

විස්තාරිත පළාත් අධ්‍යාපන දෙපාර්තමේන්තුව  
மேல் மாகாணக் கல்வித் திணைக்களம்  
Department of Education - Western Province

වර්ෂ අවසාන ඇගයීම  
ஆண்டிறுதி மதிப்பீடு - 2020  
Year End Evaluation

ශ්‍රේණිය தரம் } 11 Grade	විෂයය பாடம் } Information and Communication Subject } Technology I, II	පත්‍රය வினாத்தாள் } I Paper	කාලය காலம் } 03 hour Time
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**Important**

- Provide answers to all the Questions.
- Provide answers to question number 01 to 40 by selecting the correct answer from the given choices, (1, 2, 3 and 4)
- Cross out (\*) the correct circle on the given answers script relevant to the questions.

- (01) Which answer includes only optical media devices out of the following secondary storage devices?
1. CD, Digital Multiple Disc (DVD), Secure Digital Card (SD Card).
  2. CDs, DVDs, Blu-ray Discs (BDs).
  3. CDs, Blu-ray Discs (BDs), Secure Digital Cards (SD Cards).
  4. CDs, DVDs, magnetic tapes
- (02) What is the true statement about data transmission medium?
1. An example for unguided media is coaxial cables.
  2. The specialty of the shielded twisted pair cable is the transmission of data by reflection of light.
  3. The fastest data transmission guided media is optical fiber.
  4. In a television remote control, data transmit using radio signals.
- (03) What is a false statement regarding Random Access Memory(RAM)?
1. The main function of RAM is to temporarily retain the data and instructions required by the central processing unit.
  2. This is located on the computer's motherboard and is also known as main memory.
  3. This is volatile memory and is much slower than cache memory.
  4. The data and commands required for the basic operation of the computer are stored in this memory.
- (04) The headline of a newspaper was "..... are used in the fishing industry to identify several places where fish populations are abundant." What is the most appropriate word for the space shown here?
1. Closed Circuit TV camera system
  2. Signal lamps
  3. Sensors
  4. Identity code system
- (05) During a quiz programme, Vikum had the opportunity to choose features of distance education from the following
- A. Being able to carry out their learning activities from school according to a daily schedule.
  - B. Ability to use digital libraries.
  - C. Inability to contact an online teacher.
  - D. Ability to access counseling services.
  - E. Ability to upload answers for assignments online

If you are Vikum of the above program, what are the correct characteristics of the distance education you choose?

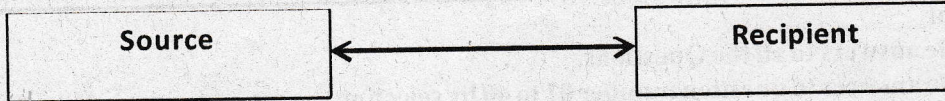
1. A, B and C.
2. B, C and D
3. A, B and D
4. B, D and E



(06) Which of the following statement is **false** regarding computer ports?

1. The HDMI port is used to connect the computer screen to the multimedia projector.
2. The serial port is used to connect the modem to the computer.
3. Today most printers connect to the computer using USB.
4. VGA port is used to connect both audio and video output devices to a computer.

(07) According to the diagram below, what is the mode of data transmission it displays and select one example for the selected mode.



1. Simplex, Watching television
2. Full duplex, Walkie Talkie
3. Half duplex, telephone conversations
4. Full duplex, telephone conversations

(08) What is the correct answer given when  $205_{10}$  is converted to a hexadecimal and an octal number respectively?

1.  $1213_{16}$  and  $255_8$
2.  $DC_{16}$  and  $513_8$
3.  $BD_{16}$  and  $205_8$
4.  $CD_{16}$  and  $315_8$

(09) If ASCII value of the letter B is  $66_{10}$  and ASCII value of letter b is  $98_{10}$ , what is the binary representation of the letters G and g according to the ASCII table?

1. 1000111 and 1100111
2. 1100111 and 1000111
3. 1010111 and 1001010
4. 1000011 and 1100010

(10) Select correct statements out of the following.

- A.  $5B_{16}$  is equivalent to 1011011
- B.  $110111001_2$  is equivalent to  $661_8$ .
- C.  $235_{10}$  is equivalent to  $EB_{16}$ .

1. A and B.
2. B and C.
3. A and C
4. All A, B, C

(11) Consider the following statements.

- A. Operating system software can be divided into two parts as applications and system software.
- B. Antivirus software and disk formatting software are application software.
- C. Random access memory is handled by the operating system.

Which of the above statements are correct?

1. A only
2. C only
3. A and B only
4. B and C only



(12) Consider the following statements regarding operating systems,

- A. Linux-based operating systems do not require an additional utility program for partitioning.
- B. Fragmentation occurs when parts of a file are saved in different places on the hard disk.
- C. Partitioning of a computer should be done after installing an operating system

Which of the above statements are correct?

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

\* Considering the given spreadsheet, answer to Questions from 13 to 15.

(13) What is the formula to be written in cell C2 to find the circumference for circle A in this spreadsheet? (Circumference of a circle =  $2 * \pi * r$ ) Note that the circumference should also be calculated in circles B and C using this formula.

	A	B	C	D
1	Circle	radius	Circumference	
2	A	4	25.14	
3	B	8	50.29	
4	C	16	100.57	
5	Minimum value	4	25.14	
6				
7	pi	3.142857		
8				

1. =2 \* B7 \* B2                      2. =2 \* B\$7 \* B2  
 3. =2 \* \$B7 \* B2                      4. =2 \* B7 \* B\$2

(14) If the circumference obtained for circle A above was copied to cell C4 to obtain the circumference of circle C, what would be its formula?

1. =2 \* B7 \* B4    2. =2 \* \$B7 \* B4  
 3. =2 \* B7 \* B\$4    4. =2 \* B\$7 \* B4

(15) Which of the following formulas can be used in cell C5 to find the minimum circumference of the spreadsheet above?

