



තෙවන වාර පරීක්ෂණය - 12 ශ්‍රේණිය - 2023
Third Term Test - Grade 12 - 2023

විභාග අංකය:

General Information Technology - I

කාලය පැය 03 යි

අමතර කියවීම් කාලය මිනිත්තු 10 යි.

- 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?

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

- (1) A and B only
- (2) A and C only
- (3) A, B and C only
- (4) A, B, C and D

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

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

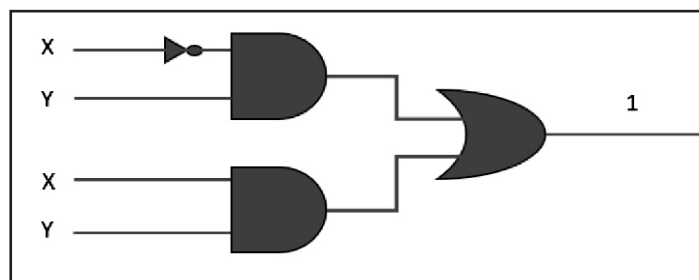
Which of the above is/are correct?

- (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

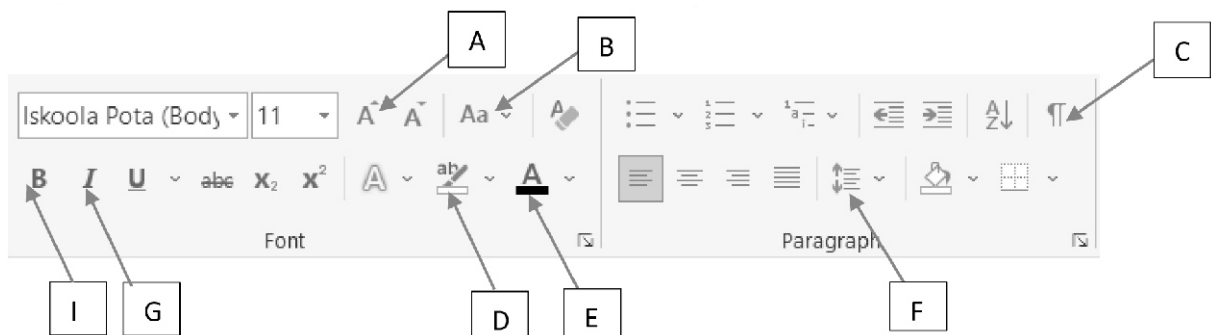
06. The equivalent decimal number for the binary number 10101111 is,
 (1) 175 (2) 185 (3) 275 (4) 285
07. Which of the following statement is correct regarding the computer coding systems?
 (1) BCD coding system represents 4 characters.
 (2) ASCII coding system can represent 128 Sinhala characters.
 (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) $(A \cdot B) + C$ (2) $(A+B) \cdot C$ (3) $A+(B \cdot C)$ (4) $A \cdot (B+C)$
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

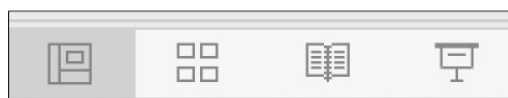
13. Data is kept as back-ups for the protection of the data. The most suitable place to keep a back-up is,
- (1) Cloud Computing (2) Computer Hard disk
(3) Pen drive (4) CD
14. The answer that shows the function of **Tools** in Operating System,
- (1) Disk cleanup - Locates file fragments by re-arranging them.
(2) Scan disk - Identifies non-essential files.
(3) Character Map - Fixing logical file system.
(4) Disk optimization – Making room in the disk space.
15. The answer that shows the file type and the file extension correctly,
- (1) Word processing software - .accdb (2) Spreadsheet software - .docs
(3) Image files - .gif (4) Audio files - .pptx

● Use the following diagram to answer the questions 16 and 17.



16. The tool used to hide the characters those are not expected to be printed in a word processing software,
- (1) A (2) B (3) C (4) D
17. What is the answer that contains all the tools required to convert the statement **P** into **Q**?
- P - Teachers open the door, but you must enter by yourself.
- Q - Teachers Open **The Door**, But You Must Enter By Yourself.
- (1) B,D,I,G (2) A,B,D,E (3) G,D,E,A (4) I,E,F,C
18. What is the answer that shows functions of the following shortcut 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, Paste
(03)

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.

	A	B	C	D	E
1	Name	Marks		total	
2		English	GIT		
3	Dinal	90	80	170	1
4	Navidu	78	60	138	3
5	Isuru	82	55	137	4
6	Nevin	70	95	165	2
7	highest mark	95			

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

22. What is the function that can be used to find out the highest marks from both the subjects English 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)
24. What is the result when the formular $=4/2+8*2-4^2$ is inserted into a spreadsheet cell ?
- (1) 14 (2) 24 (3) 4 (4) 2

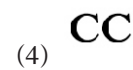
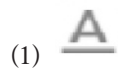
- The question numbers from 25 to 27 are based on the following database. The details of a computer shop are included in the following tables such as items to be sold in the item table, the details of the suppliers in the supplier table and purchase details in the supplier_item table.

Item table			Supplier table		
Item_no	Item_name	Unit_price	Supplier_ID	Sup_Name	Sup_TP
I001	Hard disc(750GB)	3500	S001	Amal	0770131122
I002	Hard disc(1TB)	5000	S002	Kamal	0710131001
I003	VGA card (256 MB)	1350	S003	Nimal	0770131880
I004	LCD monitor (17")	7100	S004	Ruwan	0710133332

Supplier_Item table			
Item_no	Supplier_ID	Quantity	Date
I001	S002	5	2023/5/1
I002	S002	5	2023/5/1
I003	S001	3	2023/7/5
I003	S004	4	2023/10/10
I004	S004	6	2023/11/28

25. What is the most suitable data type for unit_price in the Item table?
- (1) Number (2) Currency (3) Text (4) Rupee
26. Which of the following fields is the most suitable for the primary key of the Supplier table?
- (1) Sup_TP (2) Sup_Name (3) Item_no (4) Supplier_ID
27. The most suitable answer which contains an example for a Foreign key is,
- (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. What is the tool used in an e-mail to attach a soft copy of Piumali's A/L results sheet which she intends to send to the e-mail address **sample@gmail.com**?



29. What is the most suitable HTML code from the following, to insert the image flower.jpg into a web page?

(1) `<img= "flower.jpg" width=100 height=60>`

(2) `<image src= "flower.jpg" width=100 height=60>`

(3) ``

(4) ``

30. The correct way of setting a Hyperlink in HTML is,

(1) ` Click Here`

(2) `Click Here`

(3) `<hyperlink>http://www.example.com</hyperlink>`

(4) `<link>http://www.example.com </link>`

31. Which is NOT the valid HTML tag?

(1) `<F>`

(2) `<I>`

(3) ``

(4) `<S>`

32. What is the folder/place where the unwanted e-mails are stored?

(1) trash

(2) Spam

(3) Draft

(4) Junk

33. What is/are the correct answer(s) which give(s) services of cloud computing and provides an example for that?

A) As a service of infrastructure - Firewall facility

B) As a service of development environment – Server Computers

C) As a service of software – Operating system

(1) A only.

