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Provincial Department of Education NWP Provincial Departm

Third Term Test - Grade 12 - 2018

Index No :

General Information Technology I

One Hour

Important Answer all questions.

- 1) Which of the following is true regarding the evolution of computer?
 - i) Price increased, Capacity decreased, Increasing processing speed, size increased
 - ii) Price decreased, Capacity decreased, Increasing processing speed, size decreased
 - iii) Price decreased, Capacity increased, Increasing processing speed, size decreased
 - iv) Price increased, Capacity increased, Increasing processing speed, size increased
- 2) Mrs. Sudharma has conducted video conference with her son who lives in abroad, using web camera. In this scenario, the camera serves as a/an
 - i) Storage device only ii) Input device only iii) Output device only iv) Input/output device
- 3) Which of the following statement /statements are correct regarding the network hub and the network switch?
 - A. data transmission speed in a network switch is higher than Hub
 - B. A hub is spread data entire network
 - C. A switch send data to relevant computer
 - D. network hub is used simplex data transmission mode and network switch is used full duplex data transmission mode
 - i) A, B, C only ii) All A, B, C, D iii) B, C, D only iv) A, C, D only
- 4) Which of the following is most important, when connecting a computer to Local area network?
 - i) Router ii). Network Interface Card iii) Computer Screen iv) Modem
- 5) Which of the following devices with highest capacity and highest access speed?
 - i) Magnetic tape, Random access memory ii) Magnetic tapes, Memory registers
 - iii) Cache memory , Hard disk iv) Hard disk , Cache memory
- 6) A privet company uses finger print scanner machine to mark their daily attendance. Identify the input, process and output in the above scenario.
 - i) finger print, check database, mark attendance
 - ii) check database, finger print, mark attendance
 - iii) mark attendance, check database, finger print
 - iv) check database, mark attendance, finger print
- 7) Which of the following is not regarding demerits of information communication technology?
 - i) Spreading virus

- ii) Creating blog site
- iii) building unsuitable friendships through social media
- iv) publishing edited photograph of individuals affecting their personal life
- 8) Nimal purchase a computer for his son. there was a label as follows:

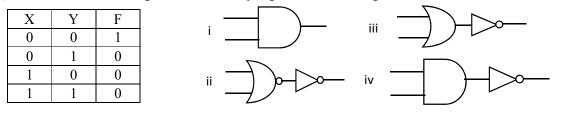
Processor	3(a)
Capacity of hard disk	40GB
Memory	2GB

Which of the following is suitable for blank (a) regarding speed of processor?
i) Gb
ii) Hz
iii) GHz
iv) GBz
9) The decimal equivalent of binary 1010₂ is,
i) 5
ii) 6
iii) 10
iv) 12

10) 2 TB of memory is equivalent to, i) 2^{10} GB ii) 2 x 2^{20} MB iii) 2 x 2^{21} KB iv) 2^{10} x 2^{10} MB

11) Character encoding schemes are used to represent symbols and character within computer. if 1001000 represented H in a coding system, which of the following is represented by 1000010?
i) A ii) B iii) C iv) D

12) Which of the following is the most likely logic circuit for the given truth table.



13) Which Boolean relation below gets verified by the logic circuit given below.?

x - 1i) X. $\overline{X} = 1$ ii) X+1 = 1
iii) X+\overline{X} = 1
iv) X.1 = 1

- 14)is a service of a internet. Which of the following terms is appropriate for blank?i) Email ii) IP Address iii) Protocol iv) web browser
- 15) Which of the following is incorrect regarding IP address?
 - i) It can be assign same IP address for several computers in a network.
 - ii) Each machines requires a unique address called IP to connect to the internet
 - iii) IP address is provided by internet service provider
 - iv) There are four values separated by decimal dotted in range 0-255 in a IP address.
- 16) An e-mail message was closed while editing by Kamal, before it finish,. Which of the following folder that email stored?
 - i) Inbox ii) Out box iii) Draft iv) Trash

17) Consider the following statements;

