ପିଓଡ୍ର ଡ ବିଭିଲ୍ଲ ଫ୍ରିଡିଡ଼ି (முழுப் பதிப்புரிமையுடையது / $All\ Rights\ Reserved$)

இ ලංකා විභාග දෙපාර්තමේන්තුව ශී ලංකා විභාග සොද්යානීන් ම්රාදිය මෙද ජීර්ප්පාලේන්තුවමන්තුව ශී ලංක இலங்கைப் பரீட்சைத் திணைக்களம்இலங்கைப் பரீட்சைத் திணைக்களம் இலங்கைப் பரீட்சைத் திணைக்களம் Department of Examinations, Sri Lanka Dep**இஙங்கை இ**Ekapiji கூறை திரு மூன் திணைக்களால் of Exa இ ලංකා විභාග දෙපාර්තමේන්තුව ශී ලංකා විභාග දෙපාර්තමේන්තුව ශී ලංකා විභාග දෙපාර්තමේන්තුව ශී ලං இலங்கைப் பரீட்சைத் திணைக்களம்இலங்கைப் **Departments and Burnational Srip திருக்க**ாக்களம் இலங்கைப் பரீட்சைத் திணைக்க

අධායන පොදු සහතික පනු (සාමානා පෙළ) විභාගය, 2015 දෙසැම්බර් கல்விப் பொதுத் தராதரப் பத்திர (சாதாரண தர)ப் பரீட்சை, 2015 டிசெம்பர் General Certificate of Education (Ord. Level) Examination, December 2015

තොරතුරු හා සන්නිවේදන තාක්ෂණය தகவல் தொடர்பாடல் தொழினுட்பவியல்

I, II I, II

Information & Communication Technology I, II

පැය තුනයි மூன்று மணித்தியாலம் Three hours

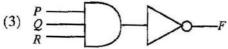
Information & Communication Technology I

Note:

- (i) Answer all questions.
- (ii) In each of the questions 1 to 40, pick one of the alternatives (1), (2), (3), (4) which you consider as correct or most appropriate.
- (iii) Mark a cross (X) on the number corresponding to your choice in the answer sheet provided.
- (iv) Further instructions are given on the back of the answer sheet. Follow them carefully.
- 1. The Central Processing Unit (CPU) of a computer consists of which of the following?
 - (1) Arithmetic and Logic Unit (ALU), Control Unit (CU), display unit
 - (2) Arithmetic and Logic Unit (ALU), Control Unit (CU), input/output devices
 - (3) Arithmetic and Logic Unit (ALU), Control Unit (CU), memory registers
 - (4) Arithmetic and Logic Unit (ALU), Control Unit (CU), secondary storage
- 2. Which of the following is not a potential benefit of a computer network which is connected to the Internet?
 - (1) Backing up files to a file server in another network connected to the Internet
 - (2) Reduced risk of viruses and malware
 - (3) Sharing resources in the network
 - (4) Use of the web
- 3. Consider a logic circuit with three inputs P, Q, R and one output F. The following is observed in this circuit:
 - if any single input is 1, then output F is 0, irrespective of what the remaining inputs are.
 - if all inputs are 0, then the output F is 1.

Which of the following is the most likely logic gate configuration for the circuit?





- 4. To qualify in an examination, candidates have to pass one compulsory subject S₁ and one of the three optional subjects S2, S3 and S4. Which of the following Boolean expressions correctly represents this scenario?
 - (1) S₁ AND (S₂ AND S₃ AND S₄)
- (3) S_1 OR (S_2 AND S_3 AND S_4)
- (2) S₁ AND (S₂ OR S₃ OR S₄) (4) S₁ OR (S₂ OR S₃ OR S₄)
- 5. Which of the following octal numbers is equivalent to decimal 79?
 - $(1) 117_8$
- $(2) 1017_8$
- (3) 711₈
- (4) 7110,
- 6. Which of the following formats are used in computers to store data?
 - (1) Binary
- (2) Decimal
- (3) Hexa-decimal
- (4) Octal
- 7. Which of the following decimal numbers is equivalent to binary number 11011112?
- (2) 63
- (3) 110
- (4) 118