- A=MIN(C2:C4)  
 B=MIN(C2:C3,C4)  
 C=MIN(C2,C3,C4)

1. A and B only    2. A and C only  
 3. B and C only    4. All A, B and C

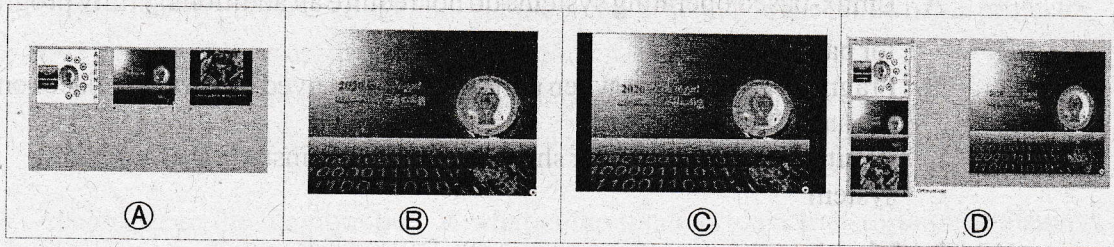
(16) Which answer contain correct shortcut keys that can be used to perform the following functions in a computer?

- (A) To open the document    (P) CTRL + HOME  
 (B) To move the cursor to the beginning of                      (Q) CTRL + P  
 (C) To replace the word contained in the                      (R) CTRL + O  
 (D) To print the document.    (S) CTRL +H

- (1) A→P, B→R, C→S, D→Q  
 (2) A→R, B→S, C→Q, D→P  
 (3) A→R, B→P, C→S, D→Q  
 (4) A→S, B→P, C→R, D→Q

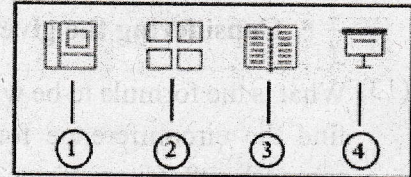


(17) Below are some slides in an e-presentation prepared by Nimali to welcome new students.



In which answer contain correct icons for above slide views?

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



(18) If the following are the features contained in a quality e-presentation, which of the following statements are true?

P	The font size of a slide must be 15 points or less
Q	When inserting motion pictures and videos, only one of them should be included per slide.
R	It is advisable to have 6-9 lines of text in each sentence.
S	The goal of the audience must be targeted.

- (1) P and Q only.      (2) Q and R only.      (3) Q, R and S only      (4) P, R and S only

- Questions from 19 to 22 are based on some tables of the database of ABC Company. These tables are used to store data on projects to which employees of the organization are attached.

**Employee table** (includes employee data.)

Employee_no	Employee_name	Address	Tel_no
E001	Nimantha Silva	29, Galle Road, Panadura	0715689231
E002	Iranganie Jayawardena	2/A, Tissa Avenu, Mt. Lavinia	0772892525
E003	Shenali Perera	92B, Vijaya Road, Dehiwela	0772593519
E004	Ghanesh Silvaraja	256A, Terrance Housing Scheme, Wellawatta.	0769812651
E005	Isha Mohomed	36/12, Temple Road, Maradana	0785912463

Project table (includes details about projects implement within the company)	
Project no	Project name
P001	Crypto
P002	Felix
P003	bitcoin
P004	trulia

Employee_assign table (include details about employees assign to projects)			
Employee no	Project no	Start date	End date
E001	P003	2020/01/10	2020/07/25
E003	P001	2020/01/11	
E005	P004	2020/01/11	2020/06/10
E002	P003	2020/01/12	2020/07/25
E001	P002	2020/02/10	
E005	P001	2020/02/10	

(19) How many fields are in the employee table?

- (1) 2                                      (2) 3                                      (3) 4                                      (4) 5



- (20) What is an example for a foreign key in the database?
- (1) Employee\_no in Employee table
  - (2) Employee\_no in Employee\_assign table
  - (3) Start\_date in Employee\_assign table
  - (4) Project\_no in Project table
- (21) Who works in the project "Felix" ?
- (1) Isha Mohamed
  - (2) Iranganie Jayawardena
  - (3) Shenali Perera
  - (4) Nimantha Silva
- (22) After recruiting a new employee to the company, he will be attached to an existing project. What are the tables (s) that need to be updated for this purpose??
1. Employee table and Project table
  2. Project table and Employee\_assign table
  3. Employee table and Employee\_assign table
  4. Employee table, Project table and Employee\_assign table
- (23) Which of the following is correct regarding computer based information systems?
- A. Computer-based information systems never cause errors.
  - B. These systems take very little time to process information.
  - C. Data on a computer-based information system is less secure than on a manual system due to unauthorized access, computer viruses, etc.
- (1) A only
  - (2) B only
  - (3) A and B only
  - (4) All A, B and C
- (24) Which of the following statement is **false** regarding software system testing methods?
- (1) The system test, tests the new system's interaction with the operating system.
  - (2) During unit testing, system components are tested separately, and this is the first test performed.
  - (3) In the overall test, tests whether desired output can be obtained by giving required inputs.
  - (4) In the acceptance test users are allow to use the new system.
- (25) The HTML source code of web page shown in Figure 1, is shown in Figure 2, without the tags labeled by 1 to 3

<b>Quarantine STOP COVID-19</b>	<code>&lt;center&gt;&lt;h2&gt;&lt;①&gt; Quarantine&lt;/①&gt; &lt;B&gt;STOP&lt;/B&gt; &lt;②&gt; &lt;③&gt; COVID - 19 &lt;/③&gt;&lt;/h2&gt;&lt;/center&gt;</code>
<b>Figure 1</b>	<b>Figure 2</b>

In which choice includes the correct order of tags required for labels ①- ③ shown in figure 2?

1. U, B, S
  2. EM, P, S
  3. EM, BR, S
  4. I, BR, STRONG
- (26) `<table border="1" width="100" height="50" cellpadding="5" cellspacing="5" bordercolor="cyan" bgcolor="Red">`

How many attributes are found in the above HTML code segment related to Table tag?

