# සියලු ම හිමිකම් ඇවිරිණි / All Rights Reserved වියම් පළාත් අධ්යාපන දෙපාර්ගමේන්තව Provincial Department of Education - NWP විශම පළාත් අධ්යාපන දෙපාර්ගමේන්තව Provincial Department of Education - NWP විශම පළාත් අධ්යාපන දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශම පළාත් අධ්යාපන දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශම පළාත් අධ්යාපන දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශම පළාත් අධ්යාපන දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශම පළාත් අධ්යාපන දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශම පළාත් අධ්යාපන දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශම පළාත් අධ්යාපන දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශම පළාත් අධ්යාපන දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශම පළාත් අධ්යාපන දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශම පළාත් අධ්යාපන දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශම පළාත් අධ්යාපන දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශම පළාත් අධ්යාපන දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශම පළාත් අධ්යාපන දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශම පළාත් අධ්යාපන දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශාව පළාත් අධ්යාපත දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශාව පළාත් අධ්යාපත දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශාව පළාත් අධ්යාපත දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශාව පළාත් අධ්යාපත දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශාව පළාත් අධ්යාපත දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශාව පළාත් අධ්යාපත දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශාව පළාත් අධ්යාපත දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශාව පළාත් අධ්යාපත දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශාව පළාත් අධ්යාපත දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශාව පළාත් අධ්යාපත දෙපාර්ගමේන්තුව Provincial Department of Education - NWP විශාව පළාත් අධ්යාපත දෙපාර්ගමේන්තුව Pro

- Answer all the questions.
- 01. What is the answer that contains only the characteristics of information?
  - (1) Timeliness, Ability to access, Ability to process
  - (2) Ability to access, Timeliness, Relevancy
  - (3) Ability to calculate, Relevancy, Accuracy
  - (4) Ability to process, Timeliness, Relevancy
- 02. Which of the following question contains only the output devices?

(2) A and C only

03. The storage device, which the processor cannot access directly?

- A. Monitor B. Scanner
- C. Printer D. Microphone

(3) A, B and C only (4) A, B, C and D

- (1) Random Access Memory (RAM)
  - (2) Read Only Memory (ROM)
  - (3) Cache memory

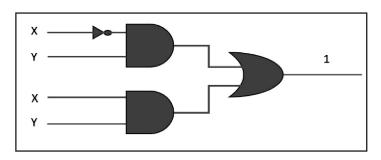
(1) A and B only

- (4) Hard disc
- 04. Consider the following statements.
  - A. Database is a system software.
  - B. Spreadsheet is an application software.
  - C. Antivirus software is a utility software.

Which of the above is/are correct?

- (1) A and B only. (2) A and C only. (3) B and C only. (4) A, B and C all.
- 05. What is not a function of an Operating System?
  - (1) Creating graphs
  - (2) Memory management
  - (3) Hardware management
  - (4) Acting as an interface between the user and the hardware

- 06. The equivalent decimal number for the binary number 101011111 is,
  - (1) 175
- (2) 185
- (3)275
- (4)285
- 07. Which of the following statement is correct regarding the computer coding systems?
  - (1) BCD coding system represents 4 characters.
  - (2) ASCII coding system can represent 128 Sinhala characters.
  - (3) Both Unicode and ASCII support multi-language computing.
  - (4) Unicode uses 16bits to represent one character.
- 08. What is the correct answer, when the binary numbers 11001, 10011, 10101, 11101 are arranged in ascending order?
  - (1) 10011, 10101, 11001, 11101
- (2) 11101, 10101, 11001, 10011
- (3) 11101, 11001, 10101, 10011
- (4) 10101, 10011, 11001, 11101
- 09. The employee A or B and the manager C must be available in order to open a safe in a bank. What is the suitable logic expression for this?
  - (1)(A.B)+C
- (2) (A+B). C
- (3) A+(B.C)
- (4) A.(B+C)
- 10. What can be the suitable inputs for X and Y, for the following logic circuit expression?



