

STUDENT SEMINAR SERIES - 2019

ශිෂ්‍ය සම්මන්ත්‍රණ මාලාව - 2019

INFORMATION & COMMUNICATION TECHNOLOGY

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QUESTION PAPER – I, II

ප්‍රශ්න පත්‍රය -I,II

(ENGLISH MEDIUM)



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Ministry of Education e-learning and Nenas Educational Program Unit G.C.E. Ordinary Level – Support Seminar – 2019		
80 Information & Communication Technology - I		
Grade 11	English Medium	Time–1 Hours
<ul style="list-style-type: none">• Answer <i>all</i> the questions.• Each question carries 1 mark.		

01. Stored program concept was introduced in

- (1). 1st generation of computers
- (2). 2nd generation of computers
- (3). 3rd generation of computers
- (4). 4th generation of computers

02. Consider following statements.

A – Aruna has shown good performances for all the subjects.

B – Aruna has 95 marks for mathematics.

Select the correct answer regarding above statements.

- (1). A – Qualitative data B – Quantitative data
- (2). A – Quantitative data B – Qualitative data
- (3). A – Quantitative data B – Quantitative data
- (4). A – Qualitative data B – Qualitative data

03. “Smart phone can be used to scan the QR code and then it will connect to the internet. Information will be taken from web site and information will be displayed through the mobile phone.”

Select the answer which represents examples from above scenario for input, process and output respectively?

- (1). QR code, connect to internet, generate information
- (2). Information, generate information, information
- (3). QR code, taking information from website, information
- (4). Information, connect to internet, QR code

04. Which one is not a feature / use of telemedicine?

- (1). Patient examination
- (2). Fast remote clinical treatment.
- (3). High availability for emergency diseases
- (4). Low cost on Tele training.

05. Following table consists features/uses of computers and types of computers. Match them and select the answer which consists of correct combinations.

a		b	
A	large scale businesses and for military purposes	1	Mainframe computers
B	few users get connected to the central computer and through a few terminals	2	Mini computers
C	consumes little electricity	3	Super computers
D	used in large scale businesses	4	Micro computers

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

06. Followings are two printing requirements.

- A – To print a bill with an ATM machine
 B - To produce clear and quality printouts.

Select the answer which consists of most suitable printer types to fulfill above printing requirements.

- (1). Thermal printer and laser printer
 (2). Inkjet printer and laser printer
 (3). Thermal printer and line printer
 (4). Dot matrix printer and thermal printer

07. What is the most suitable coding method to represent a program with Sinhala/Tamil language terms?

- (1). BCD
 (2). ASCII
 (3). EBCDIC
 (4). UNICODE

08. What is the memory which is used to store required instructions to boot up the computer?

- (1). Memory Registers
 (2). Cache Memory
 (3). Read Only Memory
 (4). Random Access Memory

09. Followings are subject groups which are required for an entrance of a course.

- Subject group A - Subject 1 and Subject 2
 Subject group B - Subject 3 and Subject 4
 Subject group C - Subject 5 and Subject 6
 Subject group D - Subject 7 and Subject 8

A student is required to pass one subject from each group A and B and he has to pass one subject from group C or D for entrance of ICT course.

According to the above explanation, which should be the correct statement for ICT course?

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

10. What is the binary equivalent of 35_8 ?

- (1). 00011101_2 (3). 00111010_2
 (2). 00111011_2 (4). 01010101_2

11. Following table consists of storage devices and their special features/usages. Select the option which shows the correct combination.

a		b	
A	Memory Card	1	Easy portability and the ability to read and write data fast.
B	Blue - ray 3D	2	Used in digital cameras, mobile phones and computer gaming devices.
C	USB flash drive	3	Used to record video.

- (1). A – 1 , B – 2, C - 3 (3). A – 2 , B – 3, C - 1
 (2). A – 3 , B – 2, C - 1 (4). A – 3 , B – 1, C - 2

12. Select the suitable topology for a network which has a centralized device which is responsible for handling a LAN.

- (1). Star (2). Ring (3). Bus (4). Mesh

13. Following requirements are given for a computer network with 10 computers.

A – Internet facility should be given for all the computers & other devices in the network.

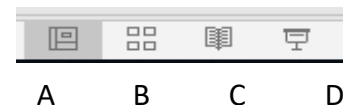
B – Security for data within the network must be there when internet usage is available.

C – All the devices must be connected together with highly efficient communication.

- (1). A – Router B – Anti-virus software C - hub
 (2). A – Router B – Firewall C - hub
 (3). A – Router B – Firewall C - Switch
 (4). A – Firewall B – Router C - Switch

14. Followings are different views of slides in presentation software. Select the view which we can see a particular slide as it is displayed on the screen.