- a) uniform resource locater is used to identify a web site uniquely
- b) Hyperlink is used to connect to a whole document or to a specific element within a document
- c) Hypertext transfer protocol (http) is used to share web data Which of the following is / are correct?
- i) a and b only ii) a and c only iii) b and c only iv) All a, b and c

- Which of the following is correct for the blanks ; ①, ② and ③? (Uniform resource locater (URL), hosting, IP address, domain name) i) URL, hosting, IP address ii) hosting, IP address, URL iii) hosting, IP address, domain name iv) URL, hosting, IP address 19) http://www.edupub.gov.lk/e-books/english/ict.pdf is/ an i) IP address iii) Protocol ii) Uniform resources locater iv) Service of a internet 20) Which of the following statement is incorrect regarding Word processing document? a) it can be paste several time when copied once. b) it can't be get deleted item c) it can be move a word using cut & paste i) b only ii) a and c only iii) b and c only iv) All a,b,and c 21) Which of the following statements are correct regarding the icons A,B and C ୁ[₽]ୁ⁶ ∽-ଓ≧ i) redo, save, undo ii) Save, undo, redo iii) Undo, sort, redo iv) Undo, save, redo 22) In word processing software, which of the following keyboard shortcut is used to center alignment respectively i) Ctrl + Aii) ctrl + Eiii) Ctrl + J Ctrl + Civ) 23) Which icon in electronic presentation software is used to start slide show from first slide? ii). iii) ED iv) i) 24) Which icon in electronic presentation software is used to manage motion effect that occur in slide show view when you move from one slide to next ,during presentation. i) Slide Transition ii) Animation Objects iii) Animation Scheme iv) Slide Design 25) Consider the following statements related to electronic presentation The key B can be used to appear black slide in slide show view. A. B. The short cut key combination Ctrl + M can be used to insert a new slide to a presentation. Which of the correct according to above statements, i) A is correct and B is incorrect ii) both A and B are incorrect iv) both A and B are correct iii) A is incorrect and B is correct
- 26) What is the feature which makes relationship between two tables in data base management?
 - i) fields are should not equal of two tables
 - ii) at least one field should equal of two tables
 - iii) All the fields are should equal of two tables.

iv) number of fields are should equal of two tables

27) Consider the following statements related to electronic Database

- A- The key which consists of two or more columns of a table uniquely identifies a record is called Composite Key.
- B- Efficiency of a database can be increased by increasing data redundancy
- C- A column or collection of columns in a table when records can be identified uniquely is called primary key.

Which of the following is/are correct?

i) A only ii) A and C only iii) A and B Only iv) All A, B and, C

• Use the following table to answer questions 28and 29

Pro num	Item name	Quantity	Unit price
S001	Pencil	4	15
S002	Pen	7	20
S003	Pencil box	8	200

28) Select the correct pair of values that represent the number of records and number of fields respectively i) 4, 4 iii) 3, 4 iii) 4, 3 iv) 3, 3

29) Which of the following is most suitable data type for Pro_Num i) Boolean ii) Currency iii) Number iv) Text

• Questions 30, 31,32 are based on the following spreadsheet segment

Z	A	В	С	D	Е	inconcentration F and a second	G
1	හාණ්ඩය	ඒකක ගණන	ඒකක මිළ	මුළු වටිනාකම	වට්ටම	ශුද්ධ වටිනාකම	
2	Monitor	3	3500				
3	Digital camera	4	16500				
4	UPS	2	4500				
5	Mother board	2	10500				
6	Flash Drive	8	4900				
7							
8							

30) Which of the following formula should be entered in D2 ?,

i) $B2*C2$ ii) $=B2,C2$ iii) $=B2:C2$ iv) $=$	=B2*C2	2
---	--------	---

31) Which of the following formula should be entered in E2 to get discount price when offer 5% on total cost?

i) =D2/100*5*B2	ii) =D2*5%*B2	iii) =D2*5%	iv) D2*5%*3
-----------------	---------------	-------------	-------------

32) Which of the following formula should be entered in F7 to get total of final cost?
i) =SUM(F2:F6)
ii) =F2.F6
iii) =TOTAL(F2:F6)
iv) =COUNT(F2..F6)

33) Consider the following statement regarding HTML tags;

- A <a> tag is used to create hyperlinks.
- B tag is used to formatting text..