(1) X=1 or 0 and Y=1

(2) X=1 or 0 and Y=0

(3) X = 0 and Y = 0

- (4) None of the above.
- 11. The answer that shows the correct order of the evolution of the computer processors is,
  - (1) Vacuum tubes, Transistors, Integrated Circuits, Large Scale Integrated Circuits.
  - (2) Transistors, Vacuum tubes, Integrated Circuits, Large Scale Integrated Circuits.
  - (3) Vacuum tubes, Transistors, Integrated Circuits, Large Scale Integrated Circuits.
  - (4) Integrated Circuits, Large Scale Integrated Circuits, Vacuum tubes, Transistors,
- 12. The Operating Systems which are installed in electronic devices such as smart watches and smart phones are,
  - (1) Single-user Operating Systems
- (2) Network Operating Systems
- (3) Real time Operating Systems
- (4) Batch Processing Operating Systems

13.	Data is kept as back-up is,	os for the protection	on of the data. The	e most suitable place to keep a back-up
	(1) Cloud Computing			(2) Computer Hard disk
	(3) Pen drive		(4) CD	
14.	The answer that shows	the function of <b>To</b>	ols in Operating	System,
	(1) Disk cleanup - Loca	tes file fragments l	by re-arranging th	nem.
	(2) Scan disk - Identifie	s non-essential file	es.	
	(3) Character Map - Fix	ing logical file sys	stem.	
	(4) Disk optimization –	Making room in t	he disk space.	
15.	The answer that shows	the file type and th	ne file extension c	orrectly,
	(1) Word processing so	ftwareaccdb	(2) Spreadsheet	softwaredocs
	(3) Image filesgif		(4) Audio files -	pptx
• U	se the following diag	gram to answei	r the questions	s 16 and 17.
		A	В	С
	Iskoola Pota (Body 🔻 11	A A A	<b>A</b>	= v ¹a;- v   €
	B I U ~ abs X2	$\mathbf{x}^2 \mid \mathbb{A} \sim \overset{aby}{\longleftarrow} \sim$	<u>A</u> ~     =	
	For	nt	\[\bigsiz\]	Paragraph
	I G	D	E	F
16.	The tool used to hide software,	the characters tho	se are not expec	ted to be printed in a word processing
	$(1) A \qquad (2)$	) B	(3) C	(4) D
17.	What is the answer that	contains all the to	ols required to co	nvert the statement <b>P</b> into <b>Q</b> ?
	P - Teachers open	the door, but you	must enter by you	urself.
	Q - Teachers Ope	n <i>The Door</i> , But Y	ou Must Enter By	y Yourself.
		) A,B,D,E	(3) G,D,E,A	(4) I,E,F,C
18.	What is the answer that	shows functions of	of the following sl	hortcut keys in order?
	i) ctrl+z	ii) ctrl	+ p	iii) ctrl+v
	(1) Undo, Copy, Paste		(2) Undo, Print	, Paste
	(3) Copy, Paste, Print		(4) Redo, Copy (03)	r, Paste

- 19. What is the correct answer regarding electronic presentation software from the following statements?
  - (1) Voice and animations cannot be inserted into a presentation.
  - (2) It is more desirable to insert only one video into one slide.
  - (3) It is suitable to insert images, graphs and charts into one slide.
  - (4) There must be around 6-9 sentences in one slide.
- 20. What is the answer that shows the functions of the following tools available in a presentation software in correct order?



- (1) Creation of the presentation, Arranging the slides in a required order, Showing the presentation to the audience, Viewing a selected slide in a full screen.
- (2) Arranging the slides in a required order, Creation of the presentation, Viewing a selected slide in a full screen, Showing the presentation to the audience.
- (3) Arranging the slides in a required order, viewing a selected slide in a full screen, Showing the presentation to the audience, Creation of the presentation.
- (4) Creation of the presentation, Arranging the slides in a required order, Viewing a selected slide in a full screen, Showing the presentation to the audience.
- Use the following segment of spreadsheet, to answer the questions 21, 22 and 23.

	Α	В	C	D	Е	
1	Name	Ma	rks	total		
2	Ivame	English	GIT	lotai		
3	Dinal	90	80	170	1	
4	Navidu	78	60	138	3	
5	Isuru	82	55	137	4	
6	Nevin	70	70 95		2	
	highest					
7	mark	9	5			

- 21. The answer when the function = count(D3:D6) is inserted in cell D7 is,
  - (1)610
- (2)170
- (3)4
- (4) 0

What is the function that can be used to find out the highest marks from both the subjects English 22. and GIT into the cell B7?