8.	Which	of	the	following	represents	the	ascending	order	of	the	four	numbers	100011112,	1708,	46687	10,
	$2F_{16}$?				n 1000 va.com		122			-212						

(1) 170_8 , 10001111_2 , $2F_{16}$, 46687_{10}

(2) 10001111₂, 46687₁₀, 170₈, 2F₁₆

(3) 2F₁₆, 170₈, 10001111₂, 46687₁₀

(4) 46687₁₀, 10001111₂, 170₈, 2F₁₆

9. Which of the file/files given in Table 1 could be stored in a USB storage device having a total capacity of 4GB so that a least amount of unused space is left on the device?

Table 1

File name	Size
A. doc	300 MB
B.jpg	740 MB
C. mp4	3 GB

(1) A.doc and B.jpg only

(2) B. jpg and C. mp4 only

(3) C. mp4 only

(4) All of them

10. A key function of an Operating System (OS) software is

(1) checking the spellings in a presentation.

(2) counting words in a document.

(3) managing hardware resources in the computer system.

(4) sending and receiving e-mail.

11. The following labelled activities from A to H are included in the system development life cycle.

A - System development

B - Feasibility study

C - System implementation

D - System maintenance

E - Problem definition

F - System analysis

G - System design

H - Testing

The correct order that the activities should be carried out is

(1) A, E, H, B, F, G, C and D.

(2) C, B, G, F, A, D, E and H.

(3) E, B, F, G, A, H, C and D.

(4) G, F, B, A, E, C, D and H.

12. Consider following statements.

A - To access the internet from a home, an internet service provider (ISP) is needed.

B - Every server computer on the internet should have a unique address.

C - Any file can be attached to an e-mail if it does not exceed the maximum file size that is allowed to be attached to an e-mail.

Which of the above statements are correct?

(1) A and B only

(2) A and C only

(3) B and C only

(4) All A, B and C

13. Consider the following file name extensions.

A - odt

B - docx

C - doc

D - rtf

Which of the above are valid for files created using word processing software?

(1) A and B only

(2) B and C only

(3) C and D only

(4) All A, B, C and D

14. Sentence A is formatted as sentence B by using word processing software.

Sentence A: Many people believe that Abacus is the foundation of the present computer.

Sentence B: Many people believe that Abacus is the foundation of the present computer.

Which of the following icons are used to format sentence A as B?

(1) B

Z

(2)



(3)



(4)



15. Which of the following icons in word processing software can be used to search for text in a document?

(1)





(3)



- 16. Consider the following sentences related to presentation software:
 - A: Slide transitions are the visual movements as one slide changes to another.
 - B: Animations are visual effects applied to individual items on a slide.
 - C: Voice recordings can be recorded and included in a presentation

Which of the above sentences are correct?

- (1) A and B only
- (2) A and C only
- (3) B and C only
- (4) All A, B, C
- Ouestions 17 and 18 are based on the spreadsheet segment given below.
- 17. What is the correct formula to be written in cell A5 to display the largest number in the cell range A1:A4?
 - (1) = count(A1:A4)
- (2) = max(A1:A4)
- $(3) = \operatorname{rank}(A1:A4)$
- (4) = sum(A1:A4)
- 18. What is the formula to be written in cell B5 to display the number of entries in cell range A1:B4?
 - (1) = count(A1:B4)
- (2) = max(A1:B4)
- $(3) = \min(A1:B4)$
- (4) = sum(A1:B4)

4	A	В	C	D
1	20	67		
2	12			
3	45	54		
4	21	34		
5	- 27			
6				

- 19. The formula = 2^5+16 is entered into a cell in a spreadsheet. What value will be displayed in the cell?
- (2) 32
- (3) 42
- (4) 48

20. Consider the following HTML statements:

<dl>

<dt> Coffee </dt>

<dd> Hot Drink </dd>

<dt> Milk </dt>

<dd> Cold Drink </dd>

</dl>

The output of the above HTML code segment would be:

(1)

(2)

(3)

(4)

Coffee

Coffee

- o Coffee
- o Coffee

Hot Drink

- Hot Drink
- o Hot Drink
- Hot Drink

Milk

Milk

- o Milk
- o Milk

Cold Drink

Cold Drink

- o Cold Drink
- Cold Drink
- 21. Consider the following HTML statements for creating a table:

Name Tel, Number

Gunarathna 0115557770

rowspan=2> Somasundaram 0115557771

0115557772

Which of the following is the correct table created by the above statements?