C - tag is used to create unordered list .

Which of the above is/are correct?

i) A only	ii) A and B only.	iii) B and C only.	iv) All A, B and C
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34) Which of the followings shows the file format of image file only.

- i). DOCX, MP₃, PNG ii). RAW, JPEG, BMP
- iii). PNG, RAW, MP3 iv). PPTX, BMP, PNG

35) Which of the following is suitable for blank (a)?

......(a)...... will study the extensively and identify requirements, inputs and outputs of the system.

- i) Web designer
- iii) Network administrator
- ii) System analyst
- iv) Computer Hardware engineer

36) Consider the following devices.

A – Mouse

B- Touch screen

C – External DVD writable drive

Which of the above can be used as both input and output devices

i). A and B only ii). A and C only iii). B and C only iv). A,B,C all

37) Which of the following is used to secure computer from physical and logical issues?

- i) Using Uninterrupted Power supply and password
- ii) Using Uninterrupted Power supply and surge protector
- iii) Using Firewall and surge protector
- iv) Using Antivirus software and pass word
- 38) The software which can download free from internet and as well as user has permission to change interface, is called:
 - i) Proprietary software ii) Application software
 - iii) Open source software iv) Commercial software
- 39) Which of the following can be potential source of computer viruses.
 - A Computer viruses
 - B Scanner
 - C Flash drive
 - i). A and B only ii) A and C only iii) B and C only iv) A,B and C all
- 40). Consider following statements:
 - A. Hardware specification
 - B Vendor reputation
 - C Warranty period and service after sale

Which of the above statements is/are useful when purchasing a computer?

i). A only ii) A and C only iii) A and B only iv) All A ,B and C

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		Provincial Department of Education NWP Provincial Department of Education NWP Provincial Department of Education NWP Provincial Department of Education - NWP Provincial Department of Education NWP Provincial Department of Education NWP Provincial Department of Education - NWP Provincial Department of Education NWP Provincial Department of Education - NWP Provincial Department of Education NWP Provincial D
		Thind Town Tost Cuode 12 2019
		Third Term Test - Grade 12 - 2018
Ind	ex N	o : General Information Technology II Two Hours
-	oorta swer	nt four questions only.
01)	a) b) c) d)	Draw the symbol of AND logic gate and write the truth table. Draw the logic circuit for the following statement. F = (A AND B) OR (NOT C) Convert the binary number 1010111 ₂ into the decimal number. Write steps. The following statement is about a computer system. Fill in the blanks using the given words in
	-,	the brackets. A gives the interface for a user to use the computerBBBsupports to the resource management of the computerC is used to fulfill the specific tasks of the userD is an example for it. (Windows 7, Utility programs, Operating systems, Application software, Word processing software, Language translator programs)
	e)	It is planned to use a fire protection system with three sensors in a hospital for the protection of the hospital. The three sensors are, A - Flame identification sensor B - Smoke identification sensor C - Temperature identification sensor which is greater than 90° C At this point the emergency alarm rings when the other two or one activated with the flame identification sensor. Create the logic circuit and the relevant Boolean statement to represent the above situation.
02)	a)	 Fill in the blanks using the given words in the brackets. (Forward , IP address , E-mail address , Attachments , webmail , Backward , Domain name)

b) Consider the following HTML source code and the relevant output. Fill in the blanks using the given tags which are necessary for source codes.

