සියලු	සියලුම හිමිකම් ඇව්රිණි / All Rights Reserved								
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	First Term Test - Grade 10 - 2020								
	පළමු වාර පරීක්ෂණය - 10 ශෝණිය - 2020								
Nar	Name/Index No: Information and Communication Technology - I Time:- 01 hour								
•	Answer all the questions.								
(1)	Select the statement that best describes ICT								
	1. A technique used to communicate processed information.								
	2. A technology used to process and convert data								
	3. Processing and sharing information.								
	4. The technology used to process and convert data into information, store and share it.								
(2)	 Crop cultivation, animal husbandry and fisheries can be introduced as the applications of information technologin agriculture. The machines that are only used for planting crops are; A. Meteorological Devices B. Radio Frequency Identification Device (RFID) C. Automated Insect Control Devices 								
	1. A and B2. C only3. B and C4 A and C								
(3)	The following are some of the features of a learning management system that are available to different sector of education.								
	A. Assignments can be uploaded at home								
	B. Ability to update school information								
	C. Ability to respond to issues in discussion forums								
	The answer which gives the above facilities to the students, teachers and administrators respectively is,								
	1. CBA 2 BAC 3. ACB 4. BCA								
(4)	In the field of education, choose the answer that includes only the websites where a student can study onlin								
(-)	1. www.schoolnet.lk, www.facebook.com, www.bbc.com								
	 www.e-thaksalawa.moe.gov.lk, www.vidumanpetha.lk, www.schoolnet.lk 								
	 www.ebay.com www.schoolnet.lk, www.amazon.com, 								
	 www.schoolnet.lk, www.webpatashala.com, www.cnn.com 								
(5)	The sailors of a particular ship have informed a hospital that some passengers on the ship show the symptor								
(\mathbf{J})	of corona virus. Hospital staff decided to treat them using distant health treatment. What is the special feature								

of distant health treatment mentioned in above situation.

3. Emergency Telemedicine

- 1. Home health medicine 2. Remote Surgery
 - 4. Medical Teletraining

- (6) The application of ICT has made human tasks much easier and misuse of ICT can bring undesirable effects not only for you but for the entire society. One of the consequences is addiction. The physical inconvenience of this is,
 - A. Sore eyes

B. Back pain

- C. Headache
- 1. B and C 2. A only 3. A and B 4. A, B and C

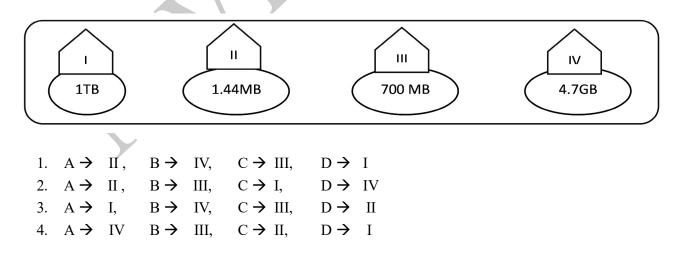
(7) In which generation of computers was the keyboard and mouse used to input data?

- 1. First Generation Computers 2. Second Generation Computers
- 3. Third Generation Computers 4. Fourth Generation Computers
- (8) following are some statements regarding the changes that took place in the evolution of the computer from the first generation to the fifth generation
 - A. The size of the computer and the cost of electricity were reduced.
 - B. Speed and storage capacity decreased.
 - C. Increasing the use and being a multipurpose equipment.

Which of these statements is true?

- 1. A only2. A and B only3. A and C only4. all A, B and C
- (9) The first computer developed by Joseph Jacquard as an input, output, and storage device, using the punch card system is,
 - 1. Pascaline2. Analytical Engine3. Difference Engine4. ENIAC
- (10) Select the answer which compare the letters relevant to the following devices used in the computer and the numbers relevant to the capacities shown in the box given.

A. floppy disks B. Compact Disk C. Hard Disk D. Digital Versatile Disk



(11) When Pradeep was asked a question by the teacher to name some of the devices that could do both input and output, the answers he gave were as follows:

4. B, C and D

- A. Touch Pad B. Touch Screen
- C. Digital Camera D. Web Camera

What is the statement which has correct answers?