(2) A and B only.

(3) C only.

(4) B and C only.

34. Which of the following answer represents the names of the Free and Open Source Software only?

(1) Linux, Open office writer, GIMP, Open office Calc

(2) Microsoft Excel, Open office writer, GIMP, Open office Calc

(3) Linux, Open office writer, Windows 11, Open office Calc

(4) Open office writer, GIMP, Open office Calc, MAC OS

35. The Malware, that does harmful activities at the background while pretending to be a useful software,
 (1) adware (2) Spam (3) Trojan Horse (4) Bots
36. The statement that has the minimum contribution towards protecting the computer from malware is,
 (1) Installing the anti-virus software in the computer and keeping it regularly updated.
 (2) Using famous websites for downloading software or other items.
 (3) Avoiding to click suspicious advertisements or messages.
 (4) It is always suitable to install legal software to the computer .
37. The pain from the shoulder to fingers is known as and the tingling or the insensitivity in the fingers is known as
 Which of the following shows the health issues A and B in correct order?
 (1) Problems and pain in different muscles and bones, Repetitive Stress Injury
 (2) Computer Vision Syndrome, Carpel Tunnel Syndrome
 (3) Computer Vision Syndrome, Problems and pain in different muscles and bones.
 (4) Repetitive Stress Injury, Carpel Tunnel 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 cost for employees
 B) No need for maintaining physical shopping centers.
 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 following answer doesn't give the reason for digital divide?
 (1) Poverty and Rich (2) Religion and Nationality
 (3) Urban life and Country life (4) Being educated and not being educated.
40. Internet of Things (IoT) is,
 (1) The communication technology which connects physical devices.
 (2) A network that can activate any device through internet.
 (3) The network of all the networks throughout the world.
 (4) The network that communicate among the internet active devices and the physical devices via an internet connection those have IP addresses assigned.



තෙවන වාර පරීක්ෂණය - 12 ශ්‍රේණිය - 2023
Third Term Test - Grade 12 - 2023

විභාග අංකය:

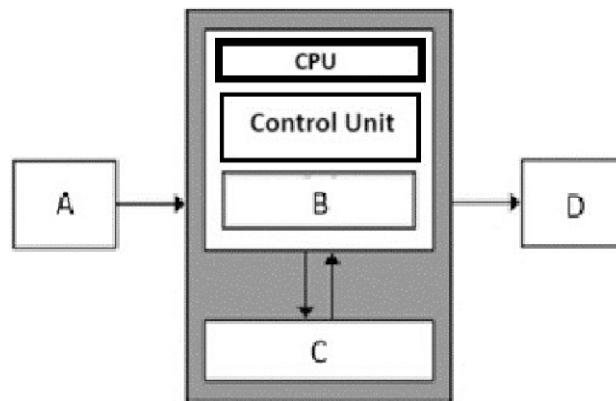
General Information Technology - II

කාලය පැය 03 යි

අමතර කියවීම් කාලය මිනිත්තු 10 යි.

- Answer only four questions.

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



- Write the correct device type against the relevant label shown in the above block diagram.
- 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.

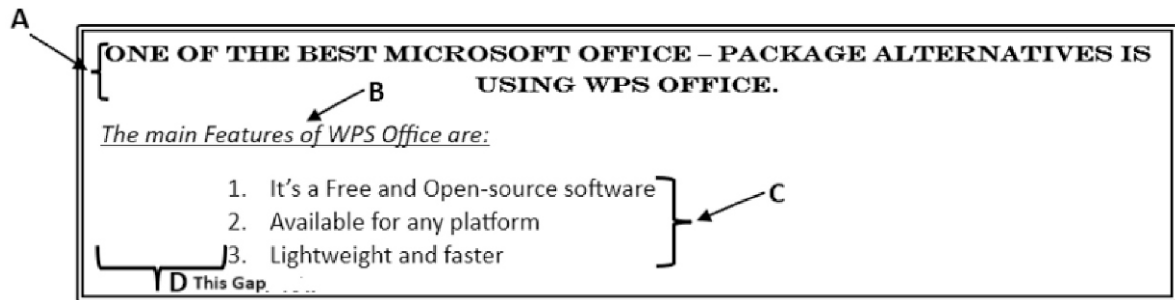
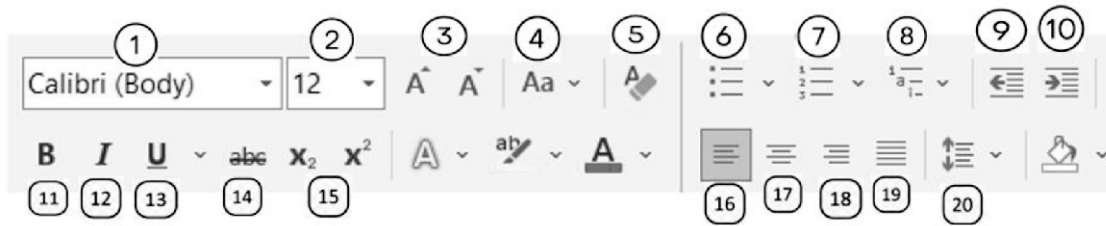
- Give a short description for the necessity of the coding systems, ASCII and Unicode.
- Specify the number of bits reserved for ASCII and Unicode separately.
- Draw a logic circuit diagram by using only the basic logic gates for the Boolean expression.

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

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

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

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



- Write the required tool numbers to complete the labeled sections A, B, C and D against the labels respectively.
 - 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.

A	B	C	D	E	F	G	H	I	J
	Electronic Device	Purchased price in Dollars (\$)	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 exchange rate			320			
			Profit percentage kept when sold in cash			21%			
			Profit percentage kept when sold in installment			34%			

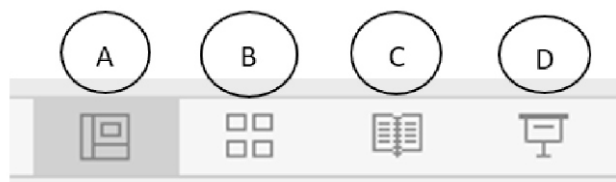
- The currency exchange rate is shown in the cell G8 as Rs. 320.00.
- The profit percentage of selling the devices by cash is shown in the cell G9 as 21%.
- The profit percentage of selling the devices by installments is shown in the cell G10 as 34%.