List:- { hr, tr, th, ol, ul, href, src, body, p, table }

List:- { hr, tr, th, ol, ul, href, src, body, p	පුතිදානය
<html> <head> <title> ABC Turtle Conservation Centre </title> </head> <1> <h2> ABC Turtle Conservation Centre </h2></html>	ABC Turtle Conservation Centre
<img2 "abc.jpg"="" =="" height="100px" width="200px"> <3> ABC Turtle Conservation Centre is located at Colombo 5 in the western province. <h4> Turtles are in danger. </h4></img2>	ABC
<4> <5 border=2> <caption> What we did in last 3 years </caption>	ABC Turtle Conservation Centre is located at Colombo 5 in the western province. Turtles are in danger.
<6> <7> Year <7 <7> Type 7 <7> Number conserved 7 6 2012	What we did in last 3 years Year Type Number conserved 2012 Adults 40 2013 Off springs 80 2014 Eggs 100 o Let's save turtles by refusing 1. Turtle eggs 2. Turtle soup More details Young Zoologists Association
<h4> <8 type= "circle"> Let's save turtles by refusing <9> Turtle eggs Turtle soup </h4> More details <a10 "http:="" =="" abc.mnet.lk"=""> Young Zoologists Association </a10>	

a) The following table shows the data which are related to annual inter-house spots, in a school. Athletes can select more than one event.

Index No	Student Name	Gender	Date Of Birth	House Name	Event Code	Event Name
12435	Suranga Gamage	Male	05-09-1998	Gemunu	A001	100 m
12435	Suranga Gamage	Male	05-09-1998	Gemunu	A002	100 m x 4
12534	Kasuni Bandara	Female	16-10-1999	Gajaba	A001	100 m

- i. What is the major difficulty that you face when creating the above table in a database. Explain briefly
- ii. Briefly explain what you suggest to avoid it.
- iii. If the numbers data type is appropriate for the Index no field, in the above table, write the most suitable data types for the representation of other fields.
- iv. What is the object of the Database management system that can be used to get a name list of all athletes after correcting the database?
- b) The worksheet which is used to make the paysheet of Goluwewa Vidyalaya is given below. Answer the questions using the given worksheet.

	А	В	С	D	Е		
1		Goluwewa Vidyalaya					
2		Salary	y – January 2018				
3	Name	Basic Salary	Regional Development Bank Loan	GuruSetha Bank Loan	Paid Salary		
4	Mr. D.M.D.Basnayaka	37584.23	4500	10500	22384.23		
5	Miss. A.P.S.Gunathunga	35465.28	2500	12500	20265.28		
6	Mr. T.M.P.Thennakoon	44503.69	0	0	44303.69		
7	Miss. W.A.C.Dissanayaka	39562.44	0	17800	21562.44		
8	Mr. K.G.R.Karunanayaka	45615.35	0	0	45415.35		
9	Total Basic Salary						
10		200	1000				
11		5					

- i. Write down the formula that should be written in B9 cell in order to calculate the total basics salary using cell address only.
- ii. Write down the relevant formula as =function1(cell1:cell2) to get the total loan installment of Gurusetha into D9 cell.
- iii. Name the formula which can be used to get the total number of teachers in to B11 cell.
- iv. Monthly the welfare society of the teachers is charged 200 rupees form one person. Write down the formula to get the total amount of monthly received into C10 cell. The following equation is used to calculate the paid salary.
 Basic salary-Regional Development bank loan Guru Setha loan installment teacher welfare installment.

By using the cell addresses write down the formula to get the Mr. Basnayake's paid salary into E4 cell.

v. Write steps to get paid salary of other teachers in to cell E8, using formula in cell E4

- 04) Answer the following questions. a)
 - i. Write down 2 characteristics that should contain in a quality presentation.
 - ii. Write 2 multimedia forms for a presentation.
 - iii. Write a file extension which is used in a file name of an electronic presentation.
 - iv. Match A and B.

	А	В
1.	88	A.The view which is used to create presentations
2.		B.Permits to make the slides respectively.
3.	모	C.Here, all the things can be read clearly.
4.	B)	D.Uses to present a presentation to the audience

b) Write down the function of the short cut keys given below.

Shortcut keys	Function
CTRL + C	
CTRL + V	
CTRL + S	
CTRL + O	
CTRL + X	
CTRL + N	

c) A part of a letter which is processed using the word processing software is given below.

