



Higher National Diploma in Technology (Agriculture)
First Year, First Semester Examination – 2017
CC1102-Information and Communication Technology

Instructions for Candidates:	No. of questions	: 05
Answer all questions in PART I	No. of pages	: 06
Answer three (03) Questions in PART II	Time	: Two (02) hours

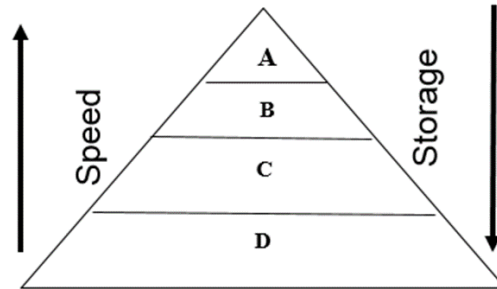
PART I

Question 01

Select the most suitable answer and fill in the blanks.

- (i) Minicomputers are often calledcomputers.
a) Macro b) Micro c) Midrange d) Middle
- (ii) A.....accepts input from a stylus or digital pen.
a) PDA b) Smart phone c) Tablet PC d) Handheld PC
- (iii) control and manage instructions in the entire computer system.
a) Application software b) Document c) Program d) CPU
- (iv) Which of the following is a powerful computer used for forecasting weather conditions?
a) Workstation b) Mainframe c) Desktop d) Notebook
- (v)is an Open Source system software with Multitasking features.
a) MS Dos b) Linux c) MS Windows d) All of them
- (vi)software is used for operating and controlling the devices attached to a computer.
a) Application b) Operating System c) Driver d) Utility
- (vii) As a computer can handle multiple tasks at the same time, it is
- a) Diligence b) Versatile c) Automation d) Intelligence
- (viii) What are the most important mechanisms used in first, second, third and fourth computer generations?
a) Vacuum Tubes, Integrated Circuits, Transistors, Microprocessors
b) Vacuum Tubes, Transistors, Integrated Circuits, Microprocessors
c) Vacuum Tubes, Transistors, Microprocessors, Integrated Circuits
d) Integrated Circuits, Vacuum Tubes, Transistors, Microprocessors

- (ix) Smart Card is a storage device.
 a) Magnetic b) Optical c) Solid state d) Laser
- (x) Select the correct memory hierarchy according to the storage and speed. (A, B, C and D respectively)



- a) Cash Memory, Registers, Main Memory, Hard disk
 b) Cash Memory, Main Memory, Registers ,Hard disk
 c) Registers, Main Memory, Cash Memory, Hard disk
 d) Registers, Cash Memory, Main Memory, Hard disk
- (xi) This type of mouse uses reflected light to measure its movements.
 a) Optical b) Laser c) Mechanical d) No of them
- (xii) The common keyboard arrangement is called the Layout.
 a) QWERTY b) QEWRTY c) QWERYT d) QWEYTR
- (xiii) Which of the following components support for input and output devices?
 a) Flash Drives b) Sound card c) Disk drives d) All of them
- (xiv) Software that detects and eliminates viruses is an example of
 a) Personal productivity software c) Operating system software
 b) Utility software d) Applications software
- (xv) runs on computer hardware and serve as platform for other software to run on.
 a) Operating system b) Open source software c) Utility software
 d) Application software

(1.5x10=15 marks)

- (xvi) When your pointing device is not working, state down the keyboard shortcuts to perform the following tasks. (2x5=10 marks)
- a. To save a file:
 - b. To create a new document:
 - c. To open an existing file:
 - d. To close a file:
 - e. To find files and folder:

(Total 25 marks)

PART II

Answer three (03) Questions from part II

Consider the following “Gami Diriya Agriculture Project” for answering questions.

Suppose that you are working as an Agriculture Project Officer in “Gami Diriya Agriculture Project” in Hambantota district. As the first step, you have to collect information of crops, details of planters, and about fertilizers used by planters. As next step, you have to analyse these data and submit a report to the Agriculture Department. You have to use current **information and communication technology** facilities and infrastructures to perform your duties in your project.