(1) =MAX (B3:C6) (2) =HIGH(B3:B6) (3) =SUM(B3:C6)

(4) = MAX(D3:D6)

23. What is the function that should be inserted to find the positions of the students' from the cell range from E3 to E6?

(1) = Rank(D3,D3:D6)

(2) = Rank(D3,D\$3:D\$6)

(3) = Rank(E3,E\$3:E\$6)

(4) = RANK(E3,D\$3:D\$6)

What is the result when the formular  $=4/2+8*2-4^2$  is inserted into a spreadsheet cell? 24.

(1) 14

(2)24

(3)4

(4)2

Supplier table

The question numbers from 25 to 27 are based on the following database. The details of a computer shop are included in the following tables such as items to be sold in the item table, the details of the suppliers in the supplier table and purchase details in the supplier item table.

T				
Item_no	Item_name	Unit_price		
1001	Hard disc(750GB)	3500		
1002	Hard disc(1TB)	5000		
1003	VGA card (256 MB)	1350		
1004	LCD monitor (17")	7100		

102		
Supplier_ID	Sup_Name	Sup_TP
S001	Amal	0770131122
S002	Kamal	0710131001
S003	Nimal	0770131880
S004	Ruwan	0710133332

Supplier\_Item table

Item_no	Supplier_ID	Quantity	Date
1001	S002	5	2023/5/1
1002	S002	5	2023/5/1
1003	S001	3	2023/7/5
1003	S004	4	2023/10/10
1004	S004	6	2023/11/28

What is the most suitable data type for unit price in the Item table? 25.

(1) Number

(2) Currency

(3) Text

(4) Rupee

Which of the following fields is the most suitable for the primary key of the Supplier table? 26.

(1) Sup TP

(2) Sup Name

(3) Item no

(4) Supplier ID

The most suitable answer which contains an example for a Foreign key is, 27.

(1) Item no in Item table

(2) Supplier ID in Supplier table

(3) Item no in Supplier Item table

(4) Date in Supplier table

(05)

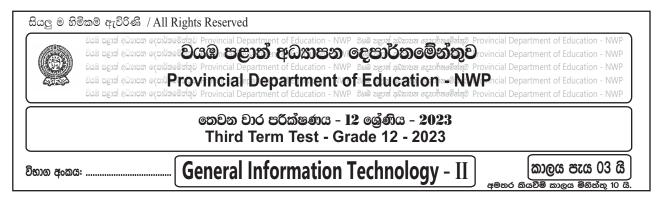
28.			attach a soft copy of sample@gmail.cor	Piumali's A/L results sheet which she n?				
	(1) <u>A</u>	(2)	(3)	$_{(4)}$ CC				
29.	What is the moweb page?	st suitable HTML co	ode from the following	g, to insert the image flower.jpg into a				
	$(1) \le img = "flow"$	er.jpg" width=100 he	eight=60>					
	(2) <image src="&lt;/td"/> <td>"flower.jpg" width=</td> <td>100 height=60&gt;</td> <td></td>	"flower.jpg" width=	100 height=60>					
(3) <img height="60" source="flower.jpg" width="100"/>								
	(4) <img src="f&lt;/td&gt;&lt;td&gt;lower.jpg" width="10&lt;/td"/> <td>0 height=60&gt;</td> <td></td>	0 height=60>						
30.	The correct way	of setting a Hyperlin	nk in HTML is,					
	(1) <a href="http:&lt;/td"><td>://www.example.con</td><td>n"&gt;Click Here</td></a>	://www.example.con	n">Click Here					
	(2) <a link="http&lt;/td"><td colspan="7">link=http://www.example.com&gt;Click Here</td></a>	link=http://www.example.com>Click Here						
	(3) <hyperlink>http://www.example.com</hyperlink>							
	(4) < link > http://	/www.example.com						
31.	Which is NOT t	he valid HTML tag?						
	(1) <f></f>	(2) < <b>I</b> >	(3) <b>&lt;</b> B>	(4) <s></s>				
32.	What is the fold	er/place where the un	wanted e-mails are sto	ored?				
	(1) trash	(2) Spam	(3) Draft	(4) Junk				
33.	What is/are the example for that		which give(s) services	of cloud computing and provides an				
	A) As a se	ervice of infrastructur	e - Firewall facility					
	B) As a se	ervice of developmen	t environment – Serve	r Computers				
	C) As a se	ervice of software – O	perating system					
	(1) A only.		(2) A and B only	7.				
	(3) Conly.		(4) B and C only	<b>y</b> .				
34.	Which of the fol	llowing answer repre	sents the names of the	Free and Open Source Software only?				
	(1) Linux, Open	office writer, GIMP,	Open office Calc					
	(2) Microsoft Ex	kcel, Open office writ	ter, GIMP, Open office	Calc				
	(3) Linux, Open	office writer, Windo	ws 11, Open office Ca	lc				
	(4) Open office	writer, GIMP, Open o	office Calc, MAC OS					