1. 5
2. 7
3. 14
4. 15



- The IT teacher has decided to send the assignments to his students via e-mail during the holidays and he intends to send a copy to the teacher in charge of the section and another copy to the principal so that the children cannot see it. Answer questions 27 to 29 accordingly.

(27) Where should the e-mail address of the teacher in charge of the section be mentioned in the e-mail message?

- (1) To                      (2) Cc                      (3) Bcc                      (4) Subject

(28) Where should the e-mail address of the principal be mentioned in the e-mail message?

- (1) To                      (2) Cc                      (3) Bcc                      (4) Subject.

(29) What is used to attach assignments prepared as a Pdf File with the e-mail?

- (1) Subject                      (2) Attachment                      (3) Draft                      (4) Sent

(30) Consider the following statements about the diagram on the right.

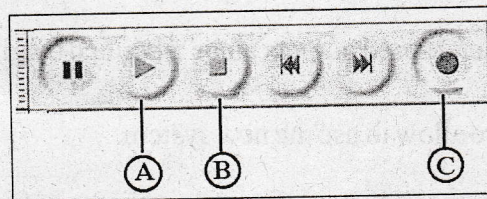
- A. Figure 1 is created from vector media and Figure 2 is created from raster media.  
 B. Figure 1 is created from raster media and Figure 2 is created from vector media.  
 C. You can use Corel Draw software to create image 1 and GIMP software to create image 2.  
 D. You can use GIMP software to create image 1 and Corel Draw software to create image 2.



Which of the above statements are true?

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

(31) Below you see a Transport toolbar of an audio editing software.



Select the choice in which, labels A, B and C are named in correct order .

- (1) Play, Stop, Record.                      (2) Select, Crop, Stop.  
 (3) Stop, Select, Crop.                      (4) Record, Play, Stop

(32) Basic elements of a digital graphic are .

- A. Pixels.                      C. size  
 B. Resolution.                      D. colour

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

(33) What is the answer that contains only the actions that can be taken for logical security?

- Software Firewall, Password, Data Backup
- Uninterruptible Power Supply (UPS), Password, Surge Protector
- Data Backup, Hardware Firewall, Uninterruptible Power Supply (UPS)
- Surge Protector, Closed Circuit Television (CCTV), Hardware Firewall







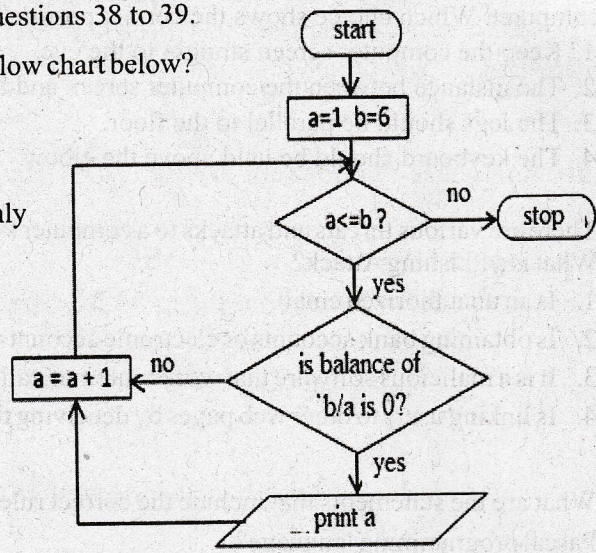
Based on the flow chart below for questions 38 to 39.

(38) Which control structures are used in the flow chart below?

1. Sequence and selection only.
2. Sequence and repetition only
3. Selection and repetition only
4. Sequence, selection, and repetition only

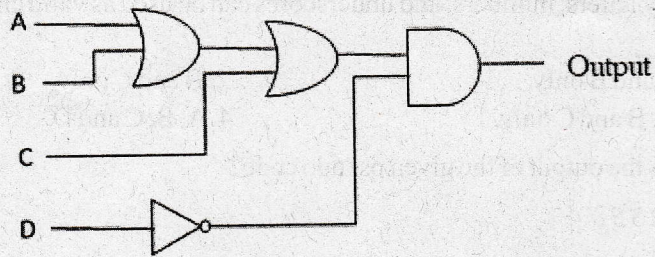
(39) What is the output of the flow chart?

1. 1 2 3 4 5 6
2. 1 3 5
3. 2 3 6
4. 1 2 3 6



(40) What is the output of the following logic circuit

1.  $A+B+C+\bar{D}$
2.  $A+B+C.\bar{D}$
3.  $A.B.C+\bar{D}$
4.  $(A+B+C).\bar{D}$





බස්නාහිර පළාත් අධ්‍යාපන දෙපාර්තමේන්තුව மேல் மாகாணக் கல்வித் திணைக்களம் Department of Education - Western Province			
වර්ෂ අවසාන ඇගයීම ஆண்டிறுதி மதிப்பீடு - 2020 Year End Evaluation			
ශ්‍රේණිය } 11 தரம் } 11 Grade } 11	විෂය } Information and Communication பாடம் } Technology Subject }	පත්‍රය } II வினாத்தாள் } II Paper }	කාලය } 02 hours காலம் } 02 hours Time }

**First question is compulsory. Select 2 questions from part I, and select 2 questions from part II and answer 5 questions only.**

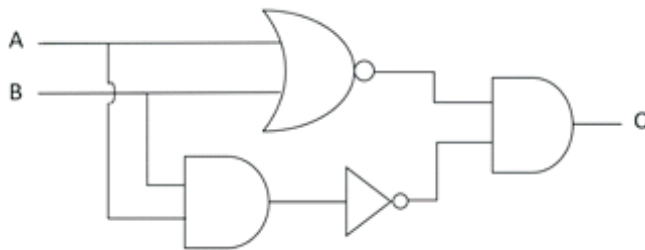
1.

(i)(a) To find out more details about a product, Kamani scanned the QR code of the product printed in a certain magazine with the help of her mobile phone camera and inserts it into the QR code decoding application software installed on her mobile phone. Then the website relevant to the product was displayed. Indicate the inputs, processes, and outputs related to this process separately.