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 table

Owner_NID	Name	Address	T.P_No

Owner_car table

V_regid	Owner_NID	agreed_amount

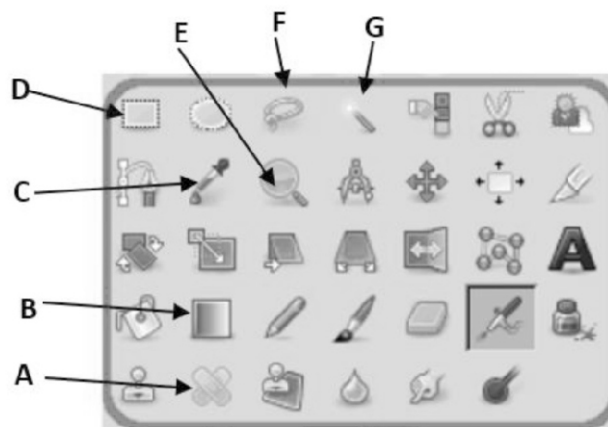
- (i) Write two primary keys using the above database with relevant table names.
- (ii) Introduce what is a foreign key and give two examples with the table names.
- (iii) Define what is a composite primary key and name a composite primary key if such a key is available in the above tables.
- (iv) This 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)

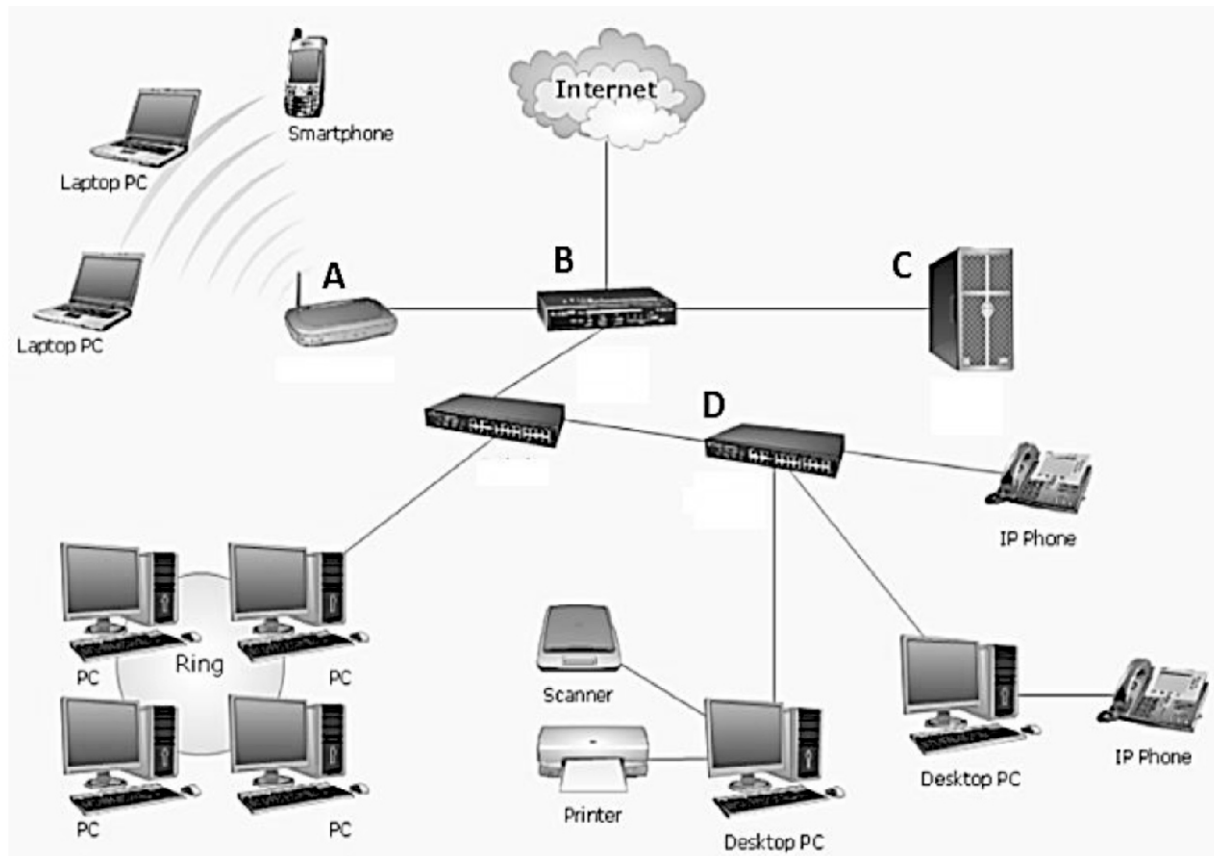
(04) Use of multimedia data have been very popular today.

- (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.



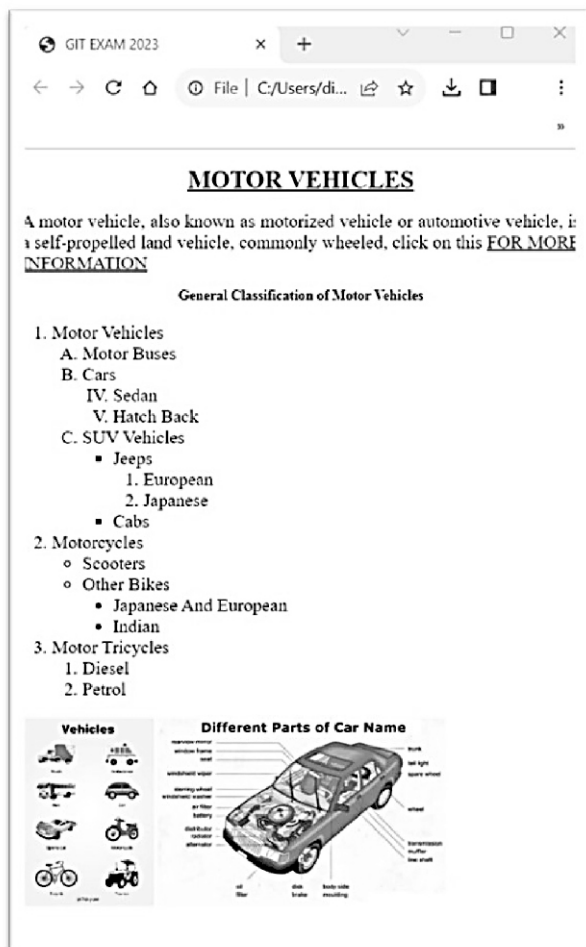
- (iv) What is the total number of colours that can be used in a digital graphic which has 8 bits assigned for a pixel?
- (b) Audio editing software can perform recording of audio, editing of audio sections as required, and saving audio files in different formats.
- (i) Name two main audio file types.
- (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.