(1)	Name	Tel. Number
	Gunarathna	0115557770
		0115557771
	Somasundaram	0115557772

2)	Name	Gunarathna	Somasundaram
	Tel. Number	0115557770	0115557771
			0115557772

(3)	Name	Tel. Number
,	Gunarathna	0115557770
ĺ	Somasundaram	0115557771
		0115557772

(1)	Name	Gunarathna	Somasundaram	
(4)	Tel. Number	0115557770	0115557772	
		0115557771		

- 22. Which of the following HTML tag combinations allows to add a row in a table?
 - (1) < TR > < /TR >
- (2) <CR> </CR> (3) <TH> </TH>
- (4) <TD> </TD>

L/2015/80-	E-I,II			4-			Access to the same of the same	
Which of (1) 	the following 1	HTML tag) <			to display	66		
order: $day = today$	14	ssignment s	statement	s in a progr	am segmen	nt which a	are executed in	the g
day =								3
	of day and toda	av after ex	ecution o	f the above	three state	ments are	respectively	
(1) 14, 14	ber newsconger befolese entremblish) 14, 18.	council o	(3) 18, 14		(4) 18		
				35.05				4 8
					The table	s show da	ata about books	s avail
for sale in	a bookshop a	nd the boo	k publish	ners.	*			
Book_ID	Book_Na		Quantity	Unit_Price		Book_ID	Publisher_ID	20.00
B001	Exploring Moon		5	250		B001	P003	
B002	Wonders of the	e World	20	200		B002	P002	,
B003	Art of Magic		50	150		B003	P002	
B004	Red Rackham's		20	300		B004	P001	İ
	Вс	ook Table				Book _Pu	ublisher Table	
		Publisher_	ID Pub	lisher_Name	Publ_Pho	one		
		P001		msons	5566778			
		P002	Bertra	m Publishers	2345678	•		
		P003	Siena	and Sieana	2356987		*	
		P004	United	d Books	5587698		£ (8)	
			Pub	lisher Table		10.7		
. What is th	e most suitable	e data type	for the	Unit Price i	n Book Ta	ble?	140	
(1) Curren) Date		(3) Numb		(4) Te	xt	
			م مامام					*
(1) Book_l	the following i D (2)	Book_Na		(3) Quant			able? nit_Price	
(1) Book_!	the following f Name in Book hone in Publisl	Table -	is an ex	(2) Book_	foreign k ID in Boo her_Name	k_Publish		**
			336		4			



Figure 1

28. Which tool is the most appropriate to draw the rabbit in the above Figure 1? (4) S (2) Q (3) R

29. Which tool is the most appropriate to be used in colouring the roof and the door of the house in the above Figure 1?

(1) P

(3) S

(4) T

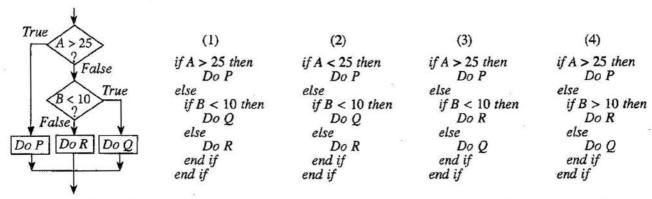
30. Which of the following tools is used in an image editing software to select an irregularly shaped area of an image?