	(1) adware	(2) Spam	(3) Trojan Horse	(4) Bots			
36.	The statement that is,	at has the minimum co	ontribution towards pr	otecting the computer from malware			
	(1) Installing the a	anti-virus software in	the computer and keep	ing it regularly updated.			
	(2) Using famous	websites for downloa	nding software or other	items.			
	(3) Avoiding to cl	lick suspicious advert	isements or messages.				
	(4) It is always su	itable to install legal s	oftware to the compute	er.			
37.	-	ne shoulder to fingers ne fingers is known as		and the tingling or the			
	Which of the follo	owing shows the healt	th issues A and B in cor	rect order?			
	(1) Problems and	pain in different musc	eles and bones, Repetit	ive Stress Injury			
	(2) Computer Vis	sion Syndrome, Carpe	l Tunnel Syndrome				
	(3) Computer Vis	ion Syndrome, Proble	ems and pain in differe	nt muscles and bones.			
	(4) Repetitive Str	ess Injury, Carpel Tur	nnel Syndrome.				
38.	Hiruni performs her ready-made dress selling business and marketing activities online by herself. The advantages of online business with respect to the off-line business are,						
	A) Low c	ost for employees					
	B) No nee	ed for maintaining phy	vsical shopping centers	S.			
	C) Need of always being online.						
	(1) A and B only.	(2) A and C only.	(3) B and C only.	(4) A, B and C all.			
39.	Which of the follo	owing answer doesn't	give the reason for dig	ital divide?			
	(1) Poverty and R	ich	(2) Religion and N	ationality			
	(3) Urban life and	l Country life	(4) Being educated	and not being educated.			
40.	Internet of Thing	s (IoT) is,					
	(1) The communication technology which connects physical devices.						
	(2) A network th	at can activate any dev	vice through internet.				
	(3) The network	of all the networks thi	roughout the world.				
			mong the internet acti ve IP addresses assign	ve devices and the physical devices ed.			

The Malware, that does harmful activities at the background while pretending to be a useful

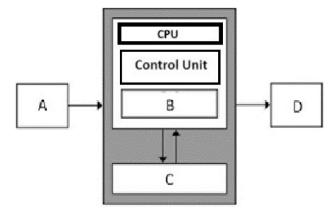
35.

software,



### • Answer only four questions.

(01) (a) The following diagram shows an incomplete illustration of a Von Neumann architecture.



- (i) Write the correct device type against the relevant label shown in the above block diagram.
- (ii) Chamara and Sudesh are two friends who are going to start a company for creating animations. Give the ideal technical specification for a computer for them to buy under the following topics.

(Video card (onboard/separate), CPU, RAM)

Give reasons for your choices.

- (b) (i) Give a short description for the necessity of the coding systems, ASCII and Unicode.
  - (ii) Specify the number of bits reserved for ASCII and Unicode separately.
  - (iii) Draw a logic circuit diagram by using only the basic logic gates for the Boolean expression.

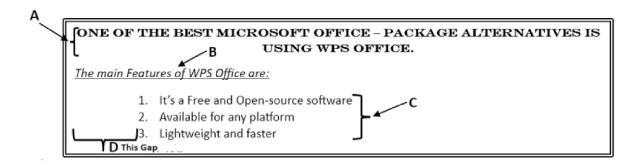
$$F = A + \overline{A}B$$

(iv) Complete the following truth table for the Boolean expression  $F = A + \overline{A}B$  regarding the values of the variables A, B and F.

Α	В	$F = A + \bar{A}B$

(02) (a) Answer the questions considering the Home ribbon given below.





- (i) Write the required tool numbers to complete the labeled sections A, B, C and D against the labels respectively.
- (ii) What is the document creating tool which is only available in word processing software?
- (b) Following is a section of a worksheet from the spreadsheet program that contains data and information of the business which is conducted by Prasanga and Dinesh. Here the relevant electric devices are purchased in dollars and sold in rupees in Sri Lanka.