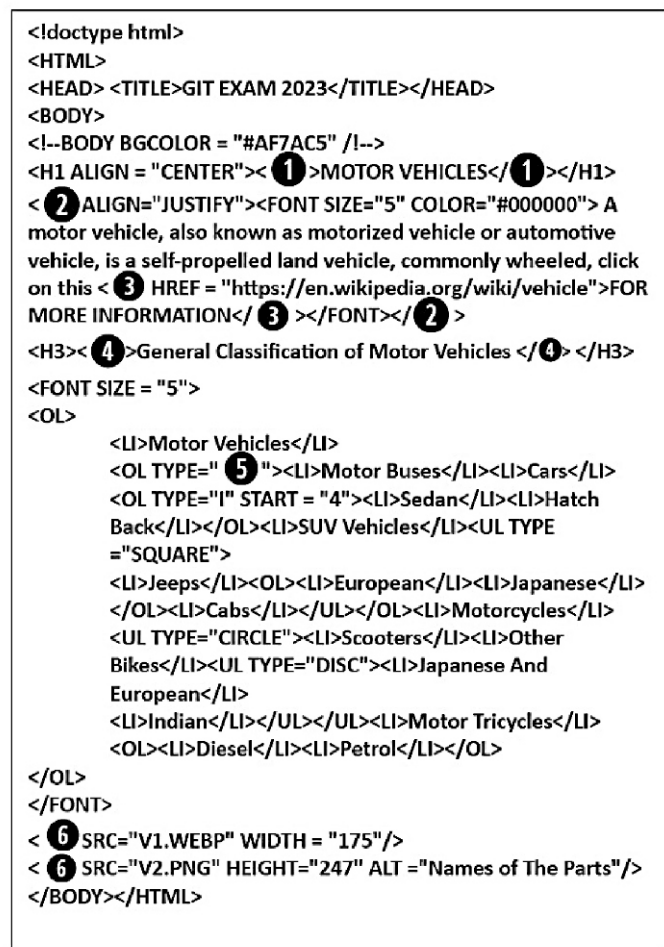


- (i) Name the devices named as A, B, C and D in the above diagram.
 - (ii) Name one alternative device for D in the above diagram and write a main feature in it.
 - (iii) Name a device which can be used for the security of the networks above.
- (b) Consider the following Uniform Resource Locator (URL).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



ଚିତ୍ର 01



ଚିତ୍ର 02

(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.

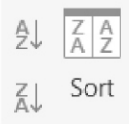
- (i) Explain the e-government concept in brief and provide three examples for the services provided by e-government to the citizens of the country.
- (ii) Name four employment opportunities related to Information and Communication Technology and write two basic activities to be performed by two of the 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.

(Health issue → Reason → Solution)

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	allocated marks																
01	a	i	A - input devices	0.5 x 4																
			B - ALU																	
			C - main memory																	
			D - output devices	total	2															
	ii	VGA card - separate		1																
		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																
			total	5																
	b	i a	ASCII characters that can be interpreted and displayed as readable plain text for people and as data for computers.		1															
			Unicode Standard provides a unique number for every character, no matter what platform, device, application or language.		1															
			ASCII - 7 bits or 8 bits		1															
			Unicode - 16 bits		1															
				total	4															
	ii a																			
b			total	2																
	<table><tr><td>A</td><td>B</td><td>$F = A + \bar{A}B$</td></tr><tr><td>0</td><td>0</td><td>0</td></tr><tr><td>0</td><td>1</td><td>1</td></tr><tr><td>1</td><td>0</td><td>1</td></tr><tr><td>1</td><td>1</td><td>1</td></tr></table>			A	B	$F = A + \bar{A}B$	0	0	0	0	1	1	1	0	1	1	1	1		
				A	B	$F = A + \bar{A}B$														
				0	0	0														
				0	1	1														
				1	0	1														
1	1	1																		
			2																	
			total	4																
02	a	i	A - 1, 4, 17		1															
			B - 12, 13		1															
			C - 7		1															
			D - 10 of using tab spaces		1															
	ii	mail merging facility		1																
			total	5																

	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	 sorting		
					2
				total	10
03	a	i	proprietary - MS Powerpoint, Apple Keynote or other correct ans		1
			free and open source - OpenOffice Impress, WPS office Presentation etc		1
			cloud based - Google Slides , MS office 365 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
	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 data in two tables.	1	
			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 identify each row in the table.	1	
			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 NID of the driver	1	2
		v	(V_regid, driver_NID, date_with_time) since the same car can be assign to the same driver in several occations per day		1
				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 a continuous area		3	
		iv	8bits, 256 colours		2	
				total	9	
		b	i	mp3, wma, aup, amr etc		2
			ii	mp3		1
					total	3
	c	i	Adobe Premiere Pro, Wondershare filmora, Cap cut, shot cut		2	
		ii	mp4, avi, vob, kmv etc		1	
				total	3	
05	a	i	A - wifi router / wireless router	0.5		
			B - Router	0.5		
			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	
		iii	software firwall or a Hardware firwall		1	
				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 network and a mechanism for retrieving it.	1	

			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
				total	5
	c	i	WWW	1	
		ii	username and domain name,	1	
		ii	“To” field. It's meant for the main recipients of email.	1	
			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	1.5 x 6	3
		ii	domain name, internet connection, FTP, web server	1.5 x 4	3
		iii	images, audio, video, and interactive elements	1.5 x 4	2
		iv	A dynamic website is a set of pages, the content of which changes depending on the visitors' locations, past actions taken on the site, time zones, and more. Eg: ecommerce sites, social media blogs	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			
			1. Author - Designs interfaces of the website		
			2. Editor - Writes codes, checks errors and rectifies those.		
			3. Publisher - Fulfills tasks related to the publishing of the website.		
			4. Administrator - Fulfills maintenance tasks related to the web server and database.		
			5. Users - Use the website.		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			

			<table><tr><th>Job Category</th><th>Basic Tasks to be performed</th></tr><tr><td><ul style="list-style-type: none">Software EngineerSoftware ArchitectSoftware QA Engineer</td><td>Analysing and Developing Software Assure quality of the software</td></tr><tr><td><ul style="list-style-type: none">Business AnalystQuality Assurance LeaderTechnical LeaderIT Manager</td><td>Analyse the business Responsible to the quality of the Software</td></tr><tr><td><ul style="list-style-type: none">Graphic DesignerWeb developer</td><td>Developing applications using graphics software /web authoring tools</td></tr><tr><td><ul style="list-style-type: none">Computer Applications Assistant</td><td>Office related applications</td></tr><tr><td><ul style="list-style-type: none">Network Administrator</td><td>Design and maintain computer network</td></tr><tr><td><ul style="list-style-type: none">Database Administrator</td><td>Responsible for the proper functioning of the database</td></tr></table>	Job Category	Basic Tasks to be performed	<ul style="list-style-type: none">Software EngineerSoftware ArchitectSoftware QA Engineer	Analysing and Developing Software Assure quality of the software	<ul style="list-style-type: none">Business AnalystQuality Assurance LeaderTechnical LeaderIT Manager	Analyse the business Responsible to the quality of the Software	<ul style="list-style-type: none">Graphic DesignerWeb developer	Developing applications using graphics software /web authoring tools	<ul style="list-style-type: none">Computer Applications Assistant	Office related applications	<ul style="list-style-type: none">Network Administrator	Design and maintain computer network	<ul style="list-style-type: none">Database Administrator	Responsible for the proper functioning of the database		3
Job Category	Basic Tasks to be performed																		
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<ul style="list-style-type: none">Database Administrator	Responsible for the proper functioning of the database																		
	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															





තෙවන වාර පරීක්ෂණය - 12 ශ්‍රේණිය - 2023
Third Term Test - Grade 12 - 2023

විභාග අංකය:

General Information Technology - I

කාලය පැය 03 යි

අමතර කියවීම් කාලය මිනිත්තු 10 යි.