(1)





- 31. An image having the size 1" x 1" with resolution 72 ppi would consist of
 - (1) 72 pixels.
- (2) 144 pixels.
- (3) 2592 pixels.
- (4) 5184 pixels.
- 32. Which of the following can be a least likely consequence of a virus infection in a computer system?
 - (1) Corruption of data and information stored in the computer
 - (2) Damage to computer hardware
 - (3) Alteration of data and information stored in the computer
 - (4) Reduction of the efficiency of the operations of the computer
- 33. Which of the following are appropriate measures in protecting a computer system from a virus infection?
 - A Paying greater attention to e-mail attachments received
 - B Taking care in the use of external storage devices
 - C Disabling the use of macro facility in software
 - (1) A and B only
- (2) A and C only
- (3) B and C only
- (4) All A, B and C
- 34. Which of the following is/are useful to consider when purchasing a computer?
 - A brand reputation of the computer
 - B vendor (seller) reputation
 - C warranty period of the computer
 - (1) A only
- (2) B only
- (3) A and B only
- (4) All A, B and C
- 35. Which of the following pseudocode segments is equivalent to the logic of the given flow chart segment?



36. Marks for 10 subjects of a student are stored in the array 'marks' with the index ranging from 1 to 10. A pseudocode to calculate the average marks with three labels **P**, **Q** and **R** is given below.

```
total\_marks = \mathbb{P}

for \ i = 1 \ to \ 10

begin
```

 $total_marks = total_marks + marks[\mathbb{Q}]$

end

average_marks = total_marks / (R)

The values of the labels P, Q and R are respectively,

- (1) 0, 10 and i
- (2) 0, i and 10
- (3) 10, i and 10
- (4) 10, 10 and i
- 37. How many times will the following 'while' loop exeunt?

count = 9while count >= 3

count = count - 2

end while

- (1) 2
- (2) 4
- (3) 6
- (4) 8

```
38. Consider the following pseudocode segment:
       OddTotal = 0
       count = 0
       CurrentOdd = 1
       while count <= 3
               OddTotal = OddTotal + CurrentOdd
               CurrentOdd = CurrentOdd + 2
               count = count + 1
       end while
       print OddTotal
    What is the output of the following pseudocode segment?
                                                                       (4) 36
                          (2) 16
                                                (3) 25
   (1) 9
39. Consider the following pseudocode segment:
       if average_marks > 50 then
           if failed_subjects = 0 then
            scholarship = 'True'
          end if
       end if
   Which of the following is equivalent to the logic in the above pseudocode?
   (1) If average_marks > 50 AND failed_subjects = 0 Then scholarship = 'True'
   (2) If average_marks > 50 OR failed_subjects = 0 Then scholarship = 'True'
   (3) If average_marks > 50 then failed_subjects = 0 Else scholarship = "True'
   (4) If average_marks > 50 then scholarship = 'True' Else failed_subjects = 0
40. Consider the 'while' loop and the 'repeat until' loops given below:
       count_A = 1
                                                    count_B = 1
       while count_A <= 10
                                                    repeat
         count_A = count_A + 2
                                                      count_B = count_B + 2
       end while
                                                    until count_B <= 10
   What are the values of count_A and count_B after completion of the execution of while and repeat
   until loops respectively?
   (1) 9 and 9
                                                (3) 11 and 9
                                                                      (4) 11 and 11
                         (2) 9 and 11
```

තියලු ම හිමිකම් ඇවිරුම් / ලාඟුට பුනිට්பුලිකාරාபුකෙටානු / All Rights Reserved]

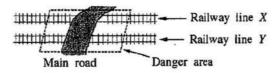
අධායන පොදු සහතික පතු (සාමානා පෙළ) විභාගය, 2015 දෙසැම්බර් கல்விப் பொதுத் தராதரப் பத்திர (சாதாரண தர)ப் பரீட்சை, 2015 டிசெம்பர் General Certificate of Education (Ord. Level) Examination, December 2015

> තොරතුරු හා සන්නිවේදන තාක්ෂණය I, II தகவல் தொடர்பாடல் தொழினுட்பவியல் I, II Information & Communication Technology I, II

Information & Communication Technology II

Note:

- * Answer five (05) questions only, selecting the first question and four others.
- * First question carries 20 marks and each of the other questions carries 10 marks.
- 1. (i) A main road crosses two parallel railway lines X and Y. An alarm bell should ring when a train enters the danger area on any of the lines from any direction (see figure).



The truth table below is given to indicate the operation of the alarm bell.

P	Q	State of bell (Z)
0	0	
0	1	
1	0	
1	1	

Note:

- P A train has entered ('1') or not entered ('0') the danger area of line X.
- Q -A train has entered ('1') or not entered ('0') the danger area of line Y.