(ii)(a) Convert the hexadecimal number  $8AE_{16}$  to an octal number. Write down the steps used in your calculation

(b) Write the BCD value relevant to the decimal number  $258_{10}$ . Write down the steps used in your calculation

(iii)



(a) Write the Boolean expression for the logic circuit above.

(b) What is the output when 1 is given as the input for A and B?

(iv) Some of the computer ports are labeled as → ? ?

Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ

Write the label corresponding to each of the following functions in front of the relevant task number.

**Task list :**

- ① Connecting a digital camera to a computer.
- ② Connecting the modem to the computer.
- ③ Connecting the computer to the Network switch.
- ④ Connecting a Multimedia Projector to a Modern Laptop.



(v) In the given table below, the functions performed by an operating system are shown in column and the services provided under each of those functions are shown in column .

Match the items in these two columns and write them on the relevant pair labels.	
A. Device Management	P. Protects the computer system from malware
B. File Management	Q. Helps to rename files and folders
C. Security Management	R. Allocates memory required for various processes in the computer
D. Memory Management	S. Controls various peripheral devices

(vi) Some of the tools found in word processing software are labelled below.

Fill in the blanks by selecting the appropriate label for the tool that can be used to perform

each of the following tasks:

- (a) The ..... tool can be used to simultaneously change the word line typed as microsoft word to Microsoft Word
- (b) The ..... tool can be used to edit newspaper columns in creating of newspapers, magazines, etc.
- (c) The ..... tool can be used to change the space between two typed paragraphs
- (d) The ..... tool can be used to add a border to a page.

(vii) Select the most appropriate word from the two words given in brackets to fill in the blanks in the following sentences ? ? . In your answer, write only the statement label and the word relevant to the space).

- ? (Bluegriffon / Dream weaver) .....is an open source web editing software
- ? If the content of a website is constantly changing, it is called as a ..... (static / dynamic) website
- ? Maintenance related to the web server and database are maintained by .....(Website Administrator / Website Editor)
- ? -To publish a website on the Internet a unique ..... (web hosting service/ domain name) should be purchased.

(viii) Indicate whether the following statements about digital graphics are true or false in front of the relevant statement label

- A. A pixel is the basic measuring unit of a digital graphics, and the colours used in a graphic are represented by the number of bits per pixel .



B. A raster graphic is made up with an array of pixels in different colors .

① The measuring unit of the physical dimension of a digital graphics is called Image  
② resolution.

D. GIF and PNG are some of the most lossy file formats used in graphical  
③ compression .  
④

(ix) Consider the following statements regarding problems in the use of information and communication technology

A malware that has the ability to execute automatically, keeping links with other networks.

An album of songs written by an individual, is bought and copied to digital discs and sold to earn money.

A Pain comes from shoulders to the fingers and then it is swelling and hardness.

Uses various tricks to mislead people, release fake information and photos about them on the internet

program print Dec Order (input, Output)  
count := integer ;

Select the word that matches the statements given above to from the list below, and write it in front of the relevant number.

The list of words [Cyber-Crime, Fraud, Social media websites, Repetitive Strain Injury,

written Funnel Syndrome, Plagiarism, Computer worms, Bots]

End

(x) Given below is a list of Pascal programs for displaying consecutive numbers from 1 to 10 in descending order. Write the correct words for the labels shown as ? ,? ,? and ?

2. Answer the following questions

(i) The Meteorological Department intends to physically protect their computer system. Write two steps they can take.

(ii) The Sri Lanka Police maintains a computerized database of criminals. Write two possible steps that can be taken for logical security of that database

(iii) De-skilling is also one of the effects of using ICT. Write two examples.

(iv) Mention an organization in Sri Lanka that provides cyber security

(v) Consider the statements labeled from ? to ? and identify the most suitable



term for

each label from the list given below. Write the statement label and the relevant word for

each answer.

? A step that can be taken to create a digital bridge.

? Numbness and pain in the fingers

? Copy another's creative work and presenting it as one's own without the permission of the owner.

patient number	name	telephone number
P0001	Sunil Weerasinghe	0772035480
P0002	Mohomed Musthafa	0751556977
P0003	Malcam Ivan	0715689243
P0004	Sujatha Attanayake	0786238146
P0005	Jesica Perera	0763569814

physician no	name	specialties	telephone number	charges per patient
D1001	usil Wijesundara	Gynecology and obstetrics	0715264259	1100
D1002	Gamini	Dental	0772398654	1000
D1003	Wijedasa	Ophthalmologist	0776974238	1200
D1004	Suneetha	Surgeon	0716512398	1300
D1005	Famil Jameel	Surgeon	0768912356	1400

hospital management system  
patient table (contains patient details)

patient number	physician no	date
P0002	D1003	2020/02/10
P0003	D1002	2020/02/11
P0001	D1003	2020/02/12
P0004	D1001	2020/02/12
P0001	D1002	2020/02/13
P0002	D1005	2020/02/14

physician table (contains details of physicians)

reservation table (contains details of patient appointments by physicians)



4. (i) Note the detailed statements labeled to Write the most suitable word to fill in the blanks from the given list

- A. <http://www.elearning.lk/ICT/Grade10/lesson1.pdf> The elearning.lk domain name of the URL ..... is the top level domain name. .... is the location of the file
- B. .... is the software used to access the Internet and ..... is an example of that
- C. The ..... address is used to uniquely identify each computer on the Internet.
- D. The ..... protocol notifies the message in case of errors.
- E. The ..... protocol is used to transfer files from client computer to another computer in the internet.
- F. .... is used to store mails that are composed to be sent but could not be completed, sent mail will be store in Sent.