- 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?

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

- (1) A and B only (2) A and C only (3) A, B and C only (4) A, B, C and D

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

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

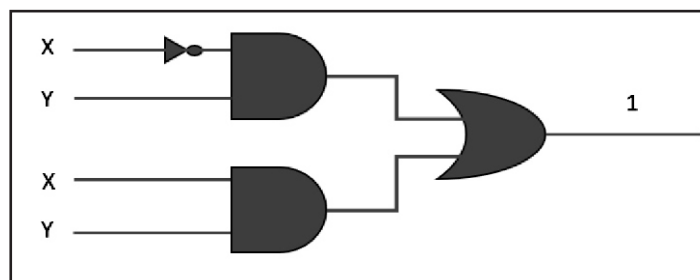
Which of the above is/are correct?

- (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

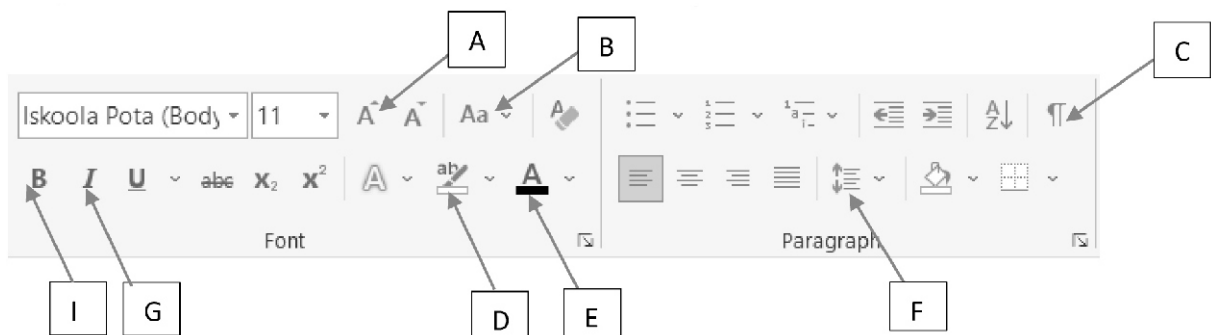
06. The equivalent decimal number for the binary number 10101111 is,
 (1) 175 (2) 185 (3) 275 (4) 285
07. Which of the following statement is correct regarding the computer coding systems?
 (1) BCD coding system represents 4 characters.
 (2) ASCII coding system can represent 128 Sinhala characters.
 (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) $(A \cdot B) + C$ (2) $(A+B) \cdot C$ (3) $A+(B \cdot C)$ (4) $A \cdot (B+C)$
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

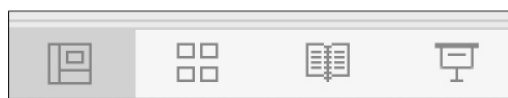
13. Data is kept as back-ups for the protection of the data. The most suitable place to keep a back-up is,
- (1) Cloud Computing (2) Computer Hard disk
(3) Pen drive (4) CD
14. The answer that shows the function of **Tools** in Operating System,
- (1) Disk cleanup - Locates file fragments by re-arranging them.
(2) Scan disk - Identifies non-essential files.
(3) Character Map - Fixing logical file system.
(4) Disk optimization – Making room in the disk space.
15. The answer that shows the file type and the file extension correctly,
- (1) Word processing software - .accdb (2) Spreadsheet software - .docs
(3) Image files - .gif (4) Audio files - .pptx

● Use the following diagram to answer the questions 16 and 17.



16. The tool used to hide the characters those are not expected to be printed in a word processing software,
- (1) A (2) B (3) C (4) D
17. What is the answer that contains all the tools required to convert the statement **P** into **Q**?
- P - Teachers open the door, but you must enter by yourself.
- Q - Teachers Open **The Door**, But You Must Enter By Yourself.
- (1) B,D,I,G (2) A,B,D,E (3) G,D,E,A (4) I,E,F,C
18. What is the answer that shows functions of the following shortcut 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, Paste
(03)

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.

	A	B	C	D	E
1	Name	Marks		total	
2		English	GIT		
3	Dinal	90	80	170	1
4	Navidu	78	60	138	3
5	Isuru	82	55	137	4
6	Nevin	70	95	165	2
7	highest mark	95			

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

22. What is the function that can be used to find out the highest marks from both the subjects English 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)
24. What is the result when the formular $=4/2+8*2-4^2$ is inserted into a spreadsheet cell ?
 (1) 14 (2) 24 (3) 4 (4) 2

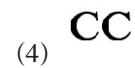
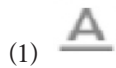
- The question numbers from 25 to 27 are based on the following database. The details of a computer shop are included in the following tables such as items to be sold in the item table, the details of the suppliers in the supplier table and purchase details in the supplier_item table.

Item table			Supplier table		
Item_no	Item_name	Unit_price	Supplier_ID	Sup_Name	Sup_TP
I001	Hard disc(750GB)	3500	S001	Amal	0770131122
I002	Hard disc(1TB)	5000	S002	Kamal	0710131001
I003	VGA card (256 MB)	1350	S003	Nimal	0770131880
I004	LCD monitor (17")	7100	S004	Ruwan	0710133332

Supplier_Item table			
Item_no	Supplier_ID	Quantity	Date
I001	S002	5	2023/5/1
I002	S002	5	2023/5/1
I003	S001	3	2023/7/5
I003	S004	4	2023/10/10
I004	S004	6	2023/11/28

25. What is the most suitable data type for unit_price in the Item table?
 (1) Number (2) Currency (3) Text (4) Rupee
26. Which of the following fields is the most suitable for the primary key of the Supplier table?
 (1) Sup_TP (2) Sup_Name (3) Item_no (4) Supplier_ID
27. The most suitable answer which contains an example for a Foreign key is,
 (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. What is the tool used in an e-mail to attach a soft copy of Piumali's A/L results sheet which she intends to send to the e-mail address **sample@gmail.com**?



29. What is the most suitable HTML code from the following, to insert the image flower.jpg into a web page?

(1) `<img= "flower.jpg" width=100 height=60>`

(2) `<image src= "flower.jpg" width=100 height=60>`

(3) ``

(4) ``

30. The correct way of setting a Hyperlink in HTML is,

(1) ` Click Here`

(2) `Click Here`

(3) `<hyperlink>http://www.example.com</hyperlink>`

(4) `<link>http://www.example.com </link>`

31. Which is NOT the valid HTML tag?

(1) `<F>`

(2) `<I>`

(3) ``

(4) `<S>`

32. What is the folder/place where the unwanted e-mails are stored?

(1) trash

(2) Spam

(3) Draft

(4) Junk

33. What is/are the correct answer(s) which give(s) services of cloud computing and provides an example for that?

A) As a service of infrastructure - Firewall facility

B) As a service of development environment – Server Computers

C) As a service of software – Operating system

(1) A only.