1. A and B	2.	A and C		3.	B and C
Grade 10 - ICT - NWP			2		

(12)	If you want to scan and comp very short period of time, the			ents printed in Englis	h in th	ne school office within a
	•	. OMR	3.	MICR	4.	Flatbed Scanners
(13)	The Devices listed in colum column B. what is the answe				puter	with the ports shown in
	Column A	Co	lumn	В		
	P Multimedia Proje	ector 1 U	JSB I	Port		
	Q Printer	2 S	Serial I	Port		
	R Modem	3 H	IDMI	Port		
	S Mouse	4 p	aralle	l port		
	1. P-3, Q-4, R-1, S-2 2.	. P-3, Q-1, R-2, S-4	3.	P-3, Q-4, R-2, S-1	4.	P-3, Q-1, R-4, S-2
(14)	The answer, which includes r	non-impact printers, is:				
		B. Thermal printer	C.	Laser printer	D.	Line Printer
	1. A and B 2.	. B and C	3.	C only	4.	C and D
(15)	Sanjeewa removed the cath Crystal Display (LCD monit A. Needing little space B. Increase in durabili C. Low usage of elect The true statement/statemen 1. A only 2. The use of transistors for data	tor). Here are some of the ity tricity ts is/are: . A and B only	ae reas	ons: A and C only	4.	all A B and C
(10)	in computer evolution. Whic					
	1. second generation and the	nird generation	2.	first generation and t	hird g	eneration
	3. First generation and Fou	rth generation	4.	Second generation and	nd Fo	urth generation
(17)	The following are some of th does its office work manually Which is the correct stateme 1. Speed, accuracy, efficier 3. Speed, save ability, intell	y. ent out of them? ncy, intelligence	omput 2. 4.	er caused for compute Save ability, intellige speed, accuracy, save	nce, v	ersatility, efficiency
(18)	 When processing data in a community of the second second	e computed byC emory through the memory t the A,B,C places is: pry, input devices	in t ory of cal uni	the Central Processing the registry and outpu	g Unit	The computed data

- 3. Input devices, main memory, arithmetic and logical unit
- 4. Output devices, main memory, arithmetic and logical unit

(19)	Consider the following state	ements about devices th	at stor	e data on a computer	
	1. Hard disk is a devic	e made using magnetic	techn	ology.	
	2. Solid state devices	are very popular today.			
	3. A Compact Disk ca	n store more data than	a hard	drive.	
	Which one of these stateme	nts is true?			
	1. A only	2. A and B only	3.	A and Conly	4. all A, B and C
(20)	Shantha who, went to a com is an output device andF Devices suitable for A and F	3 was an input de		canner, keyboard and n	nonitor. Out of them,A
	1. Monitor and printer		2.	Printer and keyboard	
	3. Scanner and Keyboard		4.	Printer and monitor	
(21)		ome statements that the	-	-	ation from a list of data and tion. What are the information
	A. Monthly electricity	bill			

- B. Mass of each student in grade 10
- C. 2019 lowest rainfall is recorded from Puttalam
- 1. A only
- 3. A and C only

- A and B only
- 4. all A, B and C

2.

(22)	
< / >	

System		
Processor:	Intel(R) Core(TM) i7-4510U CPU @ 2.00GHz 2.60 GHz	lenovo.
Installed memory (RAM):	8.00 GB	Support Information
System type:	64-bit Operating System, x64-based processo	
Pen and Touch:	Full Windows Touch Support with 10 Touch Points	

The above diagram shows a set of system information on a particular computer. According to that information, which answer correctly specifies the clock speed of the computer and the capacity of Random Access Memory.

- 1. 2.00 GHz 2.6 GHz, 64bit 2. i7-4510U, 8GB
- 3. 2.00 GHz 2.6 GHz , 8GB 4. 2.00 GHz , 2.6 GHz

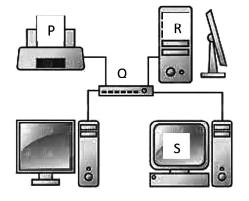
(23) Consider the following statements about data transmission.

- A. Data transmission between the system unit and the printer is in simplex mode.
- B. Half-duplex data transmission is faster than Full duplex data transmission.
- C. Transmitting data in only one direction at a time is Half duplex data transmission.