List : (.lk , Draft , IP , Uniform Resource Locator, ICMP, Web browser , eLearning , ICT/Grade10 , Chrome , FTP, lesson1.pdf )

(ii)(a) The HTML source code of the web page shown in Figure 2 is shown in Figure 1 without the elements, attributes, or values of the bearings labeled to .

```

<html>
<①><title>සිසු රක්ෂණය</title></①>
<body>
<②><h2>සුරක්ෂා සිසු රක්ෂණය</h2>
<③ src="children.jpg" width="200" height="100" alt="stay home"><④>
<⑤ face="arial" size="3">ඔබ දැන් සුරක්ෂිතයි</⑤></②>
<⑥ align="justify"> සෑම සාසල් දරුවකුට මි නොමිලයේ ලැබෙන මෙම
රක්ෂණවරණය තුළින්, හදිසි අනතුරු හා රෝගාබාධ සඳහා වින්දි හිමිකම් ලබා
ගත හැකිය. </⑥>
<table ⑦="3" align = "⑧">
<⑧><⑨>රක්ෂණවරණය </⑨><⑨>හිමිකම් මුදල</⑨></⑧>
<⑧><⑩><⑪>
<li>රෝහල් ගතවීමක දී </li>
<li>හදිසි අනතුරකදී </li>
<li>මාසි සහායක දීම</li>
<li>අසාධ්‍ය රෝගාබාධ සඳහා</li>
</⑩>
<⑩><⑪ type = "⑫">
<li>200,000</li>
<li>100,000</li>
<li>75,000</li>
<li>100,000</li>
</⑩></⑧>
</table>
<②><h3>වැඩි විස්තර සඳහා :- <a href="https://nie.lk/en/covid-19">
සිසු සුරක්ෂා රක්ෂණය</a></h3></②></body></html>

```

(b) The above web page is created by using Sinhala Unicode system. How do you store the



5. Wholesale purchases of rice during January and February are calculated using the following spreadsheet.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1		Purchase												
2		January						February						
3	Items	Unit price	Quantity	After the discount of unit price	Price Before the discount	Price after the discount	Profit	Quantity (kg)	After the discount of unit price	Price Before the discount	Price after the discount	Profit	Total	Total Profit
4	Suwandel	200	500	180	Rs.100,000.00	Rs.90,000.00	Rs.10,000.00	500	170	Rs.100,000.00	Rs.85,000.00	Rs.15,000.00	175,000.00	25,000.00
5	Kuruluthuda	100	500	90	Rs.50,000.00	Rs.45,000.00	Rs.5,000.00	250	85	Rs.25,000.00	Rs.21,250.00	Rs.3,750.00	66,250.00	8,750.00
6	White raw	80	2000	72	Rs.160,000.00	Rs.144,000.00	Rs.16,000.00	1500	68	Rs.120,000.00	Rs.102,000.00	Rs.18,000.00	246,000.00	34,000.00
7	Red raw	70	1500	63	Rs.105,000.00	Rs.94,500.00	Rs.10,500.00	1000	59.5	Rs.70,000.00	Rs.59,500.00	Rs.10,500.00	154,000.00	21,000.00
8	Kiri Samba	100	1500	90	Rs.150,000.00	Rs.135,000.00	Rs.15,000.00	500	85	Rs.50,000.00	Rs.42,500.00	Rs.7,500.00	177,500.00	22,500.00
9	Samba	80	3000	72	Rs.240,000.00	Rs.216,000.00	Rs.24,000.00	2000	68	Rs.160,000.00	Rs.136,000.00	Rs.24,000.00	352,000.00	48,000.00
10	Total					Rs.724,500.00	Rs.604,500.00				Rs.446,250.00	Rs.78,750.00	Rs.1,170,750.00	Rs.159,250.00
11	Maximum Value					Rs.216,000.00	Rs.24,000.00				Rs.136,000.00	Rs.24,000.00	Rs.352,000.00	Rs.48,000.00
12														
13	Discount													
14	January		10%											
15	February		15%											
16														

(i) Write the formula to be inserted in cell F10 as =function1(cell1:cell2), to calculate the amount spent on total purchases in the month of January.

(ii)(a) Write down the formula that should be included in cell D4 to calculate the unit price of Suwandel after the discount for the month of January.

Unit price after discount of an item in the relevant month = Unit price of the item - Unit price of the item \* Discount of the relevant month

(b) If you copied the formula in (ii) (a) above for the white raw rice for the month of January, write the formula that appears in cell D6

(iii)

(a) Write down the formula to be included in cell F4 to calculate the price after discount of suwandel rice in January.

The price of an item in the relevant month after the discount = Unit Price of an item after the discount \* Quantity

(b) Write down the formula should be included in cell G4 to calculate the profit for Suwandel rice in January.

Profit of an item in the relevant month = Price before the discount of the item - Price after the discount of the item

(iv) Write down two ways of writing formula to be inserted in cell M4 to calculate the total purchases in January and February.

(v) Write the formula to be included in cell N11 to calculate the maximum profit earned on items in January and February



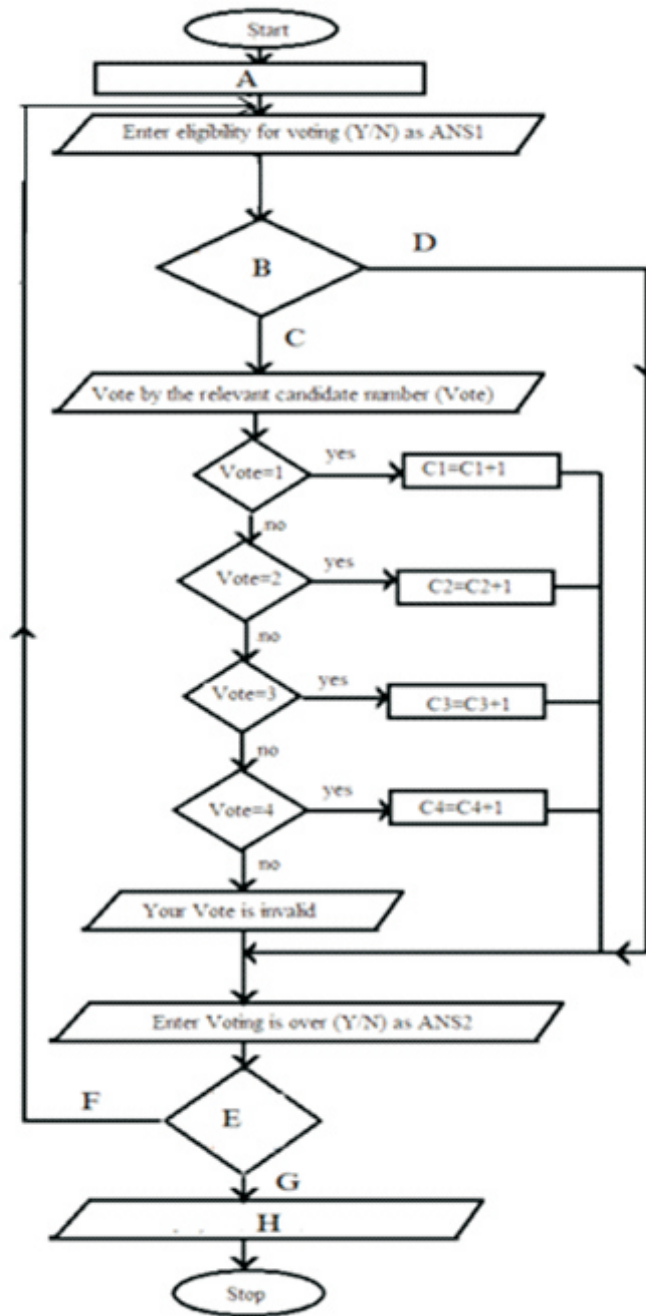
6. The following diagram shows the six major steps in the system development lifecycle.  
Provide correct answers to the questions asked