(2) A and B only.

(3) C only.

(4) B and C only.

34. Which of the following answer represents the names of the Free and Open Source Software only?

(1) Linux, Open office writer, GIMP, Open office Calc

(2) Microsoft Excel, Open office writer, GIMP, Open office Calc

(3) Linux, Open office writer, Windows 11, Open office Calc

(4) Open office writer, GIMP, Open office Calc, MAC OS

35. The Malware, that does harmful activities at the background while pretending to be a useful software,
 (1) adware (2) Spam (3) Trojan Horse (4) Bots
36. The statement that has the minimum contribution towards protecting the computer from malware is,
 (1) Installing the anti-virus software in the computer and keeping it regularly updated.
 (2) Using famous websites for downloading software or other items.
 (3) Avoiding to click suspicious advertisements or messages.
 (4) It is always suitable to install legal software to the computer .
37. The pain from the shoulder to fingers is known as and the tingling or the insensitivity in the fingers is known as
 Which of the following shows the health issues A and B in correct order?
 (1) Problems and pain in different muscles and bones, Repetitive Stress Injury
 (2) Computer Vision Syndrome, Carpel Tunnel Syndrome
 (3) Computer Vision Syndrome, Problems and pain in different muscles and bones.
 (4) Repetitive Stress Injury, Carpel Tunnel 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 cost for employees
 B) No need for maintaining physical shopping centers.
 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 following answer doesn't give the reason for digital divide?
 (1) Poverty and Rich (2) Religion and Nationality
 (3) Urban life and Country life (4) Being educated and not being educated.
40. Internet of Things (IoT) is,
 (1) The communication technology which connects physical devices.
 (2) A network that can activate any device through internet.
 (3) The network of all the networks throughout the world.
 (4) The network that communicate among the internet active devices and the physical devices via an internet connection those have IP addresses assigned.



තෙවන වාර පරීක්ෂණය - 12 ශ්‍රේණිය - 2023
Third Term Test - Grade 12 - 2023

විභාග අංකය:

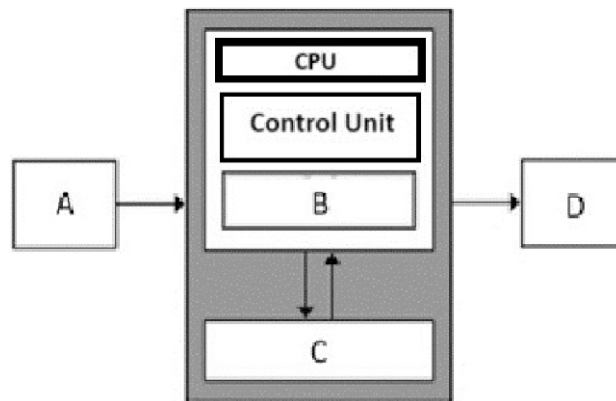
General Information Technology - II

කාලය පැය 03 යි

අමතර කියවීම් කාලය මිනිත්තු 10 යි.

- Answer only four questions.

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



- Write the correct device type against the relevant label shown in the above block diagram.
- 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.

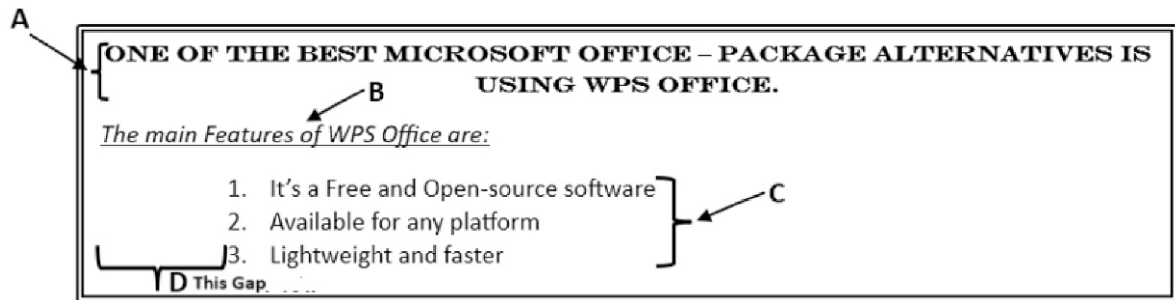
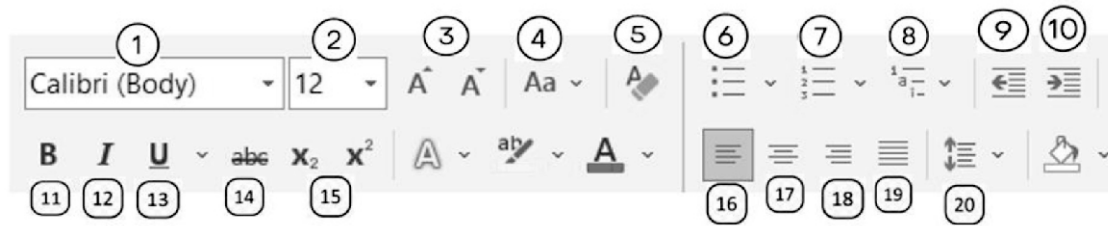
- Give a short description for the necessity of the coding systems, ASCII and Unicode.
- Specify the number of bits reserved for ASCII and Unicode separately.
- Draw a logic circuit diagram by using only the basic logic gates for the Boolean expression.

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

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

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

(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.

A	B	C	D	E	F	G	H	I	J
	Electronic Device	Purchased price in Dollars (\$)	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 exchange rate			320			
			Profit percentage kept when sold in cash			21%			
			Profit percentage kept when sold in installment			34%			

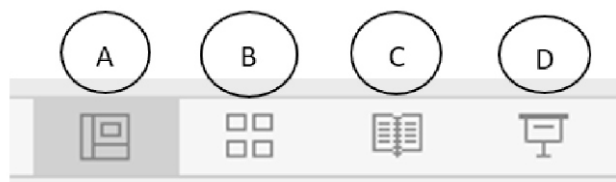
- The currency exchange rate is shown in the cell G8 as Rs. 320.00.
- The profit percentage of selling the devices by cash is shown in the cell G9 as 21%.
- The profit percentage of selling the devices by installments is shown in the cell G10 as 34%.