Of these statements, the true statement /statements is/are:

1. A only2. A and B only3. A and C only4. all A, B and C

(24) When the devices In the following diagram, are named as P,Q,R,S respectively the answer is:



- 1. Printer, switch, server computer, client computer
- 2. Printer, router, client computer, server computer
- 3. Router, switch, client computer, server computer
- 4. Router, switch, server computer, client computer

- (25) Which of the following is not an advantage of computer networking?
 - 1. Ability to share resources'
 - 3. Increse the cost while using the Internet
- 2. Ability to communicate between computers.

Р

Q

R

Super Computers

Micro Computers

Mini Computers

- 4. Easy to share files.
- (26) After a study of the topology used in computer networking, Saman chose star-type network topology to network computers at his place of business. Following may be few reasons for that decision.
 - A. Ability to control central device
 - B. even if one computer is out of order, No failure in the network
 - C. connectivity from one computer to all the other computers through wires
 - What is / are the true statement/statements of them?
 - 1A only2.A and B only3.A and C only4.all A, B and C
- (27) The Port used to connect a computer with the Network Interface Card is;
 - 1. PS/2 Port2. USB Port3. RJ/45 Port4. VGA Port
- (28) Find the answer that matches the below statements about the types of computers and the types of computers mentioned in the column
 - A. It is used to process data in institutions such as banks and insurance companies.
 - B. It is a large computer with very powerful data processing speed.
 - C. It is commonly used for day today activities.

1.	$A \rightarrow$	R,	В≯	Q,	$C \rightarrow P$
2.	$\mathbf{A} \not \rightarrow$	R,	B→	Р	$C \rightarrow Q$
3.	$\mathbf{A} \not \rightarrow$	Q,	B→	Р	$C \rightarrow R$
4.	$\mathbf{A} \not \rightarrow$	Р,	В≯	R	$C \rightarrow Q$

- (29) Which of the following devices is not used to network computers?
 - 1. Switch2. Server computer3. Printer4. Hub
- (30) Which of the following numbers is an octal number?1. A6752. 5633. 9874. EF12

(31)	What is the decimal equiv	valent	to binary 101101 ₂				
	1. 40 ₁₀	2.	45 ₁₀	3.	36 ₁₀	4.	52 ₁₀
(32)	What is the answer when	1011	1+11011 is calculated	?			
	1. 100010 ₂	2.	110010 ₂	3.	111011 ₂	4.	101111 ₂
(33)	Which of the following no	ımbe	rs is equivalent to decin	nal 12	20 ₁₀		
	1. 1111000 ₂	2	160 ₈	3.	76 ₁₆	4.	101111 ₂
(34)	What is the decimal equiv	valent	to binary 101011,				
	1. 42 ₁₀		39 ₁₀	3.	44 ₁₀	4.	43 ₁₀
(35).	Which of the following nu	ımbeı	rs has minimum value?				
	1. 101101 ₂	2.	36 ₈	3.	2F ₁₆	4.	45 ₁₀
(36)	what is the Least Signific	ant B	it (LSB) and Most Sign	ifica	nt Bit (MSB) respective	ely of	f the number 001.10001
	1. 0,0	2.	0, 1	3.	1,0	4.	1, 1
(37)	The Octal equivalent of H	Iexa	decimal 7A ₁₆ is;				
	1. 1111010 ₂	2.	172,	3.	124,10	4.	74 ₈
(38)	Which answer represents	s the a	scending order of these	e fou	r numbers 100011 ₂ 54	, 76	$5_8, 2F_{16}?$
	1. $2F_{16}, 7_8, 100011_2, 54$			2.	100011 ₂ , 76 ₈ , 2F ₁₆ , 54		
	3. $54, 2F_{16}, 100011_2, 76$	8		4.	100011 ₂ , 2F ₁₆ , 54, 76 ₈		
(39)	What is the largest of the	follov	wing BCD (Binary Cod	ed D	ecimal) values?		
	1. 01000101			2.	10010001		
	3. 00110100			4.	10011001		
(40)	If character 'c' is represen character 'f'?	nted in	n the ASCII code system	n as 1	100011, which of the f	ollov	ving answers represents
	1. 1110100	2.	1100110	3.	1101011	4.	1101011
	<i>«</i>						