Α	В		С	D	Е	F	G	Н	1	J
	Electronic Device	F	rchased price in ollars (\$)	Purchased price in Rupees	Profit when sold in cash	Profit when sold in by installment	Selling price in cash	Selling price in installment	Number of installment given for a device	Value of an installment
1	TV	\$	332.00	106,240.00	22,310.40	36,121.60	128,550.40	142,361.60	24	5,931.73
2	Setup	\$	354.00			0.00	0.00	0.00	24	0
3	Fridge	\$	432.00			0.00	0.00	0.00	36	0
4	Washing machine	\$	398.00			0.00	0.00	0.00	30	0
5	Microwave oven	\$	285.00			0.00	0.00	0.00	18	0
				Currency exchar	Currency exchange rate		320			
				Profit percentag	Profit percentage kept when sold in cash Profit percentage kept when sold in installment					
				Profit percentag						

- The currency exchange rate is shown in the cell G8 as Rs. 320.00.
- The profit percentage of selling the devices by cash is shown in the cell G9 as 21%.
- The profit percentage of selling the devices by installments is shown in the cell G10 as 34%.

Answer the questions by using only the cell addresses, after studying the given spreadsheet well.

- (i) Write the correct function in the cell D2 in order to find the price of an equipment in rupees where that should be able to copy it in the cell range from D2 to D6.
- (ii) Write the function in the cell E2 to represent only the profit by selling the equipment by cash. The function must be able to copy in the cell range from E2 to E6.
- (iii) What is the correct function to insert in the H2 in order to find the selling price of a device in the payment by installations scheme?
- (iv) Write the correct function to represent the amount of an installment when buying a television in the payment by installments scheme.
- (v) Draw the tool which is used to sort the names of the devices in the ascending order that is available in the spreadsheet software and name it.
- (03) Answer the questions related to electronic presentation software and database management systems.
  - (a) (i) Write an example for electronic presentation software for each software type such as copy righted, Free and Open Source and Cloud computing.
    - (ii) Name the following View types correctly shown in the labels A, B, C, and D. Write the label that shows the most suitable view type to show a presentation.



(b) Chandana Cabs is a company which provides vehicles those belongs to the company or own by the private individuals and provide them to the customers on the rental basis. Following is the structure of the database which is maintained by the company for this process.

This company has decided to use the personal identity card number (NID) and the vehicle registration number (V\_regid) in the tables as required when the data is stored.

Vehicle table

V\_regid Make Model

Owner_NID	Name	Address	T.P_ No

Owner table

V_regid	Owner_NID	agreed_amount

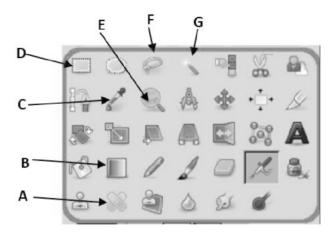
Owner cartable

- (i) Write two primary keys using the above database with relevant table names.
- (ii) Introduce what is a foreign key and give two examples with the table names.
- (iii) Define what is a composite primary key and name a composite primary key if such a key is available in the above tables.
- (iv) This company has decided to employ drivers as the customers ask for the drivers. Give a suitable name for the table that is to be created by Chandana Cabs with three essential data field names.

(v) One driver can drive various vehicles at various occasions. The company records data into another table when assigning a vehicle to a driver. Name of this table is Driver car. Write three names of the fields those are essential to be in the table, selecting from the given list.

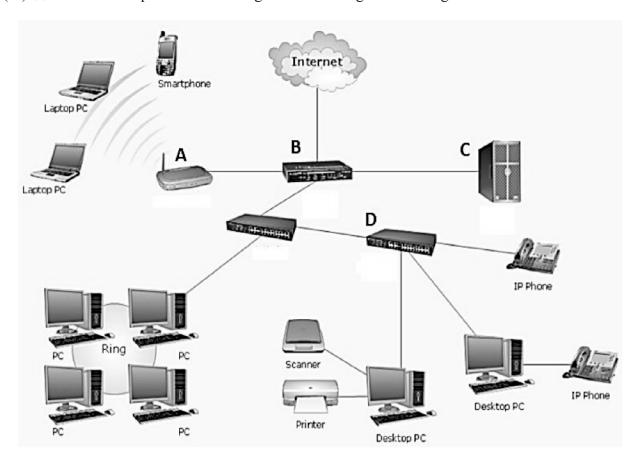
(model, make, V regid, driver NID, date, date with time, cus NID)