Question 02

- i.
 - a. What is meant by application software? (02 marks)
 - b. State two (02) examples of application software. (02 marks)
- ii. State two (02) application software for each of the following tasks used by you, as the Agriculture Project Officer of your organization.
 - a. Store above information
 - b. Data analysing
 - c. Generating Reports
 - d. Preparing mails to a large number of planters
 - e. Sending urgent information to the agriculture department (10 marks)
- iii.
 - a. What is meant by “*system software*”? (03 marks)

- b. Mention two kinds of system software you wish to use to perform the tasks in “Gami Diriya Project”. (04 marks)
- iv. There is a large integration in the Agriculture field and the computer technology in the world today. Explain this statement using two (02) examples. (04 marks)
- (Total 25 marks)**

Question 03

Under the “Gami Diriya” plantation project, as an Agriculture Project Officer, you have to consider the computer hardware requirements to install the relevant software to perform above duties.

- i. Mention the main hardware requirement that you have to consider when you install any kind of software. (02 marks)
- ii. Briefly describe the following types of computers considering the storage capacity, processing speed and size. (06 marks)
- a. Mainframe
 - b. Micro
 - c. Super
- iii. According to your organizational needs, select the most suitable type of computer from the types given above. (02 marks)
- iv. Draw a block diagram to represent the architecture of the entire computer system and name the components. (07 marks)
- v. State two (02) hardware devices required to perform the following functions of the computer system. (08 marks)
- a. Input
 - b. Output
 - c. Processing
 - d. storage

(Total 25 marks)

Question 04

Consider the “Gami Diriya” information work sheet given below to answer the following questions.

	A	B	C	D	E	F	G	H
1	Gami Diriya Information							
2			Bank Loan Payment for Year					
3	Employee ID	Crop Type	Payment In Rs	Interest Rate	Interest	Income in Rs	Net Income	Income Level
4	11124	Coconut	125000	12.50%		225000		
5	11125	Rubber	200000	11.50%		270000		
6	11126	Vegetable	50000	12.00%		90000		
7	11127	Paddy	75000	11.50%		175000		
8	11128	Coconut	50000	11.00%		90000		
9	11129	Vegetable	60000	12.00%		90000		
10	11130	Cinnamon	125000	12.50%		175000		
11	11131	Coconut	30000	11.00%		50000		
12	11132	Coconut	64000	11.25%		78000		
13								
14		a) Total income						
15		b) Average income						
16		c) Number of planters						
17		d) Number of coconut planters						
18		e) Maximum income						

- i. State three (03) advantages of using Ms Excel in your project. (03 marks)
- ii. Write Excel formulas to calculate the following values for the planter having employee ID 11124. (You should be able to copy these formulas to calculate the same for other employees.)
 - a. Interest (02 marks)
 - b. Net Income (03 marks)
 - c. Income level (06 marks)

Note: $Interest = payment * Interest Rate$

$Net-Income = Income - (Payment + Interest)$

If Income is greater than 100000 Income level is **High**, If Income is greater than 75000, Income level is **Medium**, Otherwise Income level is **Low**

- iii. Write Excel functions to perform the followings.
 - a. Calculate total income (02 marks)
 - b. Calculate average Income (02 marks)
 - c. Count number of planters (02 marks)
 - d. Count number of planters who cultivate coconut (03 marks)
 - e. Find maximum income (02 marks)

(Total 25 marks)

Question 05.

- i. List three (03) advantages of using MS Word as a word processing software to perform your project activities. (03 marks)
- ii. Briefly explain the purpose of following ‘Views’ available in MS Word. (06 marks)
 - a. Print Layout
 - b. Outline
 - c. Web Layout
- iii.
 - a. Mention two (02) advantages of using “templates” available in Ms Word. (03 marks)
 - b. Give three (03) types of templates used by you to perform your project activities. (03 marks)
- iv. Briefly explain the following features available in MS Word.
 - a. Themes (02 marks)
 - b. Water Marks (02 marks)
- v. Using suitable examples, explain “bulleted list” and “numbered list” in Ms Word (06 marks)

(Total 25 marks)