- (i) In the above note, write the steps with regard to the ? ,? and ? labels in front of the relevant label
- (ii) Name three things to be noted in written, when the steps of identifying about the new system. →
- (iii) Put a tick ( ✓ ) for the tasks performed and a cross ( ✕ ) for the not performed in step ? of the tasks given below from ? ?

(P)	Identify the main hardware systems and its components.	
(Q)	Planning of tests	
(R)	Identify the system errors.	
(S)	Coding the system using a suitable computer language.	
(T)	Identification of software architecture	
(U)	Identification of system objectives	
(V)	Preparing Interfaces and database	

- (i) Mention two methods of deployment of the system and briefly explain them
  - (ii) Mention two differences between the waterfall model and the Iterative Incremental model
7. Four candidates from four political parties are contesting for the presidency. After verifying the identity of a voter who is eligible to cast the vote by an official of polling station, the voter can declare his or her preference for only one candidate's relevant number. If the voters finished casting their votes, this task is finished and if it





- (i) Write the suitable terms for labels A, B, C, D, E, F, G, H in this flow chart
- (ii) Write the relevant pseudo-code for the flow chart.
- (iii) It shows that the coding of the Pascal program relevant to this flow chart by using an array in the above task A. So define a suitable array to do that.







BCD value - 001001011000 (Marks ½) Important: If BCD value is written as 1001011000 no Marks will be allowed.

(iii) (a)  $Q = \overline{(A+B)} \cdot \overline{(A \cdot B)}$  (Marks 1)

(b) 0 (Marks 1)

(iv) ① - A | ② - C | ③ - B | ④ - D  
(Marks ½ x 4)

(v)  $A \rightarrow S$      $C \rightarrow P$   
 $B \rightarrow Q$      $D \rightarrow R$   
(Marks ½ x 4)

(vi) (a) - R (c) - P  
(b) - T (d) - U  
(Marks ½ x 4)

(vii) Ⓐ - Bluegriffon  
Ⓑ - Dynamic  
Ⓒ - Website Administrator  
Ⓓ - Domain name  
(Marks ½ x 4)

(viii) A - True            C - False  
B - True            D - False  
(Marks ½ x 4)

(ix) ① - Bots  
② - Fraud  
③ - Repetitive Stress Injury  
④ - Cyber crimes  
(Marks ½ x 4)

(x) Ⓐ - var  
Ⓑ - count  
Ⓒ - downto  
Ⓓ - count  
(Marks ½ x 4)

(Total Marks 20)

2.

- (i) Use of Uninterrupted Power Supply
- Use of hardware firewalls
- Controlled access through doors
- Use of CCTV



Maintain the lab with free from dirt, dust, moisture etc.

(Marks 1 x 2 = 2)

(ii)

Use of passwords.

Data Encryption

Taking backups.

Use of software firewalls

(Marks 1 x 2 = 2)

(iii)

- Machinery has taken over the industry replacing the talents of people.
- Libraries have been made to close down and jobs in the sector lost due to the electronic books and magazines.
- Online learning through the distance mode has limited teacher resources.
- Health concerns are easily sorted out from homes itself, cutting down the job opportunities in laboratory services.

(Marks 1 x 2 = 2)

(iv) CERT (Computer Emergency Response Team)

(Marks 1 )

(v) Ⓐ Improving Digital Literacy

Ⓑ Carpel Tunnel Syndrome

Ⓒ Plagiarism

Ⓓ Referencing

Ⓔ Phishing

Ⓕ Recycling (Marks $\frac{1}{2}$  x 6 = 3)

(Total Marks10)

3. Important : if table names and field names are not written as it is marks will not be allowed

(i). **patient** table - **patient\_number**

**physician** table - **physician\_no** (Marks 1 x 2 = 2)

(ii).

(a) **reservation** table (Marks 1)

(b) **physician** table (Marks 1)

(iii).

(a) **reservation** table→(P0005, D1002, 2020/02/16) (Marks 1)

(b) **patient** table→ (P0006, Neela Amarasiri, 0778529634 )

**physician** table→ (D1006,Premalal Wijesundara, gynecologist and obstetrician, ,1100)

**reservation** table→ (P0006, D1006, 2020/02/16)

(Marks 1 x 3 = 3)



(iv). physician table, reservation table

(Marks 2)

(Total Marks10)

4. (i)

① .lk

② ICT/Grade10/

③ Web browser

④ Chrome

⑤ IP

⑥ ICMP

⑦ FTP

⑧ Draft

(Marks  $\frac{1}{2}$  x 8 = 4)

(ii) (a)

① head

② center

③ img

④ br

⑤ font

⑥ p

⑦ border

⑧ tr

⑨ th

⑩ td

⑪ ul

⑫ circle

( All correct 5 marks)

(9-11 correct 4 marks)

(6-8correct 3marks)

(3-5correct 2marks)

(1-2 correct 1mark)

Note: No marks awarded if answers within the  $\diamond$

(b) In the Save As dialog box, Encoding Form must be made into a Unicode Form. (1 mark)

(Total marks10)

5.