- (04) Use of multimedia data have been very popular today.
  - (a) (i) Write one type of popular software for creating digital graphics for each of the categories of software types as copy righted, free and open source and cloud computing.
    - (ii) Write four basic features of a digital graphic.
    - (iii) Name four of the following tools with one main function of each from the given tools from the labels A, B, C, D, E, F and G available in digital graphic designing software.



- (iv) What is the total number of colours that can be used in a digital graphic which has 8 bits assigned for a pixel?
- (b) Audio editing software can perform recording of audio, editing of audio sections as required, and saving audio files in different formats.
  - (i) Name two main audio file types.
  - (ii) Name the main file format which can be used in your digital television at home and in the players available in vehicles.
- (c) The video editing software can be used to create videos by joining items such as videos captured by video cameras and still images captured by video cameras.
  - (i) Name two software which can be used to edit video files or create videos as mentioned above.
  - (ii) Name two file formats for video files.

(05) (a) Answer the questions according to the following network diagram.

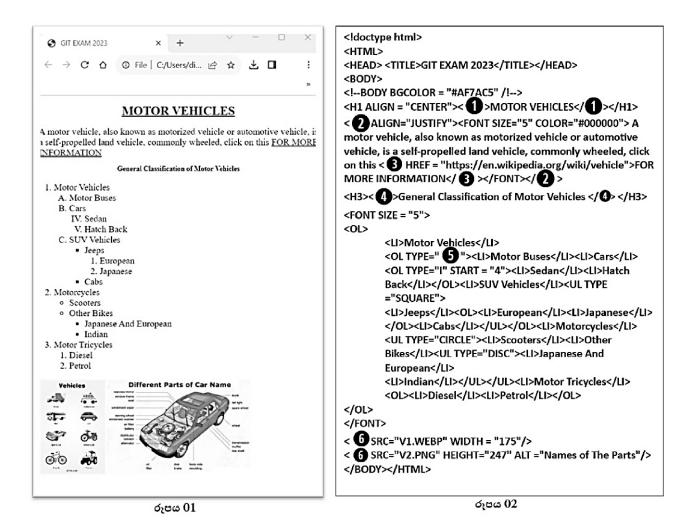


- (i) Name the devices named as A, B, C and D in the above diagram.
- (ii) Name one alternative device for D in the above diagram and write a main feature in it.
- (iii) Name a device which can be used for the security of the networks above.
- (b) Consider the following Uniform Resource Locator (URL).

https://nie.lk/pdffiles/tg/GIT2024.pdf

- (i) Write the protocol and the top-level domain of this URL.
- (ii) What is the special server computer system for translating domain names into IP addresses.
- (iii) Describe the difference between URL and URI (Uniform Resource Identifier).
- (c) (i) Internet is the main data communication infrastructure. Name the main service of finding information which is operated on the Internet.
  - (ii) Name the two parts of a valid e-mail address using an example.
  - (iii) Describe the correct use of "To", "Cc" and "Bcc" when sending an e-mail.

(06) Figure 01 shows the web page created by the source code in the figure 02. Consider that sample web page and the source code.



(i) Write suitable HTML tags or terms for the labels 01 to 06 from the given list.

### (B, S, A, P, A, HREF, IMG, U, 1, i, I, CENTER)

(ii) Write four essential requirements for publishing a website selecting from the given list.

(Content Management System, Domain Name, User group, Internet connection, File Transfer Protocol, Web server)

- (iii) Name four multimedia types which can contained in a web page of a website.
- (iv) Write an example for a static web site and a dynamic web site after describing them.
- (v) Name three employment opportunities with their basic function related to creating and maintaining a web site.

- (07) Almost in every field, the Information and Communication Technology is used today. The society gains a higher efficiency and a productivity from it.
  - (i) Explain the e-government concept in brief and provide three examples for the services provided by e-government to the citizens of the country.
  - (ii) Name four employment opportunities related to Information and Communication Technology and write two basic activities to be performed by two of the given employment.
  - (iii) Write two demerits due to misuse of Information and Communication Technology.
  - (iv) Write two methods which will confirm the physical security and logical security of a computer system.
  - (v) Write two health issues which can arise due to using of computer in wrong posture and in unhealthy manner in the format as health issue, reason, and the solution as given below.