State of bell (Z):

Bell is ringing - '1'
Bell is not ringing - '0'

Copy the above truth table to your answer script and fill the last column (Z).

- (ii) A basic rule (axiom) in Boolean algebra is: $x + \overline{x} = 1$. This rule can be proved using a logic circuit with a two-input OR gate and a NOT gate. Draw the relevant logic circuit diagram to illustrate the proof of the above rule.
- (iii) A tourist takes photographs of interesting places in Sri Lanka using the built-in camera of his tablet computer and saves the captured images on the hard disk of the device. Later, he edits the images using the touch screen and copies them to a USB drive.

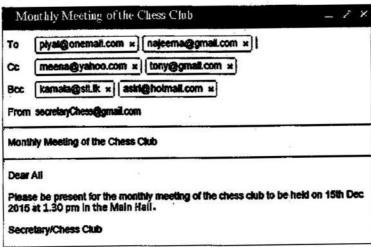
Identify and write down two input devices and two storage devices used in the above scenario.

- (iv) Consider the following scenarios:
 - X A bank providing internet banking facilities to its customers to transfer money, pay bills such as electricity, telephone etc.
 - Y An organization using an isolated computer network within a building (i.e., without any connection to the outside world)
 - Z A network linking a head office of a company in Colombo with its branches in the city Identify and write down the type of computer network involved in each of the above instances X, Y and Z from the list given below:

List: {Local Area Network (LAN), Metropolitan Area Network (MAN), Wide Area Network (WAN)}

(v) Convert the binary 110101012 to the equivalent octal number. Show your steps.

- (vi) In the ASCII code, the letter A is represented as decimal 65. Determine the binary representation of the letter D.
- (vii) Consider the following figure showing a mail sent to Piyal, Najeema, Meena, Tony, Kamala and Asiri by the Secretary of the Chess Club of a school.



Assuming that the mail was received by the recipients in the list, write down whether the following statements are **True** or **False**. (You are required to write only the statement label (a)-(d) and **True/False**.)

- (a) Kamala sees that the mail was also sent to Asiri.
- (b) Meena sees that the mail was also sent to Piyal and Asiri.
- (c) Tony sees that the mail was also sent to Meena.
- (d) Piyal sees that the mail was also sent to Najeema.
- (viii) Second column of the following table shows some icons used in an image editing software. Identify and write down the correct names for the icons from the given list. (You are required to write only the icon label ① ④, and the name.)

Label	Icon
0	14
2	*.
3	♣.
4	2

List: {brush tool, clone stamp tool, crop tool, hand tool, lasso tool, magic wand tool, move tool}

(ix) Consider the following two categories A and B. Category A consists of some activities of the system development life cycle (SDLC) while Category B contains some terms relevant to the activities listed under Category A.

	Category A	
1	Coding	
2	Feasibility study	
3	System analysis	
4	System design	

	Category B
®	Interfaces
0	Interviews
®	Monetary resources
(S)	Programming language

Write down the four matching pairs using the given labels.

(x) Consider the execution of the following code segment containing a while loop.

$$sum = 0$$

$$N = 16$$

$$while N >= 10$$

$$sum = sum + N$$

$$N = N - 2$$

$$end while$$

Cycle No.	sum	N
1		
2		
3		
4	Capacian Tues	

Copy the above table to your answer sheet and fill it using the values assigned for sum and N after the execution of each cycle in the while loop.

2. (i) Consider the following spreadsheet segment giving some statistics related to certain education indicators for Sri Lanka.