(i). =SUM(F4:F9)

(ii).

(a) =B4-B4\*C\$14

(b) =B6-B6\*C\$14

(iii). .

(a) =C4\*D4

(b) =E4-F4

(iv). =F4+K4

=SUM(F4,K4)

(v). =MAX(N4:N9)

(Marks2 x 5 = 10)



6.

- (i) (A) → Designing the solution
- (B) → Testing and debugging
- (C) → Maintenance of the system

(Marks 0.5 X 3)

- (ii) Objectives of the new system, Benefits of the system, efficiency of the new system

(Marks 0.5 X 3)

(iii)

(P)	✓	(T)	✓
(Q)	✓	(U)	x
(R)	x	(V)	✓
(S)	x		

(Marks 0.5 X 4)

- (iv) Direct deployment/ parallel deployment/ pilot deployment/ phase deployment

*(Any two answers and short description about relevant to given answers)*

(for two methods-Marks 0.5 X 2)

(for explanationMarks 1 X 2)

(TotalMarks 3)

(v)

- In waterfall model next stage will be started after completion of the current step. But in Iterative Incremental model a system is developed through repeated cycles and in smaller portions at a time.
- In waterfall model the result of the developed system is found at the final stage. But in Iterative Incremental model as the system is developed through iterations system can be shown in parts before the final stage.
- Iterative Incremental model software developers can develop the system using what was learned at the previous stages. But in waterfall model no such advantage since next stage will be started after completion of the current step.

*(Any two answers or any appropriate answer)*

(Marks1 X 2)  
(Total Marks10)

7(i).

- A- C1=0,C2=0,C3=0,C4=0
- B- ANS1="Y"
- C- yes
- D- no
- E- ANS2="Y"
- F- no



G- yes  
H- Display C1,C2,C3,C4

(Marks 0.5 X 8)

(ii).

Begin

C1=0,C2=0,C3=0,C4=0

Repeat

Enter eligible for voting(Y/N) as ANS1

If ANS1="Y" then

    Vote by the relevant candidate number as Vote

    If Vote =1 then

        C1=C1+1

    Else

        If Vote=2 then

            C2=C2+1

        Else

            If Vote=3 then

                C3=C3+1

        Else

            If Vote=4 then

                C4=C4+1

        Else

            Display "your vote is invalid"

    Eid if

End if

End if

End if

Enter voting is over(Y/N) as ANS2

Until ANS2="Y"

Display C1,C2,C3,C4

End.

(if all are correctMarks 3

Incomplete Mark1 )

(iii).Var C:Array[1..4] of integer;

(Marks3)

(Total Marks10)



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අ.පො.ස. කා/පෙළ පසුගිය විභාග පුස්තකෝන්තර  
2010 සිට 2019 දක්වා

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**ගණිතය**  
MATHEMATICS

✓ ප්‍රශ්න ✓ ලිපි ✓ වටිනාකම ✓ අලුත්  
10-11 ශ්‍රේණියේ සිසුන් සඳහා විශේෂයෙන්ම සකස් කළ පුස්තකෝන්තරයකි.

Ex/Press/2019/0034 සමානල දැනුමේ ප්‍රකාශකයා. A SAMANALA PUBLICATION

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**විද්‍යාව**  
SCIENCE

✓ ප්‍රශ්න ✓ ලිපි ✓ වටිනාකම ✓ අලුත්  
10-11 ශ්‍රේණියේ සිසුන් සඳහා විශේෂයෙන්ම සකස් කළ පුස්තකෝන්තරයකි.

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**ඉතිහාසය**  
HISTORY

✓ ප්‍රශ්න ✓ ලිපි ✓ වටිනාකම ✓ අලුත්  
10-11 ශ්‍රේණියේ සිසුන් සඳහා විශේෂයෙන්ම සකස් කළ පුස්තකෝන්තරයකි.

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SINHALA LANGUAGE AND LITERATURE

✓ ප්‍රශ්න ✓ ලිපි ✓ වටිනාකම ✓ අලුත්  
10-11 ශ්‍රේණියේ සිසුන් සඳහා විශේෂයෙන්ම සකස් කළ පුස්තකෝන්තරයකි.

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**සංගීතය (පෙරදිග)**  
MUSIC (ORIENTAL)

✓ ප්‍රශ්න ✓ ලිපි ✓ වටිනාකම ✓ අලුත්  
10-11 ශ්‍රේණියේ සිසුන් සඳහා විශේෂයෙන්ම සකස් කළ පුස්තකෝන්තරයකි.

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INFORMATION & COMMUNICATION TECHNOLOGY

✓ ප්‍රශ්න ✓ ලිපි ✓ වටිනාකම ✓ අලුත්  
10-11 ශ්‍රේණියේ සිසුන් සඳහා විශේෂයෙන්ම සකස් කළ පුස්තකෝන්තරයකි.

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2010 සිට 2019 දක්වා

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**සෞඛ්‍යය හා ශාරීරික අධ්‍යයනය**  
HEALTH AND PHYSICAL EDUCATION

✓ ප්‍රශ්න ✓ ලිපි ✓ වටිනාකම ✓ අලුත්  
10-11 ශ්‍රේණියේ සිසුන් සඳහා විශේෂයෙන්ම සකස් කළ පුස්තකෝන්තරයකි.

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2010 සිට 2019 දක්වා

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**භූගෝල විද්‍යාව**  
GEOGRAPHY

✓ ප්‍රශ්න ✓ ලිපි ✓ වටිනාකම ✓ අලුත්  
10-11 ශ්‍රේණියේ සිසුන් සඳහා විශේෂයෙන්ම සකස් කළ පුස්තකෝන්තරයකි.