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ව ද්යාපන දෙපාර්තමේන්තුව ප්රදඩ බෙස්ස් හා ද්යාපන දෙපාර්තමේන්තුව ප්රදඩ සබරස්ක සුවරින් අධාාපන දෙපාර්තමේන්තුව ප්රදඩ සබරස්ක සුවරින් වයන පළාත් අධාාපන දෙපාර්තමේන්තුව ප්රදඩ සබරස්ක සුවරින්	වරද පැබද දෙ වෙලද සිදුව කරන්න සිදුවාර්ත කරන්න දී පාර්ත කරන්න පැබද දෙ වෙලද වියන සළාත් අධානයන දෙපාර්තමේන්තුව ප්රදඩසබජස්ස කත් ද පැමදීවසදය වියන සළාත් අධානයන දෙපාර්තමේන්තුව ප්රදඩසබජස්ස කත් ද පැමදීවසදය වියන පළාත් අධානයන දේපාර්තමේන්තුව ප්රදඩසබජස්ස පැතිද ද වේදීවසදය වියන පළාත් අධානයන දේපාර්තමේන්තුව ප්රදඩසබජස්ස	රදඩසබජස්ක ෲැව්රඑපැබඑ ද ෲැව්රූ හැව්රූ හැව්රූ හොව්රීඑපැබඑ දල භුමප්එසදබ
First Te	erm Test - Grade 10 - 2020	
පළමු වාර	පරීක්ෂණය - 10 ශේණිය - 2020	
Name/Index No:	Information and Communication Technology - II	Time:- 2 hours
	• • • • • • • • • • • • • • • • • • • •	

• Answer all together five questions includinag the first question and another four questions.

(1) (i) Columns" A" and" B" below illustrate the applications and uses of ICT respectively. Match the applications in column "A "with the examples in column "B" and write the corresponding pair of characters.

	Α		В
i	Health Sector	a	Getting aid of LMS
ï	Agricultural Sector	b	Use of EEG machine
ü	Education field	c	Use of RFID signals
iv	Transport Sector	d	Use of ETC (Electronic Toll Collection)

- (ii) Convert the hexadecimal D6B to its binary equivalent . Write down the steps.
- (iii) Different storage devices have different capacities. Set the storage devices below in order of the increasing capacity. (It is sufficient to mention only the relevant character.)
 - (a) Flash Memory
 - (b) Cache Memory
 - (c) Magnetic Tape
 - (d) Register Memory
- (iv) a) Name a storage medium used to store additional data on a mobile phone.
 - b) Write a commonly used device to backup data and information on server computers.
- (v) Categorize and write down the following printers as impact printers and non-impact printers.
 - (a) Line Printer
 - (b) Inkjet Printer
 - (c) Thermal Printer
 - (d) Dot Matrix Printer
- (vi) Write down whether following statements on data communication labelled (a)-(d) are True or False. (in your answer write only the statement label and True or False status)
 - a) Router is used to create a very fast computer network connection.
 - b) Infrared data transmission media is used to connect wireless key boards and mouse.
 - c) Switch is an example for a half-duplex data transmission mode.
 - d) Metropolitan Area Network (MAN) is a computer network that connect computers inside a room or several rooms in a building.
- (vii) The capacity of a portable storage device is 2^{30} bytes. Write down its capacity in GB.
- (viii) If the decimal representation for letter "K" in the ASCII table is 75, write the binary representation of the word **'OR'** by 7 bits per each character.

- (ix) Write two changes in the evolution of the computer from the first generation to the fifth generation.
- (x) The letters A to D in the following table below depicts the processes performed by different devices. The ports that connect those devices to the computer are shown by letters P to S. Match the processes and ports and write down in the correct order.

	Process		Device
А	Connecting an external hard disk to a computer	Р	HDMI
В	Connecting a multimedia projector	Q	RJ/45
С	Connecting an old mouse	R	USB
D	Connecting a computer to a switch	S	PS/2

- (2) a) Consider the following statements related to the characteristics of quality of information. Select the characteristic that each of those statement reflects from the given list in brackets. Match and write only the statement number and the characteristic.
 - 1. A fisherman usually listens to the daily weather report.
 - 2. When a telephone number of a company is needed, go to the institution itself and get it.
 - 3. When recruiting graphic editors to a graphic editing company, following a graphic editing course is sufficient.
 - 4. The teacher in charge of grade 11 says it is difficult to make a successful analysis of the achievement of Grade 11 as five students did not sit for the exam.