1	Education Indicators: Gen	eral Educatio	on 2008-2013	
2	ltem .	2008	2010	2013
3	Total Schools	10,445	10,502	10,849
4	Govt. Schools	9,662	9,685	10,012
5	Private	92	98	103
6	Pirivenas	691	719	734
7	Total Students	4,101,509	4,119,525	4,231,259
8	Govt. Schools	3,930,374	3,940,072	4,037,157
9	Private	115,070	117,362	127,986
10	Pirivenas	56,065	62,091	66,116
11	Total Teachers	224,410	224,541	239,245
12		213,212	212,457	226,983
13		11,198	12,084	12,262
14	Student/Teacher Ratio (Govt. Schools)	i		

Sources:

- 1. Statistical Handbook 2010 of National Science Foundation
- 2. Education Information Ministry of Education
- (a) What is the single spreadsheet function that can be used in cell B3 to display the total number of schools for 2008?
- (b) What will be the formula displayed in C3, if the formula in B3 is copied to C3?
- (c) "Student/Teacher Ratio (Govt. Schools)" is calculated by dividing the number of students in government schools by the total number of teachers in government schools. What is the formula to be written in cell B14 to display the student/teacher ratio (Govt. schools) in 2008?
- (d) Suggest the most suitable graph type to show the comparison between the numbers of government schools, private schools and pirivenas for the given three years.
- (ii) State whether the following statements regarding spreadsheets are True or False: (You are required to write only the statement number (a) (f) and True/False.)
 - (a) The autofill facility can be used to copy a formula to a range of adjacent cells.
 - (b) Text entries in cells get right aligned automatically by default.
 - (c) It is possible to get cell borders to appear on a spreadsheet printout.
 - (d) It is possible to hide rows and columns in a spreadsheet.
 - (e) By pressing Control+Home keys the cursor is moved to cell A1.
 - (f) When Control+Pageup keys are pressed, the active cell jumps to the next worksheet.

3. The XYZ Sports is a shop that sells sports items which are supplied to the shop by several suppliers. The shop maintains a database with three tables to store the items currently in stock, their suppliers and items purchased from the suppliers, as shown below.

ItemID	IName	Stock
P01	Football	15
P02	Bat	25
P03	Netball	18
P04	Volleyball	10

Item Table

SupplD	SName	Phone
S01	Nuwan	1234567
502	Rita	5678123
503	Akram	5566113
504	Kumari	8877221

Supplier Table

11/8 S01 12/9 S03 13/9 S02	P03 P03 P01	40 15
13/9 S02	0.00	W 275.75
	P01	
/-		20
14/9 504	PQ2	30
16/9 S03	P04	20

Purchase Table

- (i) List two primary key fields and their table names in the above database system.
- (ii) The shop decides to add a new item 'Tennis ball' and purchases 30 of them from the supplier Rita on the date 22/9.
 - (a) What table(s) need(s) to be updated for this event?
 - (b) Write down the new record(s) in the relevant table(s).
- (iii) A customer buys one Volleyball and one Bat.
 - (a) What table(s) need(s) to be updated for this event?
 - (b) Write down the updated record(s) in the relevant table(s).
- 4. (i) Assume that your friend says "telemedicine is taking medicine from home by contacting a doctor over a phone." Explain why your friend's statement is incorrect. Write down an example to illustrate the correct use of telemedicine.
 - (ii) Saman says that he installed a virus scanner on his home computer six months ago and that he has never had internet access at home. Explain why his computer may not have protection from new virus attacks.
 - (iii) Explain one ethical issue related to the use of personal information stored on an information system. Your answer should include one example to illustrate an unethical act related to privacy of information.
 - (iv) Your friend says that he does not need to backup his data as he has installed a firewall. Do you agree with him? State reasons for your answer.
 - (v) Provide two reasons why one should not use pirate software. (Your answer should show issues related to pirate software.)
- 5. (i) Assume that the monthly payments for tea plucking employees in a tea estate are calculated based on the weight of the tea leaves that they pluck daily. The payment process is performed manually at present and it is proposed to automate the process.
 - (a) State two methods that can be used to understand the requirements of the proposed system if the above process is to be automated.
 - (b) Write down the input data and the output information of the proposed system.
 - (c) Unit testing is one testing method that can be used to test the above system. Write one other testing method.
 - (d) The newly developed software can be deployed (installed) using either a parallel implementation or a direct implementation. Which method would you use? State **one** reason for your recommendation.
 - (ii) Assume that you want to find information on 'environment conservation' from the internet. The relevant activities involved are given in the list below. Write down the given activities in the correct order. (You are only required to write down the labels of the activities in the correct order.)

