer software field, computer service and repair field, computer sales, computer education and training field and IT consulting. State FIVE (5) with TWO (2) examples of job title.  

(10 marks)

Question 2

System software is a program that controls the operations of the computer and its devices. While, Operating System (OS) is a set of programs containing instructions that work together to coordinate all the activities among computer hardware resources.

(a) Determine FIVE (5) tasks or functions of OS. 

(b) The process of starting or restarting a computer is called booting. Explain the difference of booting and formatting. 

(5 marks)

(5 marks)
Question 3

A hard disk contains one or more inflexible, circular platters that use magnetic particles to store data, instructions, and information.

(a) State EIGHT (8) characteristics of a hard disk.

(b) Give TWO (2) types on how memory sized are measured. (10 marks)

Question 4

You are a computer technician at MyKampong Chicken Cafe, and your boss decides that he would like to install new computers that will be used to relay orders to the kitchen. Once a server has taken a customer’s order, he or she will enter the order into a computer and then the order will appear on a display device in the kitchen. The computers also will print a check for each guest, as well as allow the managers to generate sales reports at the end of each shift.

Suggest FIVE (5) input devices and FIVE (5) output devices that you feel necessary for the computers to perform the above tasks. State also the type of information that might be produced. (10 marks)
SECTION B (Total: 60 marks)

INSTRUCTION: Choose THREE (3) questions only
Please use the answer booklet provided

Question 1

Computer communication and network describe a process in which two or more computers or devices transfer data, information and instructions using the internet.

(a) Discuss FOUR (4) reasons of using communication via internet.  
(8 marks)

(b) Describe the Global Positioning System (GPS) and give TWO (2) examples of GPS.  
(6 marks)

(c) Describe THREE (3) types of network.  
(6 marks)

Question 2

Discuss SIX (6) jobs typically in the Information Technology (IT) department with FOUR (4) examples.  
(20 marks)

Question 3

Computer is important in our daily life.

(a) Explain each type of computer (supercomputers, mainframe computers, embedded computers and personal computers) and which one is the best to suit an individual. Justify your answer.  
(14 marks)

(b) Explain and differentiate between volatile and non-volatile memory, by giving examples.  
(6 marks)
Question 4

Computer components such as input devices, output devices and memory are important.

(a) Name the input or output device that is the best to perform each of the following activities:

i. Viewing images from one computer to another over the internet.  
   (2 marks)

ii. Producing architectural drawings such as building plans.  
    (2 marks)

iii. Playing games using the computer.  
     (2 marks)

iv. Retrieving information electronically from a code on a product.  
    (2 marks)

v. Identifying users by scanning their finger prints.  
   (2 marks)

(b) Define computer crime and give TWO (2) examples of computer crimes.  
    (4 marks)

(c) Give TWO (2) steps that can be taken to help prevent the computer crime.  
    (6 marks)

END OF EXAMINATION PAPER