Vavuniya Campus of the University of Jaffna

First Examination in Information and

Communication Technology - 2017

First Semester - September/October 2018

ICT1152 Practical for Fundamentals of Computer Systems

Answer All Questions

Time Allowed : **Three** hours

Instructions:

- Create a folder named with your **index number** on Desktop. Save all your files inside that folder.

- Save your files frequently to avoid losses due to power failures.

- This paper has **three** questions in **six** pages.

1. Create the following document using MS Word and save the document with the file name that starts with **Word_Q1_** and followed by your **index number** [e.g.: **Word_Q1_IT12001**]. [40%]

    - Your document should have the pages of size A4.

    - Set left and right margin with 3cm.

    - Set top and bottom margin with 2cm.

    [This question is continued on the next page]

- Put the page number on the center of footer.

- Put your index number on the top left header of the page.

(a) Create the following text format exactly as given:

A **computer** is a device that can be instructed to carry out an arbitrary set of ARITHMETIC OR LOGICAL OPERATIONS AUTOMATICALLY. The ability of computers to follow a sequence of operations, called a program, make computers very applicable to a wide range of tasks. Such computers are used as control systems for a very wide variety of industrial and consumer devices. This includes simple special purpose devices like microwave ovens and remote controls, factory devices such as industrial robots and computer assisted design, but also in *general purpose devices* like personal computers and mobile devices such as smartphones. The Internet is run on computers and it connects millions of other computers. Since ancient times, simple manual devices like the abacus aided people in doing calculations. Early in the Industrial Revolution, some mechanical devices were built to automate long tedious tasks, such as guiding patterns for looms. More sophisticated electrical machines did `specialized analog calculations` in the early **20th century**. The first digital electronic calculating machines were developed during ~~World War II~~. The speed, power, and versatility of computers has increased continuously and dramatically since then. Conventionally, a modern computer consists of at least one processing element, typically a *central processing unit (CPU)*, and some form of memory. The processing element carries out arithmetic and logical operations, and a sequencing and control unit can change the order of operations in response to stored information. Peripheral devices allow information to be retrieved from an external source and they enable the result of operations to be saved and retrieved.

(b) Create a letter as given below using mail merge and enter the date using insert menu:

Date

<<Title>> <<First name>> <<Last name>>

<<Reg. No>>

<<Faculty>>

<<Address 1>>

<<City>>

Dear <<First name>>

We are pleased to inform you that you have been selected to attended a conference at University of Jaffna on 25.09.2018 at 9.00am.

Thank you.

Create a spreadsheet in MS Excel to store the following information and create three letters with the information stored in the Excel sheet.

Title	First name	Last name	Reg. No	Faculty	Address 1	City
Ms	Thurkka	Chanthru	ICT/12001	FAS	No. 14 Main Street	Jaffna
Ms	Tharjini	Soundram	ICT/12011	FAS	1st Cross Street	Vavuniya
Mr	Tharsan	Peris	ICT/12013	FAS	3rd Cross Street	Vavuniya

2. Create the following spreadsheet using MS Excel and save the file with file name that starts with **Excel_Q2_** and followed by your **index number** [e.g.: **Excel_Q2_IT12001**].

[40%]

(a) Create the below table in sheet 1 and fill the **Gross Salary, Bonus** and **Net Salary** columns using the information provided below.

Emp. ID	No. of Hours	Due Loans	Gross Salary	Bonus	Net Salary
1	250	10000			
2	180	15000			
3	170	12500			
4	195	20000			
5	185	16000			
6	200	11500			
7	190	13500			

- Rate per hour is Rs. 1000/-
- Gross Salary = (No of Hours * Hourly rate)
- Bonus = 50 percentage of Gross Salary
- Net Salary = Gross Salary + Bonus - Due Loans

i. Find all the employees, whose **Net salary** is greater than Rs 50,000/- and calculate payee tax. Add one more column to the table for Payee Tax

Payee Tax = 10 percentage of the Gross Salary

ii. Add one more column to the table for Remaining Salary

Remaining Salary = Net Salary - Payee Tax

(b) Create the below tables in sheet 2:

Final Results

Student ID	Q1 (100)	Q2 (100)	Q3 (100)	Q4 (100)	Total(100)
S 001	65	70	60	86	
S 002	75	48	76	82	
S 003	64	68	69	56	
S 004	74	85	90	68	
S 005	60	84	95	64	
S 006	67	78	54	65	
S 007	48	87	65	75	
S 008	65	86	68	86	
S 009	78	95	87	68	
S 010	69	78	85	65	

Assessment Marks

Student ID	ICA 1	ICA 2	ICA 3
S 001	85	87	98
S 002	96	65	78
S 003	75	87	67
S 004	84	90	59
S 005	68	84	68
S 006	83	88	89
S 007	76	66	66
S 008	88	75	87
S 009	77	68	84
S 010	80	79	76

i. Use Lookup function to insert the assessment marks columns to final marks table

ii. Add a column **ICA marks** to final marks table and obtain the average marks of two assessments which are having **maximum** value

iii. Add a column **End Marks** to **final marks** table to compute the end marks using the formula given below:

End marks = 60 percentage of ICA Marks + 40 percentage of Total

iv. Add a column **Grade** to the **final marks** table and obtain the grade based on the following condition:

- If End marks between 100 and 75 then A
- If End marks between 74 and 65 then B
- If End marks between 64 and 55 then C
- If End marks between 54 and 45 then D
- If End marks between 0 and 44 then E

3. Create the following database using MS Access and save the file with file name that starts with **Access_Q3_** and followed by your **index number** [e.g.: Access_Q3_IT12001].

[20%]

(a) Create a database **Shop**.

(b) Create a table named as **Inventory** and insert the following records:

No	Item Name	Count
01	Red Pen	80
02	Black Pen	50
03	Blue Pen	100
04	Pencil	150
05	Eraser	50
06	Exercise Book 120 pages	65
07	Exercise Book 160 pages	45
08	Exercise Book 200 pages	35

(c) Write a query to retrieve the items details which are having the count more than 50.