තොරතුරු හා සන්නිවේදන තාක්ෂණය (80) Information and Communication Technology (ICT) මධ්‍ය චාර පරීක්ෂණය - 2014

10 ලේණිය

කුසල් ඇතැලආරච්චි National Dip. In Teaching (ICT) ICT වූපය පිළිතුරුපත් පරිකුෂක



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Name	:
Class/Day	:
2 Hours	

Answer 5 questions only, including first question and four other questions

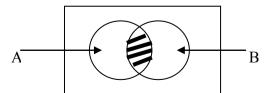
(01)

- i Name 2 occasions that ICT is used in Agriculture Field.
- ii Mention whether following statements are TRUE or FALSE
 - a) Magnetic tape was used for storage when it was Third computer era
 - b) In computer networking far topology using a HUB is caused to less security of data than using a SWITCH
- iii Name a secondary storage device used in third generation of computers
- iv Consider the following devices
 - a) Optical Character Reader (OCR)
 - b) Repeater
 - c) Magnetic Disk
 - d) Arithmetic and Logic Unit (ALU)

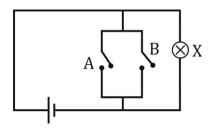
Mention the above devices are Input, Output, Processing and Controlling, Storage and

Communication

- v Find the value of following **Boolean Expression** 0.1+1.0+1?
- vi What is the relevant Logic Gate to the coloured part of the following set?



vii Name and draw the relevant Logic Gate in Boolean Algebra to the following Electronic Circuit?



- viii Write two internet facilities
- ix Match X table and Y table

	X Table		Y Table
(a)	saman@yahoo.com	(P)	Video Conferensing
(b)	Web camera	(Q)	web address
(c)	10.210.22.4	(R)	e-mail address
(d)	www.ictexam.lk	(S)	IP Address

x How many bits used in BCD?

(2×10, 20 Marks)

- (02) The Principal of Ananda College Mathugama expects to computerize the school details of student and teachers and he wants to network all the computers in the school (office, computer center, library)
 - I. Write 2 advantages of networking computers in Ananda College.
 - II. What is the type of network in Ananda College according to above details?
- III. Name suitable and most profitable type of network cable to build the computer network of Ananda College Mathugama.
- iv What do you mean by the Network Topologies
- v Draw 2 Network Topologies and name them

(20 Marks)

- (03) The management of the "Udingiya" foreign jobs company decides to prepare an Information System for computerise the information of the entire foreign job holders registered in the company. So each job holder must fill a form given him or her. job holder's name, age, address, country and Identity card number are the important facts in the form. Then the Air travel time table, vacancies of jobs in abroad and descriptions of training are given to job holders.
- i Give examples for 3 data input to relevant system of above incident.
- ii Name 3 information output from the relevant system of above incident.

- iii Write 2 fact which depends the value of information
- iv Classify the computers according to the size
- Iv Write 2 differences between Cathode Ray Tube (CRT) and Liquid Crystal Display (LCD)

(20 Marks)

(04)

- i Name the relevant Data transmission Mode for the following incidents
 - a) Radio Broadcasting
 - b) Video conferencing
 - c) Using Walky Talky
- ii Name the main 2 parts of CPU
- iii Write suitable ports that the following devices are connected to the system unit
 - a) Mouse
 - b) Digital Camera
 - c) Speaker
 - d) Network Cable
- iv Write 4 needs that we want to access the Internet

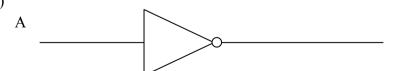
(6+2+8+4=20 Marks)

(05) Complete the following table and show how A,B,C,D,E,F,G,H,I are taken

Decimal	Binary	Octal	Hexa Decimal
234	Α	В	C
D	101100	E	F
G	Н	105	I

(2x9+2=20 Marks)

- (06) Name the following Logic Gates and Draw the truth table for those logic gates
- i a)



ii Draw and name the suitable Logic Gale for the following Truth Table

A	В	Output
0	0	0
0	1	0
1	0	0
1	1	1

- ii What is the Decimal equivalent for the following BCD Values
 - a) 00100100 _{BCD}
 - b) 01011001 _{BCD}
- iii ASCII Code for "A" is 1000001 then write the ASCII code for word "CAD"

(20 Marks)

- (07) Write short notes on 3 of the following.
- i The advantages of computerizing the process of issuing National Identity Cards
- ii Advantages of e-mail over normal Post
- iii Usage of ICT in Education sector
- iv Disadvantages of Internet.
- v Disadvantages of Computer Games

 $(6 \times 3 + 2 = 20 \text{ Marks})$