(Completeness, Accuracy, Relevancy, Timeliness, Cost Effectiveness) (4 marks)

- b) (i) Write down two services offered by e-government to other governments. (2 marks)
 - (ii) Information and Communication Technology has created some opportunities to get a little relief for the people who are living a very busy and restless life today. Name two such opportunities.

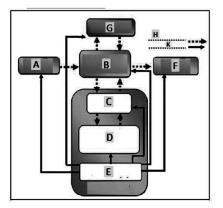
(2 marks)

(Marks - $2 \times 10 = 20$)

- (iii) Mr. Nawaratne is going to Fort Railway Station, Colombo and gives money to get two second class tickets to travel to Rambukkana. The ticketing officer checks the money and notes down the destination and the date and issues the ticket. Separate and write down the input, process, output that represented in this situation. (2 marks)
- (3) In 1945 John von Neumann, an American mathematician, presented the concept of the structural form of computer architecture.



John von Neumann 1903 – 1957



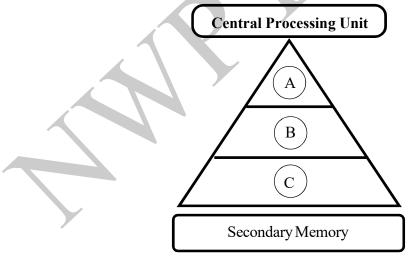
Using this model, the functionality of the computer is described below. Select the words in brackets that correspond to the numbers in the blanks.

1 Data and instructions input by the ... (i) first. a) 3 (ii) That data is sent to the for the processing. It consists of 5 4 three parts called and memory registers. 3 2are sent to the ... Data and instructions processed by the (iii) as information. 6 In here information is output by the. (iv) can be used to store information. (v) Also 5 (vi) communicates, handles and controls the hardware connected to the computer.

{Control Unit, Output Devices, Primary Memory, Input Devices, Central Processing Unit, Secondary Memory, Arithmetic and Logical Unit}

 $(0.5 \times 7 = 3.5 \text{ marks})$

The figure below shows how primary memories are established in terms of proximity and capacity to the b) central processing unit



- (i) writes the primary memories shown by A to C in order. (3 Marks)
- Mention two technologies that form secondary memory. Write a relevant example for each (ii) technology. (2 Marks)
- Convert 2¹⁰ kilobytes into bytes and write down. (iii) (1.5 Marks)
- Saranga who had passed the GCEA/Lexamination this year saw the following instructions when filling out (4) the online admission form to enter to a university. Answer the following questions associated with the situation.
 - within e-government concept in this incident, with whom the government is communicating information? (i) (1 Mark)
 - (ii) If he uses calculator software installed in his computer to calculate the age as at the last date of application, on which device in the computer do those calculations take place? (2 Marks) Grade 10 - ICT - NWP

- (iii) A soft copy of the identity card should be included in the form. What is the most appropriate input device to include a soft copy of the identity card in the form (2 Marks)
- (iv) He first stored a photocopy of the identity card and the electricity ran out while filling out the form online.
 When the power came back on, the computer had only a photo of the identity card but no electronic form.
 What can be the reason for this according to the clasifications of computer memory? (2 Marks)
- (v) The final instructions were to mail a copy to the Commission with the help of a laser printer. What is the reason for choosing this printer? In addition, mention two common features found in this group of printers.
 (3 Marks)
- (5) Librarian of Malpitiya public library intends to obtain several new computers for staff and public use in order to provide an efficient service to the public. She hopes to network the computers and printers with the appropriate network topology
 - Suppose the computers of the Malpitiya Public Library were handed over to you for networking. Draw a diagram of a star network, connecting a switch, three computers, and a printer. (Use the labels Switch, Computer 1, Computer 2, Computer 3, and Printer)
 (3 Marks)
 - (ii) If hub was replaced with the switch for the above network, write down two disadvantages of the computer network (2 Marks)
 - (iii) Write down one disadvantage of using ring topology instead of star topology in the above library.(1 Marks)
 - (iv) Write down two advantages that the Malpitiya Public Library can obtain by networking rather than using computers and devices in isolation. (2 Marks)
 - (v) Radio Transmission is currently used as a very popular data transmission medium. Write down two instances of using radio transmissions in everyday life. (2 Marks)
- (6) At the end of the first term, Pathum was given an online assignment by his ICT teacher under the heading "Computer Evolution". The following is an extract of that assignment.