List:

- A Connect to the internet using the relevant software.
- B Enter 'environment conservation' as the search text.
- C Log in to the computer.
- D Open up a search engine.

6. (i) Consider the web page given in Figure 1 which is to be prepared using the source code in Figure 2.

Lifestyle-Based Ways to Improve Your Memory



Although there are no guarantees when it comes to preventing memory loss, memory tricks can be helpful. Consider five simple ways to improve your memory.

Five Simple Ways

- O Get Organized
- O Sleep Well
- O Eat Healthy Diet
- O Play Brain Games
- O Do Physical Activity

Further Information: Health Advice Center

Figure

	Figure 1
	<html> <1>></html>
	<title>Health Tips </title>
	0
	<body></body>
	<2>
	<3> Lifestyle-Based Ways to Improve Your Memory 3
	SRC = "icon.jpg" ALT = "Brain Logo" border = 3>
	0
2	₹9 >
	< 6>
9	Although there are no guarantees when it comes to preventing memory loss, memory tricks can be
	helpful. Consider five simple ways to improve your memory. 6
	<7> Five Simple Ways 7
	< 3 type = circle>
	<9 Get Organized 9
	<9>Sleep Well 9
	<9>Eat Healthy Diet 9
	<9>Play Brain Games 9
	< 9>Do Physical Activities 9
	8
	Further Information: <a 🛈="http://www.health.com"> Health Advice Center
tml>	
	Figure 2

The code in Figure 2 has ten missing HTML tags indicated by labels 1 to 0. Select the correct tags for the labels from the list given below. (Write down only the label number and the corresponding HTML tags.)

List: {TR, OL, HEAD, HREF, BODY, LI, UL, H2, H1, P, IMG, HR, TABLE, CENTER, DL}

(ii) Select from the list given below and write down, the most appropriate term/phrase for each of the blanks labelled to 5 in the following sentences. (You are required to write only the label number and the corresponding term/phrase.)

List: {switch, modem, hub, URL, web browser, web authoring software, web server}

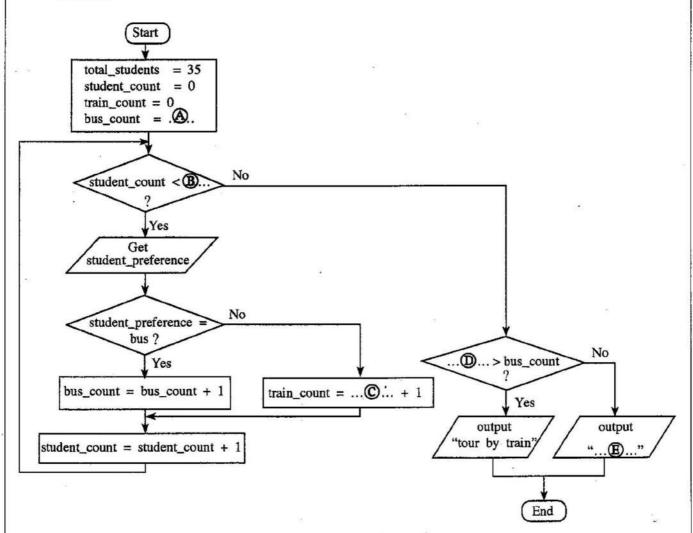
- (a) A can be used to properly view an HTML file.
- (c) An HTML file can be created by using a
- (d) A may contain all the hypermedia documents relating to a particular organization.
- (e) A can be used to convert analog signals to digital.

7. (i) A school has 1000 students. The following pseudocode segment prints the admission numbers of students who attended the school everyday (i.e., 210 days) in a particular year:

```
N=0
while N<1000
get AdmissionNumber
get NumberOfDays
if NumberOfDays=210 then
print AdmissionNumber
end if
N=N+1
end while
```

Draw a flowchart to represent the above pseudocode. (Use the same variable names as given in the pseudocode in your flowchart.)

(ii) A teacher of a class of 35 students obtains the student preference to travel either by train or by bus on their annual trip. The following flow chart with missing terms labelled from (a) to (b) represents this scenario.



Write down the appropriate terms for the labels (Any variable names that are used in your answer must be exactly as given in the question.)