Insert a table

Α

In Microsoft Word, you can insert a table by in three ways: choosing from a selection of preformatted tables — complete with sample data — or by selecting the number of rows and columns that you want. You can insert a table into a document, or you can insert one table into another table to create a more complex table. ſ

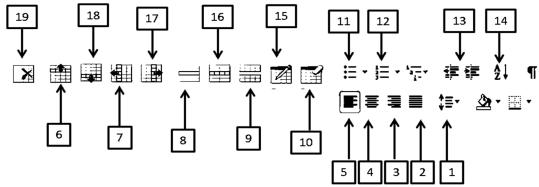
Choose from a gallery of preformatted table templates.

В

Use the Table \geq

	D	Student details		
Name	Scł	100l	Gender	Date of birth
A.A. Ruvinda bandara	Su	nangala M.V	male	2000.06.20
P.A. Ashoka Basnayaka	Vij	ayaba N.C	male	2000.10.23
D.M.Hemathilaka	U.I	3.Wanninayaka Model	Female	2000.08.06
	Scł	nool		

A part of a formatting tool in MS Word software ribbon is given below. Study it and answer the questions.



Mention the label number for the following formatting tools (No marks will be given for more icons including the correct answer)

- i. Aligning the topic which is labelled/named as in to the center.
- ii. Formatting the paragraph which is named as B
- iii. Processing the line which is labelled as D in the above table.
- iv. To insert a new record below the record of A.A. Ruvinda Bandara.
- v. To separate the column Gender into two parts as Male and Female.
- vi. To make the list which is named as C
- 05) a) Information technology has converted to information & communication technology due to communication revolution done recently. It is well known that the reason for this is computer networking.
 - i. Write 03 computer networks distributed according to the Geographical manner.
 - ii. State two advantages and 02 disadvantages of networking.
 - iii. Explain the functionality of a modem in brief
 - iv. What is a firewall?. Describe in brief.
 - v. Give two guided media and two unguided media which are used in computer networking.
 - b) Select form the list given below, the most appropriate term for each of the blanks labelled 1 to 6 in the following sentences.
 - i. A collection of web pages relating to a topic is generally called
 - ii. A can be used to view a web page created in HTML.
 - iii. A file in the web is uniquely identified by using a
 - iv. used to link web page.
 - v. The instruct the web browser on how to display a web page.

06) a) Select the most suitable term for A to E statements from the given list and write them with the label number.

(antivirus software / Malware / plagiarism / physical security / logical security / firewalls)

А	Inserting passwords to the computer system.
В	Publishing a document of a other person as an own document
С	Virus, Warms, Trojan Horse are example.
D	The client has locked the door in computer room.
Е	Downloading the software with copy rights without getting permission or without payments.

- b) Digital Divide can be defined as the gap between those who have and haven't the knowledge about information technology. Write two steps taken by the government to minimize the digital divide.
- c) Online shopping is getting popular day by day. Write tow advantages and two disadvantages of online shopping when comparing with the general shopping.
- e) Mention 3 technological qualities and 01 non technological qualities that should be consider when buying/purchasing a computer.

Third Term Test – 2018			
General Information Technology			

1	iii	11	ii	21	ii	31	iii
2	ii	12	iii	22	ii	32	i
3	i	13	iii	23	iii	33	ii
4	ii	14	i	24	i	34	ii
5	ii	15	i	25	iv	35	ii
6	i	16	iii	26	ii	36	iii
7	ii	17	iv	27	ii	37	i
8	iii	18	ii	28	ii	38	iii
9	iii	19	ii	29	iv	39	ii
10	ii	20	i	30	iv	40	iv

Answer – Part I

Answer – Part II

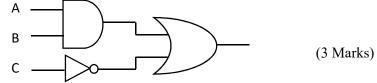
1) .

a)

b)

Α	В	A.B
0	0	0
0	1	0
1	0	0
1	1	1

(3 Marks)



c) 0 1 1 1 0 1 1 (64x1) +(16x1)+(4x1) +(2x1)+(32x0)+(8x0) +(1x1)+2 64 +0+16+0+4+187 (2 Marks)