Α	В	С	D
A device used in the past for calculation purposes	Designed by Charles Babbage with the basic concept of computer.	The efficiency of the computer increased with the invention of this device	A device used to store 3rd generations of data

(Transistor, Analytical Engine, Abacus, Magnetic Tape)

(i) Read the clues under the images above and select the relevant device name for that image from the list given above in brackets and write (in your answer write the English letter and the device name.)

(2 Marks)

- (ii) With the invention of the device introduced in the letter C, computers designed by using those devices were said to be more efficient. To which computer generation do these computers belong? Write two more features that can be seen on computers of that generation.
 (3 Marks)
- (iii) Write down with the given letter whether the following statements about computer evolution are true or false.

- A. Punch cards were used in first generation computers to input and output data.) B. The use of the Internet for the first time began with the arrival of the second generation computers.) C. The speed of data processing on Very Large Scale Integrated Circuits is slower than the speed at which Ultra Large Scale Integration are processed.) D. One of the main reasons Charles Babbage became the father of computers was the introduction of the punch card system. E. Howard Aiken invented the world's first digital calculator, the Mark 1.) (5 Marks)
- (07) (i) Write down the number systems from the binary, octal and decimal to which each of the following numbers may belong.

	Number	Number System
A.	23	
В.	845	

(ii) Write the Most Significant Number(MSD) and the Least Significant Number(LSD) of the following numbers.

A. 7820 B. 50.320 $(0.5 \times 2=1 \text{ Marks})$

- (iii) Nimantha was getting ready to attend school in the morning and his mother gave him Rs. 100. He went to the school canteen with the money and bought a parcel of String hoppers for Rs.36 $_8$ and a bottle of yogurt for Rs.110010 $_2$
 - A. Write the amount given to Nimantha by his mother as a binary number (1 Marks)
 - B. Specify the amount to be paid for a string hopper parcel as a hexadecimal number. (2 Marks)
 - C. After purchasing string hoppers and a bottle of yogurt, write down the remainder paid by the canteen owner to Nimantha as a decimal number. (2 Marks)
- (iv) Complete the following table with information about the coding system used to represent the data on the computer

Coding system	The number of bits used to represent a symbol/ character	Number of characters to be represented
BCD		
ASCII		
EBCDIC		
Unicode		

(0.5 x 4=2 Marks)

(v) Write down with steps how the number 53 is represented by Binary Coded Decimal (BCD)

5

සියලුම හිමිකම් ඇව්රිණි / All Rights Reserved



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පළමු වාර පරීක්ෂණය - 10 ශේණිය - 2020

First Term Test - Grade 10 - 2020

තොරතුරු හා සන්නිවේදන තාක්ෂණය - පිළිතුරු පතුය

I පතුය පුශ්න පිළිතුරු පුශ්න පිළිතුරු පුශ්න පිළිතුරු පුශ්න පිළිතුරු අංකය අංකය අංකය අංකය අංකය අංකය අංකය අංකය

II පතුය

			20 11011(5
		Total marks	10 marks
		පුතිදානය - පුවේශ පතුය	2 marks
	(iii)	ආදානය - මුදල්, සැකසීම - මුදල් පරික්ෂා කිරීම, පුවේශපතුය සැකසීම,	
	(ii)	පරිගණක කීඩා, වීඩියෝ සහ ගීත වලට සවන් දීම, සමාජයීය වෙබ් අඩවි	2 marks
		සහය වීම	2 marks
		ආ i රජයට අනතා වූ නීති රීති, තානාපති කාර්යාල හා වීසා පහසුකම්, සංචාරකයන් ස	ඳහා
(2)	(i)	අ 1 – කාලීන බව, 2 - පිරිවැය අවම වීම, 3 - අදාළ බව, 4 - අංග සම්පූර්ණ බව	4 marks
		Total marks	20 marks
	(x)	A – R, B-P, C-S, D-Q	2 marks
	(ix)	පුමාණය අඩුවීම, දත්ත සැකසීමේ වේගය වැඩිවීම, විදුලිය වැයවීම අඩුවීම ආදි පිළිතුරු	2 marks
	(viii)	O-1001111 R-1010010	2 marks
	(vii)	1GB	2 marks
	(vi)	a. සතාායි b- සතාායි c - අසතාායි d - අසතාායි	2 marks
	(v)	සංඝඨන - line , Dot matrix සංඝඨණය නොවන - Inkjet, Thermal	2 marks
	(iv)	(a) මතක චීප Memory Chip (b) චුම්භක පටි	2 marks
	(iii)	dbac	2 marks
	(ii)	110101101011 (අදාළ පියවර දක්වා තිබිය යුතු ය)	2 marks
(1)	(i)	$i \rightarrow b$ $ii \rightarrow c$ $iii \rightarrow a$ $iv \rightarrow d$	2 marks