G3/4de 12 AN

# ANSWER PAPER

# **General Information Technology**

# PART - I

01.(2)	02. (2)	03. (4)	04. (3)	05. (1)	06. (1)	07. (4)	08. (1)	09. (2)	10.(1)
11.(3)	12.(3)	13.(1)	14. (4)	15. (3)	16. (3)	17.(1)	18. (2)	19. (2)	20. (4)
21.(3)	22. (1)	23.(2)	24. (4)	25.(2)	26. (4)	27. (3)	28. (2)	29. (4)	30.(1)
31.(1)	32. (2)	33.(1)	34. (1)	35. (3)	36. (2)	37. (4)	38. (1)	39. (2)	40. (4)

	Ques No		Model answers	alloca mar	
01	a	i	A - input devices	.5 x 4	VS
		<del> </del>	B - ALU	7.5 X 1	
			C - main memory		
			D - output devices	total	2
			D output devices	total	
		ii	VGA card - separate		1
		<b>-</b>	CPU - multi core processors (core i5 or heigher)		1
			RAM - 8GB or heigher		1
			requirment of high video rendering power (VGA)		1
			requirment of high and faster processing power		1
			requirement of high und faster processing power	total	5
	b	i a	ASCII characters that can be interpreted and	10141	
		"	displayed as readable plain text for people and as		1
			data for computers.		
			Unicode Standard provides a unique number for		
			every character, no matter what platform, device,		1
			application or language.		1
	+	<u> </u>	ASCII - 7 bits or 8 bits		1
	+		Unicode - 16 bits		1
	+		Cincode - 10 bits	total	4
	+	ii a		totai	4
<u> </u>	+	па			
	+				
	+				
	+			total	2
	+			total	
	+		A B $F = A + \overline{A}B$		
	+		0 0 0		
	+		$egin{array}{ c c c c c c c c c c c c c c c c c c c$		
	+		$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		_
	+			, , ,	2
				total	4
02	a	i	A - 1, 4, 17		1
3	1000	<del> </del>	B - 12, 13		1
	+		C - 7		1
	+		D - 10 of using tab spaces		1
	+	ii	mail merging facility		1
	+		india morging ruentry	total	5
				with	

	b	i	= C2 * G\$8 or $= C2 * SG$8$		2
		ii	= D2 * G\$9  or $= (C2 * G$) * G$9$		2
		iii	= D2 + F2 or suitable other answer		2
		iv	= H2 $/$ i2		2
		v	A Z A Z		
			sorting		2
			Z Sort	total	10
03	a	li	proprietary - MS Powerpoint, Apple Keynote or		1
			other correct ans		1
			free and open source - OpenOffice Impress, WPS		1
			office Presentation etc		1
			cloud based - Google Slides, MS office 365		1
			Powerpoint etc.		1
		ii	A - Normal view	0.5	
			B - Slide sorter view	0.5	
			C - Reading layout view	0.5	
			D - Presentation view	0.5	2
			Presentation view		1
				total	6
	<u> </u>	<u> </u>			
	b	i	Vehicle table - V_regid	1	
			Owner table - Owner_NID	1	2
		ii	A foreign key is a column or group of columns in a		
			relational database table that provides a link between	1	
			data in two tables.		
			Owner_car table - V_regid and Owner_NID	1	2
		iii	A composite key is a combination of two or more		
			columns in a table that can be used to uniquely	1	
			identify each row in the table.		
			Owner_car table - V_regid + Owner_NID	1	2
		iv	Driver table or suitable name	1	
			(driver_NID, D_name, D_T.P_No) or suitable with	1	2
			NID of the driver		
		v	(V_regid, driver_NID, date_with_time) since the		
			same car can be assign to the same driver in several		1
			occations per day		
				total	9