- d) A Operating system
 - B Utility software
 - C Application software
 - D Word processing software (2 Marks)

 $A \cdot (B + C)$ e) А (3 Marks) В С 2) a) i. IP address ii. Email address iii. Web mail iv. Attachment v. Forward (01 x 05 Marks) b) i. Body ii. Src iii. P iv. Hr v. Table vi. TR vii. TH viii. UL ix. OL x. Href (1 x 10 Marks) 3) Data duplication a) i. (1 Marks) Recording column data repeately. Ex – The name ' Sunanda Gamage" has been repeated twice in the student name column. (1 Marks) ii. Creating a relational data base by deviding a single table to serveral tables. (1 Marks) Student Name - Text iii. Gender – Text Date of birth - Text House name - Text Event name - Text Event code – Text (3 Marks) Report (1 Marks) iv. b) i. =B4 + B5 + B6 + B7 + B8(2 Marks) Cell 2 - D8 රොර් = Sum (D4 : D8) (2 Marks) ii. Function 1 - = sum $Cell \ 1-D4$ iii. Count (1Marks) iv. = B10 * B11 (1 Marks) $v_{.} = B4 - C4 - D4 - B$ (2 Marks)

- 4)
- Number of lines a) .i.
 - Font size _

-

- Correct use of grammer and language
- inserting images, drawings, table or graphs _

(2 Marks)

- Pay attention on target group ii. Images/videos/ sound/ text/ Animation (1 Marks)
- iii. .ppt/ .pptx (1 Marks)

iv. 1. - B / 2 - A /3.- D / 4. - C (2 Marks)

b)

Shortcut key	Fuitionality	
CTRL + C	сору	
CTRL + V	paste	
CTRL + S	save	
CTRL + O	open	
CTRL + X	cut	
CTRL + N	New document	
	•	(3 Mar

c)

- i. 4
- ii. 2
- iii. 8
- iv. 18
- 16 v.
- vi. 11 (6 Marks)

5).

a) i. 'LAN, MAN, WAN (3 Marks)

ii **Advantages**

- Date information can be shared between computers _
- Data can be stored in a smaller space -
- Centralized control of software (1 Marks) _

Disadvantages

- -Break down of the Network
- Training requirements are needed -
- Difficulty in securing data (1 Marks) -
- A modem is used to convert analog sign in to Digital signals and Digital signals in only signals . iii. (1 Marks)
- It is a computer network security. A firewall functions as a secured barrier between Internet and the iv. computer network. Firewalls are available both in software and hardware. (2 Marks)

	v. Guided - Twisted wire pairs, UTP/ STP - Coaxial cables	
	- Fiber optical	
	UnGuided - Radio waves – Wifiy/ wimax / bluetooth	
	- Microwaves	
	- Infrared (2 Marks)	
	vi Lower software cost - Fewer maintchance issues - Ins	tant sofware updates. (2 Marks)
	b) i. Web site ii. Web browser iii. URL iv. H Marks)	Typhrlink v. Markup tags (3
a)	a) A – Logical secutiy	
	B – Plagiarism	
	C – Malware	
	D – Physical security	
	E – Piracy (5 Marks)	
b)	b) - Establishing comuter centers in rural area school	
~)	- Establishing comuter resource centers	
	- Establishing vidatha, Nenasala Centres (3 Marks)	
C)	c) <u>Advantages</u>	
,	Open 24 hours a cloay	
	• Can purchase goods from local or international market	
	• Able to connet any time and any where	
	• Ability to pay using electronic payment method (2	2 Marks)
	<u>Disadvantages</u>	
	• Payment method will be complicated	
	• Difficult to select some good such a dress (1	Marks)
d)	d) <u>Hardware specification</u>	
	Processor speed	
	RAM capacity	
	Hard disk capacity	
	• VGA (3	8 Marks)
<u>1</u>	Non technical factors	
	• The reputation	
	Responsibility time (1 Marks)	

6)

• Responsibility time (1 Marks)