(3)	Α	(i) 1 - ආදාන උපාංග 2 - පුධාන මතකය 3 - මධා සැකසුම් ඒකකය	
. ,		4 - අංක ගණිතමය හා තාර්කික ඒකකය 5 - පාලන ඒකකය 6 - පුතිදාන උ	පාංග
			x 73.5 marks
	В	(i) A – රෙජිස්තර මතකය, B – වාරක මතකය C – සසම්භාවි මතකය	3 marks
		 (ii) චුම්භක තාක්ෂණය - දෘඩ තැටි, චුම්භක පටි ප්‍රකාශ තාක්ෂණය - CD, DVD 	
		ಕಿಂದ ಕಾರ್ಯಾಂಗ್ ಕಾರ್ಯ ಕಾರ್ಯಾಂಗ್ ಕಾರ್ಯಾಂಗ್ ಕ	2 marks
		(iii) $1024 \times 1024 = 1048576$, 2^{20} byte	1.5 marks
		Total marks	10 marks
(4) (1	(i)	රජය - පුරවැසියන්ට G to C	1 marks
` '	(ii)	මධා සැකසුම් ඒකකය - CPU, අංකය ගණිතමය හා තාර්කික ඒකකය - ALU	2 marks
	(iii)	සුපරික්ෂණය - Scanner	2 marks
	(iv)	සසම්භාවී පුවේශ මතකය (RAM)	2 marks
		Total marks	10 marks
		Computer 1 Computer 2	
(5)	(i)	Switch Computer 2	3 marks
		Computer 3	
		Printer	
	(ii)	දත්ත සම්පේශණ වේගය අඩුවීම, ජාලය තුල පරිගණක අනනාව හඳුනාගත	
		නොහැකිවීම.	2 marks
	(iii)	දත්ත සම්පේශණ වේගය අඩුවීම, එක් පරිගණකයක් අකර්මණා වුවහොත් ජාලය බිඳ වැටී	I marks
	(vi)	සම්පත් හුවමාරුව / මධාෳගතව පාලනය කළ හැකිවීම / ගොනු බෙදාහදා ගැනීම ආදී වා	8
		සඳහා ලකුණු ලබා දෙන්න	2 marks
	(v)	blue-tooth , wi-fi	2 marks
		Total marks	10 marks
(6)	(i)	A – ඇබකසය, B – ඇනලයිටිකල් එන්ජින්, C – ටුාන්සිස්ටර්, D – චුම්භක පටි	2 marks
	(ii)	දෙවෙනි පරම්පරාව පරිගණක පුමාණයෙන් කුඩාවීම. විදුලිය වැයවීම අඩුවීම. තාපය පිටවී -	
		අවම වීම	3 marks 5 marks
	(iii)	A = සතාාය, B = අසතාායි, C = අසතාායි, D = අසතාායි, E = සතාායි,	
		Total marks	10 marks
(7)	(i)	A – අෂ්ඨමය, දශමය, ෂඩ් දශමය, B - දශමය, ෂඩ් දශමය	.5 x 2 1 mark
	(ii)	${f A}-$ වැඩිම 7, අඩුම 0 ${f B}$ - වැඩිම 5, අඩුම 2	.5 x 2 1 mark
	(iii)	(අ) 1100100දෙක - අදාල පියවර දක්වා තිබිය යුතුය.	1 marks
		(ආ) 1Eදාසය - අදාලපියවර දක්වා තිබිය යුතුයී	2 marks
		(ඇ) රු 20 යි	2 marks 2 marks
	(iv)	BCD – 4 – 16 ASCII – 7 – 128 EBCDIC – 8 – 256 Unicode – 16 – 65536	
	(v)	5 3	
		0101 0011	
		· · · · · · · · · · · · · · · · · · ·	
		01010011 _{BCD}	1 marks