General Certificate of Education (Ord.Level) Examination - 2008
Information & Communication Technology II

Two hours

Answer five questions only as instructed. Any extra questions answered, if not struck off by the candidate himself, will be crossed out by the examiner, without being marked.

01.

(i)	Write in one sentence, the difference between raw data and information.
(ii)	Write two examples of digital devices.
(iii)	Write why there is no symbol on the space bar of a computer keyboard.
(iv)	Write two examples of guided data communication media.
(v)	Why is a dot matrix printer not suitable to be used in an operation theatre?
(vi)	Why do you need more computer memory to store a video clip than an audio clip of the same duration?
(vii)	Out of the two types of Personal Computer memories ROM and RAM, which memory is volatile?
(viii)	Draw the two symbols you get when you file the letter F horizontally and vertically respectively using a graphics utility software.
(ix)	Write two examples of full duplex communication.
(x)	What are the values of 999 MOD 1000 and 1000 MOD 999 respectively?

02. 'Mobile Doctor' is an Ambulance Service, which provides emergency services for those who need immediate medical attention. Currently, they do not use a computer based information system. Those who wish to receive services are required to register with them.

Customers who need the service should call the 'Customer Services Manager'. After a short conversation he sends an ambulance with a doctor and nurse to the place where the patient is. After providing emergency treatment, the patient is taken to the nearest hospital.

(i)	List separately, the data and information required by the Customer Services Manager in order to provide the service.
(ii)	List what additional data is required to prepare the invoice.
(iii)	State what benefits they can obtain if they use a computer based information system?

03. Mr. Ramesh is a retired teacher who is living in a rented house with his wife. He has two children and both of them work abroad. They send US$ 50 to their parents every month as living expenses. In addition to his pension, he earns some money by conducting English classes for the poor children in his village at a reasonable fee. He also receives an interest from his fixed deposit in the bank.

He enters his monthly earnings and expenses into the worksheet shown in *Figure-Question 3*. At the end of each month he obtains US$ to Rupee conversion rate from the bank and enters it into cell D12 of the worksheet to store its Rupee equivalent in the B6 cell. Finally he completes the worksheet and obtains a printout.

	A	B	C	D
1		Monthly Income and Expenditure-November 2008		
2	Income Category	Income	Expenditure Category	Expenditure
3	Pension	Rs. 8,000.00	House rent	Rs. 4,000.00
4	Tuition	Rs. 7,500.00	Food	Rs. 5,500.00
5	Interest from bank deposit	Rs. 500.00	Travelling	Rs. 1,100.00
6	Money received from childrer	Rs. 5,417.50	Helth	Rs. 800.00
7			Personal	Rs. 2,755.00
8			Social work	Rs. 800.00
9			Miscellaneous	Rs. 4,835.00
10				
11	Total Income	Rs. 21,417.50	Date	30/11/2008
12	Total Expenditure	Rs. 19,790.00	Currency coversion rate US$=	Rs. 108.35
13	Savings	Rs. 1,627.50	Money recived from children in US$	50.00
14	Percentage of Savings	7.6		
15				

Write the formulae/functions in respective cells to produce the following information.
- (i)   Money received from children in B6 cell in Rupees.
- (ii)   Total monthly income in B11 cell.
- (iii) Total monthly expenditure in B12 cell.
- (iv)   Monthly savings in B13 cell.
- (v)   Savings as a percentage of total income rounded to one decimal place in cell B14 .

04.

- (i)   *Figure-Question 4* shows a flowchart that displays Odd numbers in a certain range. Write the first **three** and the last **two** numbers displayed by it.
- (ii)   Write a pseudo-code that corresponds to the logic given in the flowchart.
- (iii) State how to modify the given flowchart to display all even numbers from 1 to 100 inclusive.

```
START
  |
X = 1
  |
  |<---------------+
  v                |
Display X          |
  |                |
  v                |
X = X +            |
  |                |
  v            No  |
  ?  X >100 -------+
  |
 Yes
  |
END
```
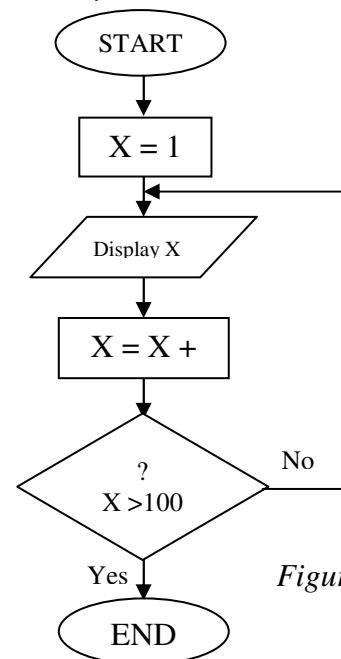
Figure-Question 4

05.   It is a well Known fact that the business world has been continuously nourished by advances in technology. Being one of the newest and foremost technologies, the Internet Technology has made the business community aware of how easily World Wide Web, which is operated through the Internet, can be utilized to perform in the challenging world. Today, even the retail shops maintain websites to provide their services to a wider clientele unlike traditional retailers.

"e-Mart" is a retailer who intends to adopt the new technology described above to expand its services over the web.

- (i)   List **two** advantages, "e-Mart" would get by having a website.
- (ii)   List **four** items of information that can be provided to customers through their website.
- (iii) List **two** features that can be incorporated into the website to make it attractive.
- (iv)   State **two** methods to increase the awareness of the website among the public.

06.   Write short notes on **three** of the following.
      (i)   The impact of ICT on Sri Lankan youth.
      (ii)   Disadvantages of computer games.
      (iii)   Health issues that may be caused by mobile phones.
      (iv)   Use of ICT to develop the agricultural sector of Sri Lanka.