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 table

Owner_NID	Name	Address	T.P_No

Owner_car table

V_regid	Owner_NID	agreed_amount

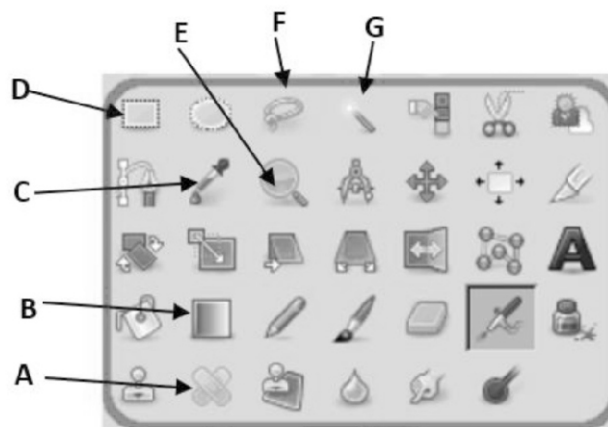
- (i) Write two primary keys using the above database with relevant table names.
- (ii) Introduce what is a foreign key and give two examples with the table names.
- (iii) Define what is a composite primary key and name a composite primary key if such a key is available in the above tables.
- (iv) This 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)

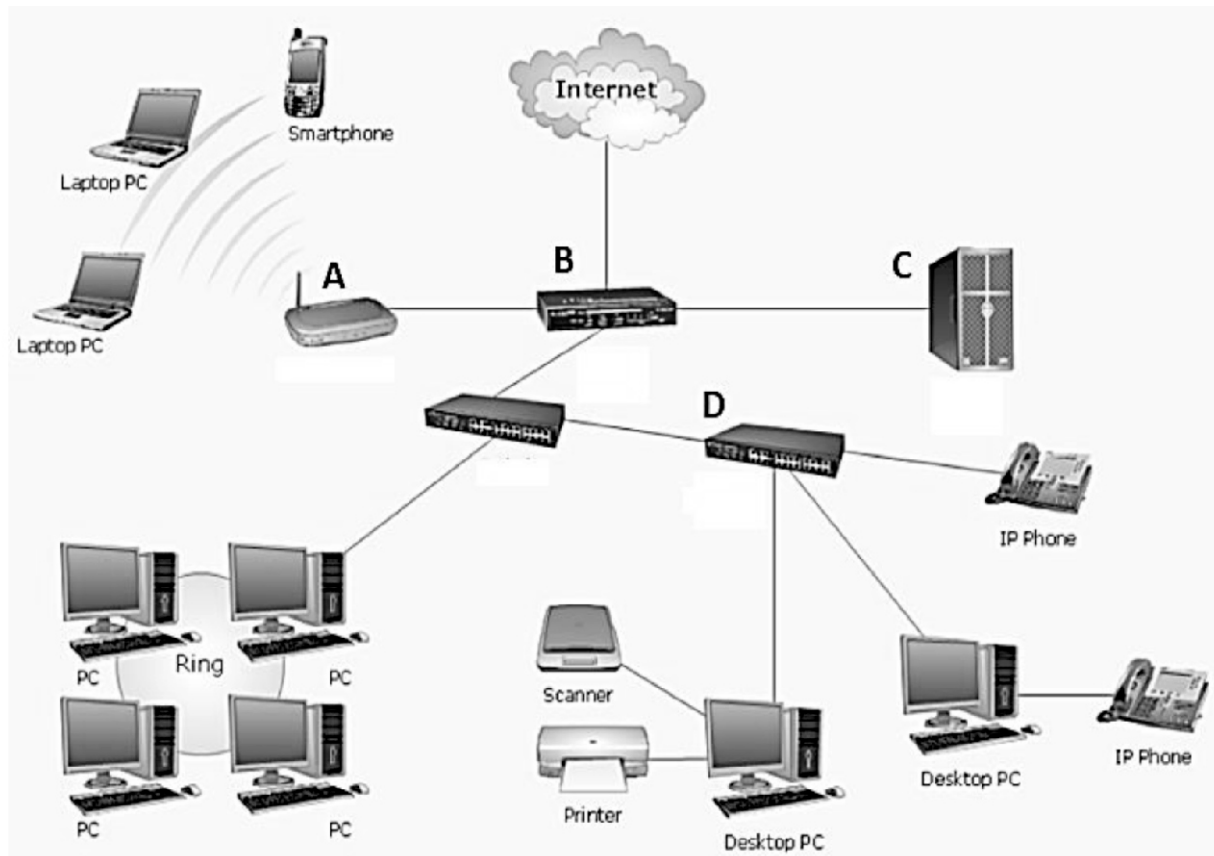
(04) Use of multimedia data have been very popular today.

- (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.



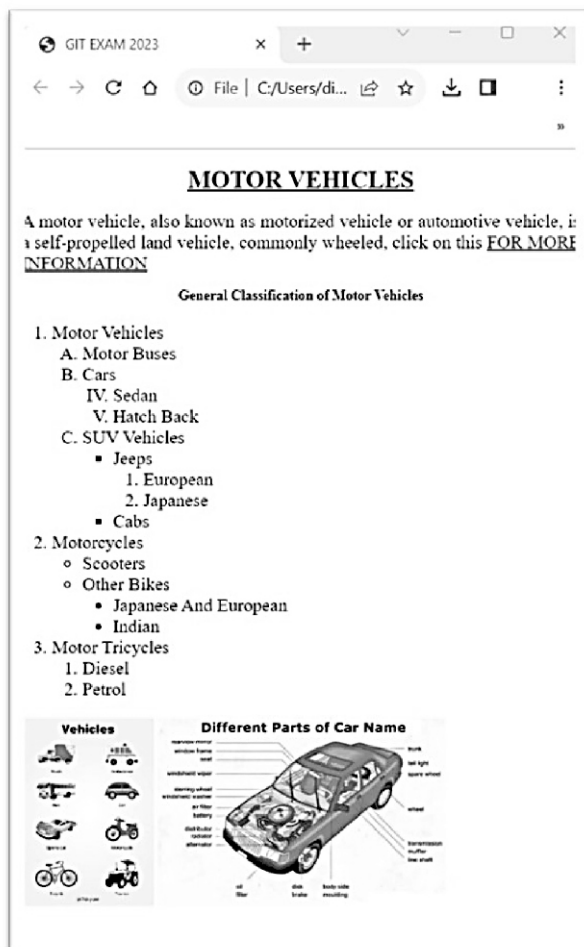
- (iv) What is the total number of colours that can be used in a digital graphic which has 8 bits assigned for a pixel?
- (b) Audio editing software can perform recording of audio, editing of audio sections as required, and saving audio files in different formats.
- (i) Name two main audio file types.
- (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.