04	a	i	proprietary - Adobe Photoshop etc		
			free and open source - GIMP etc		
			cloud based - Canva etc		
			for above 2 or 3 answers - 2 marks		
			for only 1 answer - 1 mark		2
		ii	pixel, size, resolution colour model 0.5 x 4		2
		iii	A - healing the areas		
			B - applying colour blends		
			C - identifying the correct colour of a pixel		
			D - selecting an area in rectangular shape		
			E - zoom in or zoom out the graphic		
			F - selecting an area in free hand		
			G - automatically select the same coloured pixels in		3
			a continuous area		3
		iv	8bits, 256 colours		2
				total	9
	<u> </u>		_		
	b	i	mp3, wma, aup, amr etc		2
		ii	mp3		1
	<u> </u>			total	3
	c	i	Adobe Premiere Pro, Wondershare filmora, Cap cut, s	shot cu	2
		ii	mp4, avi, vob, kmv etc		1
				total	3
05	a	i	A - wifi router / wireless router	0.5	
	+	<b>-</b>	B - Router	0.5	
	1		C - server	0.5	
			D - Network Switch or Hub	0.5	2
		ii	Network Switch or Hub	1	
			main features of network switch or Hub	1	2
	<u> </u>	iii	software firwall or a Hardware firwall		_ <u>_</u>
	1	<b>—</b>		total	5
	b	i	protocol - https	1	
			top level domain name - lk	1	2
		ii	Domain name system sever / DNS server		1
		iii	URL - a web address, is a reference to a web		
			resource that specifies its location on a computer	1	
			network and a mechanism for retrieving it.		

			sequence of characters that identifies a logical or physical resource used by web technologies. URIs may be used to identify anything, including real-world objects, such as people and places, concepts, or information resources such as web pages and books.	1	2
		ļ	XX XX XX X	total	5
<u> </u>	С	i 	WWW	1	
	+	ii	username and domain name,	1	
		ii	"To" field. It's meant for the main recipients of email.  CC, in its full form, stands for Carbon Copy, a function that allows you to send a single email to multiple contacts.	1	
			Bcc - When you place email addresses in the BCC field of a message, those addresses are invisible to the recipients of the email.	1	
				total	5
06		i	1 - U, 2 - P, 3 - A, 4 - center, 5 - A, 6 - Img	.5 x 6	3
		ii	domain name, internet connection, FTP, web server	.5 x 4	3
		iii	images, audio, video, and interactive elements A uynamic website is a set of pages, the content of which	.5 x 4	2
		iv	changes depending on the visitors' locations, past actions taken on the site, time zones, and more. Eg: ecommerce sites,	2	
			Static web pages are made of "fixed code," and unless the site developer makes changes, nothing will change on the page. Eg: dictionaries, encyclopedia	2	4
		v	Author - Designs interfaces of the website	'	
			Editor - Writes codes, checks errors and rectifies those.  Publishers: Evifella tasks related to the publishing of the publish.		
			Publisher - Fulfills tasks related to the publishing of the website.  A desired tasks are related to the publishing of the website.		
			<ol> <li>Administrator - Fulfills maintenance tasks related to the web server and database.</li> </ol>	d	
	+		5. Users - Use the website.		
	+			total	3
	+			total	15
07		i	Electronic governance or e-governance is the application of information technology for delivering government services, exchange of information, communication transactions etc		3
		ii			

	Joh Catagony Desig Teals to be well-amount	$\neg$	
	<ul> <li>Job Category</li> <li>Software Engineer</li> <li>Software Architect</li> <li>Software QA Engineer</li> <li>Basic Tasks to be performed</li> <li>Analysing and Developing</li> <li>Software</li> <li>Assure quality of the software</li> </ul>		
	Business Analyst     Quality Assurance Leader     Technical Leader     IT Manager      Business Analyst     Analyse the business Responsible to the quality of the Software		
	Graphic Designer     Web developer      Developing applications using graphics software /web authoring tools		
	Computer Applications     Assistant  Office related applications		
	Network Administrator     Design and maintain computer network		
	Database Administrator     Responsible for the proper functioning of the database		
			3
iii	addiction, building unsuitable friendships, privacy issues, pirating intellectual properties etc.		3
iv	Physical protection - CCTV, Padlocks, UPS, etc		
	Logical protection - proper user accounts, passwords, backing up the data etc, encryptions, anti - virus softwares etc		3
V	CVS - low distance, bright colours - maintain the correct distance between monitor and the eyes, control brightness use blue light filters etc	1	
	CTS - wrong postures of using keybaord - maintain the correct postures and heght of the chair	1	
	RSI - wrong postures, stress of work load - maintain the correct postures and have short breaks	1	3
	or other acceptable answers	total	15