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**ඉංග්‍රීසි භාෂාව**  
ENGLISH LANGUAGE

✓ ප්‍රශ්න ✓ ලිපි ✓ වටිනාකම ✓ අලුත්  
10-11 ශ්‍රේණියේ සිසුන් සඳහා විශේෂයෙන්ම සකස් කළ පුස්තකෝන්තරයකි.

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2010 සිට 2019 දක්වා

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**නාට්‍ය හා රංග කලාව**  
DRAMA AND THEATRE

✓ ප්‍රශ්න ✓ ලිපි ✓ වටිනාකම ✓ අලුත්  
10-11 ශ්‍රේණියේ සිසුන් සඳහා විශේෂයෙන්ම සකස් කළ පුස්තකෝන්තරයකි.

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2010 සිට 2019 දක්වා

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**නැටුම් (දේශීය)**  
DANCING (ORIENTAL)

✓ ප්‍රශ්න ✓ ලිපි ✓ වටිනාකම ✓ අලුත්  
10-11 ශ්‍රේණියේ සිසුන් සඳහා විශේෂයෙන්ම සකස් කළ පුස්තකෝන්තරයකි.

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2010 සිට 2019 දක්වා

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**කතෝලික ධර්මය**  
CATHOLICISM

✓ ප්‍රශ්න ✓ ලිපි ✓ වටිනාකම ✓ අලුත්  
10-11 ශ්‍රේණියේ සිසුන් සඳහා විශේෂයෙන්ම සකස් කළ පුස්තකෝන්තරයකි.

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2010 සිට 2019 දක්වා

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**ව්‍යාපාර හා ගිණුම්කරණ අධ්‍යයනය**  
BUSINESS & ACCOUNTING STUDIES

✓ ප්‍රශ්න ✓ ලිපි ✓ වටිනාකම ✓ අලුත්  
10-11 ශ්‍රේණියේ සිසුන් සඳහා විශේෂයෙන්ම සකස් කළ පුස්තකෝන්තරයකි.

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2010 සිට 2019 දක්වා

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**බුද්ධ ධර්මය**  
BUDDHISM

✓ ප්‍රශ්න ✓ ලිපි ✓ වටිනාකම ✓ අලුත්  
10-11 ශ්‍රේණියේ සිසුන් සඳහා විශේෂයෙන්ම සකස් කළ පුස්තකෝන්තරයකි.

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2010 සිට 2019 දක්වා

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**චිත්‍ර**  
ART

✓ ප්‍රශ්න ✓ ලිපි ✓ වටිනාකම ✓ අලුත්  
10-11 ශ්‍රේණියේ සිසුන් සඳහා විශේෂයෙන්ම සකස් කළ පුස්තකෝන්තරයකි.

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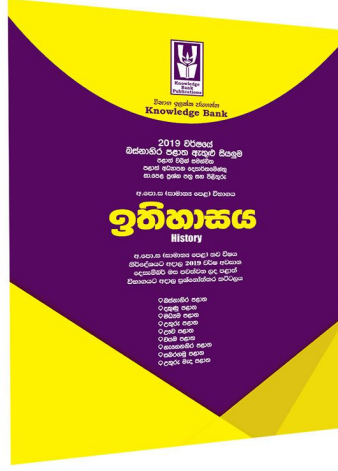
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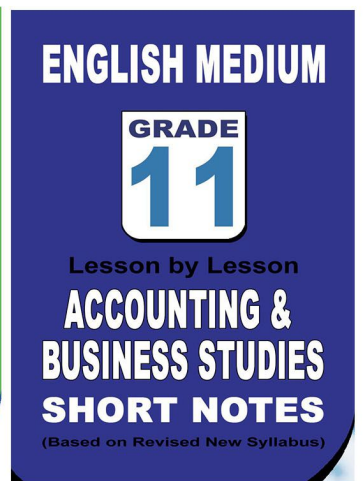
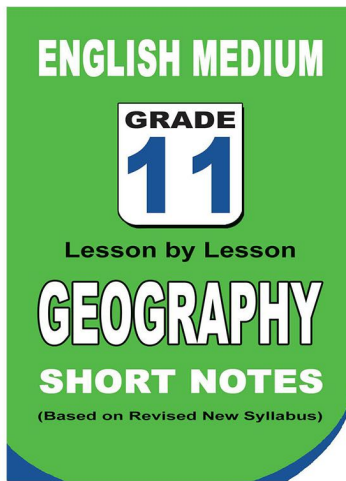
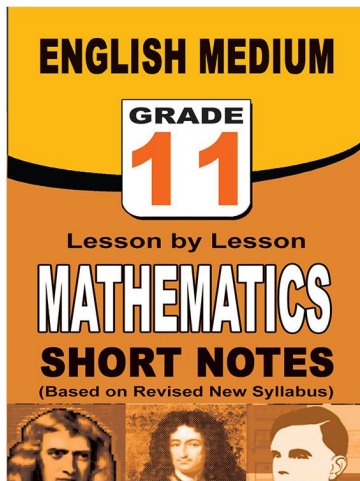
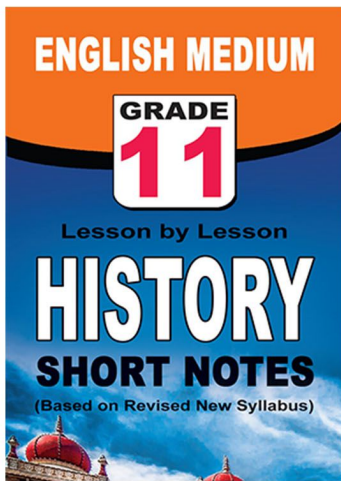
පළාත් ප්‍රශ්න පත්‍ර සහ විලිනුරු පත්‍ර පොත්



ආදර්ශ ප්‍රශ්න පත්‍ර සහ විලිනුරු පත්‍ර පොත්



කෙටි සටහන් පොත්



ච්චම් කහිතම ගෙදරටම ගෙන්නාහැනිම

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ඔන්ලයින් ඔඩර් කරන්න

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