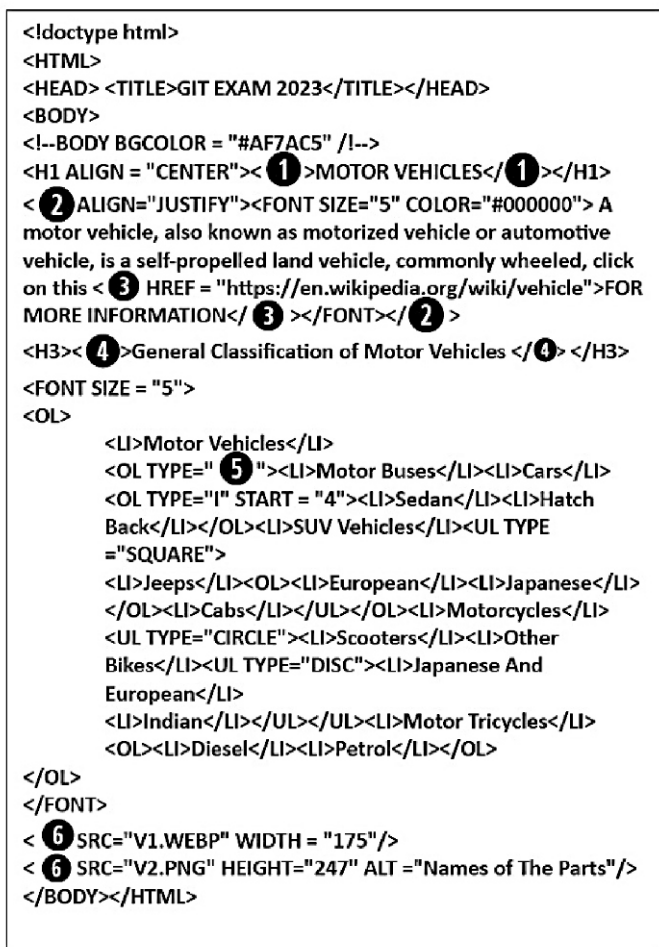


- (i) Name the devices named as A, B, C and D in the above diagram.
 - (ii) Name one alternative device for D in the above diagram and write a main feature in it.
 - (iii) Name a device which can be used for the security of the networks above.
- (b) Consider the following Uniform Resource Locator (URL).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



ଚିତ୍ର 01



ଚିତ୍ର 02

(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.

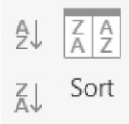
- (i) Explain the e-government concept in brief and provide three examples for the services provided by e-government to the citizens of the country.
- (ii) Name four employment opportunities related to Information and Communication Technology and write two basic activities to be performed by two of the 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.

(Health issue → Reason → Solution)

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	allocated marks	
01	a	i	A - input devices	0.5 x 4	
			B - ALU		
			C - main memory		
			D - output devices		
				total	2
		ii	VGA card - separate		1
			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
				total	5
	b	i a	ASCII characters that can be interpreted and displayed as readable plain text for people and as data for computers.		1
			Unicode Standard provides a unique number for every character, no matter what platform, device, application or language.		1
			ASCII - 7 bits or 8 bits		1
			Unicode - 16 bits		1
				total	4
		ii a			
				total	2
		b			
					2
				total	4
02	a	i	A - 1, 4, 17		1
			B - 12, 13		1
			C - 7		1
			D - 10 of using tab spaces		1
		ii	mail merging facility		1
				total	5

	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	 sorting		
					2
				total	10
03	a	i	proprietary - MS Powerpoint, Apple Keynote or other correct ans		1
			free and open source - OpenOffice Impress, WPS office Presentation etc		1
			cloud based - Google Slides , MS office 365 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
	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 data in two tables.	1	
			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 identify each row in the table.	1	
			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 NID of the driver	1	2
		v	(V_regid, driver_NID, date_with_time) since the same car can be assign to the same driver in several occations per day		1
				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 a continuous area		3	
		iv	8bits, 256 colours		2	
				total	9	
		b	i	mp3, wma, aup, amr etc		2
			ii	mp3		1
					total	3
	c	i	Adobe Premiere Pro, Wondershare filmora, Cap cut, shot cut		2	
		ii	mp4, avi, vob, kmv etc		1	
				total	3	
05	a	i	A - wifi router / wireless router	0.5		
			B - Router	0.5		
			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	
		iii	software firwall or a Hardware firwall		1	
				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 network and a mechanism for retrieving it.	1		

			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
				total	5
	c	i	WWW	1	
		ii	username and domain name,	1	
		ii	“To” field. It's meant for the main recipients of email.	1	
			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	1.5 x 6	3
		ii	domain name, internet connection, FTP, web server	1.5 x 4	3
		iii	images, audio, video, and interactive elements	1.5 x 4	2
		iv	A dynamic website is a set of pages, the content of which changes depending on the visitors' locations, past actions taken on the site, time zones, and more. Eg: ecommerce sites, social media blogs	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			
			1. Author - Designs interfaces of the website		
			2. Editor - Writes codes, checks errors and rectifies those.		
			3. Publisher - Fulfills tasks related to the publishing of the website.		
			4. Administrator - Fulfills maintenance tasks related to the web server and database.		
			5. Users - Use the website.		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			

			<table><tr><th>Job Category</th><th>Basic Tasks to be performed</th></tr><tr><td><ul style="list-style-type: none">Software EngineerSoftware ArchitectSoftware QA Engineer</td><td>Analysing and Developing Software Assure quality of the software</td></tr><tr><td><ul style="list-style-type: none">Business AnalystQuality Assurance LeaderTechnical LeaderIT Manager</td><td>Analyse the business Responsible to the quality of the Software</td></tr><tr><td><ul style="list-style-type: none">Graphic DesignerWeb developer</td><td>Developing applications using graphics software /web authoring tools</td></tr><tr><td><ul style="list-style-type: none">Computer Applications Assistant</td><td>Office related applications</td></tr><tr><td><ul style="list-style-type: none">Network Administrator</td><td>Design and maintain computer network</td></tr><tr><td><ul style="list-style-type: none">Database Administrator</td><td>Responsible for the proper functioning of the database</td></tr></table>	Job Category	Basic Tasks to be performed	<ul style="list-style-type: none">Software EngineerSoftware ArchitectSoftware QA Engineer	Analysing and Developing Software Assure quality of the software	<ul style="list-style-type: none">Business AnalystQuality Assurance LeaderTechnical LeaderIT Manager	Analyse the business Responsible to the quality of the Software	<ul style="list-style-type: none">Graphic DesignerWeb developer	Developing applications using graphics software /web authoring tools	<ul style="list-style-type: none">Computer Applications Assistant	Office related applications	<ul style="list-style-type: none">Network Administrator	Design and maintain computer network	<ul style="list-style-type: none">Database Administrator	Responsible for the proper functioning of the database		3
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<ul style="list-style-type: none">Graphic DesignerWeb developer	Developing applications using graphics software /web authoring tools																		
<ul style="list-style-type: none">Computer Applications Assistant	Office related applications																		
<ul style="list-style-type: none">Network Administrator	Design and maintain computer network																		
<ul style="list-style-type: none">Database Administrator	Responsible for the proper functioning of the database																		
	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															





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නිවසටම ගෙන්වා ගන්න



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සිංහල සහ ඉංග්‍රීසි මාධ්‍යයෙන් ගෙදරටම ගෙන්වා ගැනීමට

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