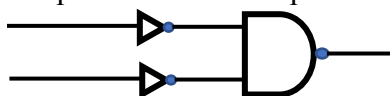
- (1). A (3). C
 (2). B (4). D



15. Select the largest value from following values.

- (1). 125_{10} (3). $0010\ 0111_{bcd}$
 (2). AC_{16} (4). 553_8

16. What is the answer which represents correct input combination to get a negative output (0) of following circuit?

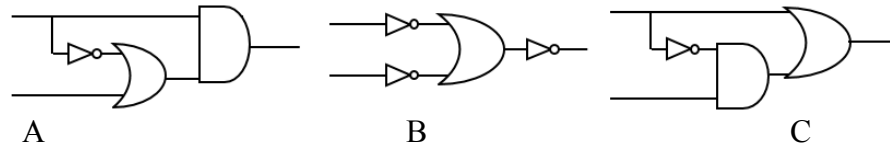


- (1). $x = 0$ $y = 0$ (3). $x = 1$ $y = 0$
 (2). $x = 0$ $y = 1$ (4). $x = 1$ $y = 1$

17. Thisak needs to store 3 files with the capacity of 128 MB, 512MB and 1 GB. His flash drive has 2 GB space to store these files. What is the available capacity of this flash drive after storing these files?

- (1). 380KB (3). 384GB
 (2). 384MB (4). No space available

18. Which of the following circuits produce same output according to the given input combinations?

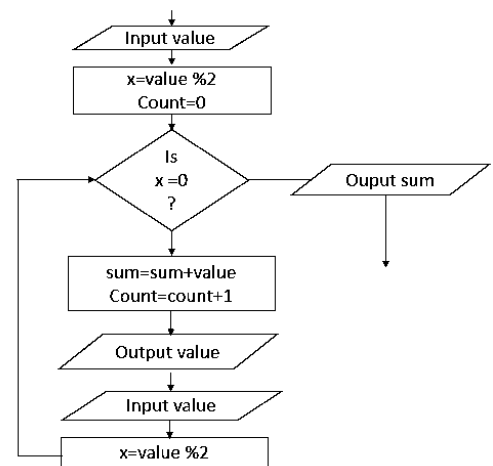


- (1). A and B (3). B and C
 (2). A and C (4). A, B and C

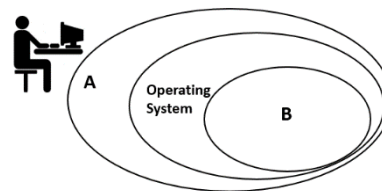
19. Consider 4,6,12, 15,14,13,20,9 is the input for the following flowchart.

How many times this will be executed?

- (1). 4 times
 (2). 3 times
 (3). 5 times
 (4). 8 times



20. Following is a diagram which is related to operating system.



Select the answer which contains suitable terms for A and B respectively.

- (1). Application software & Hardware
 (2). System software & Hardware
 (3). System software & User
 (4). System software & Utility software

21. Which one of the following statements is incorrect?
- (1). Objects are based on object-oriented programming languages.
 - (2). When we use interpreter, it will produce the correct output if the program does not contain any syntax error.
 - (3). Many different approaches to computer programming are called programming paradigms.
 - (4). Sub program which returns an output back to the main program is called a Procedure.
22. What is the correct answer for the calculation given below?
- $$5 \bmod 2 * 30 / 5 - (2^2)$$
- (1). 30
 - (2). 2
 - (3). 12
 - (4). 16

Use the following spreadsheet to answer the question number 22 and 23.

	A	B	C	D	E	F	G	H	I
1	x	3	2	1	0	-1	-2	z	5
2	$y = (x+2)^2$	25	16	9	4	1	0		
3	$a = x*2$	6	4	2	0	-2	-4		
4	x^2	9	4	1	0	1	4		
5	$f=(x+y)z$	140	90	50	20	0	-10		

23. It is required to find the values from B2 to G2 according to the value of x. What is the correct formula which should be entered in cell B2?
- (1). $= (B1+2)^2$
 - (2). $B2 = (B1+2)^2$
 - (3). $= (\$B1+2)*2$
 - (4). $= B1+2^2$
24. Which cannot be the formula for cell B5 according to the given spreadsheet if it is copied until cell G5?
- (1). $= (B1+B2)*\$I1$
 - (2). $= (B1+B2)*I\$1$
 - (3). $= (B1+B2)*\$I\1
 - (4). $= (B1+((B1+2)^2))*\$I1$
25. Select the answer which has the correct shortcut keys to fulfill following requirements when a presentation is going on.
- A – to show the screen with black colour
B – to exit from the slide show
- (1). Ctrl + B and N
 - (2). B and Ctrl + N
 - (3). B and Esc
 - (4). Ctrl + B and Ctrl + N
26. Select the shortcut key to move to column A in a spreadsheet along the row where the active cell is.
- (1). Home
 - (2). CTRL + arrow keys
 - (3). CTRL + up arrow
 - (4). CTRL + HOME

Use the following database to give answers for question number 27 and 28.

Item				Item_bill			Bill	
<u>itemNo</u>	Item name	Price	Qty	<u>Bill_No</u>	<u>ItemNo</u>	Qty	<u>Bill_No</u>	Amount
i0543	Buscuit	45.00	450	b0234	i0543	10	b0234	2500.00
i0545	Butter	230.00	200	b0342	i0547	30	b0342	240.00
i0547	Jam	145.00	250	b0342	i0545	40	b0453	3200.00
i0549	Milk powder	345.00	150	b0453	i0547	20	b0458	3400.00
				b0458	i0543	30		

27. According to the above database, what is the relationship among Item table and Bill table?

- (1). One to Many (3). Many to One
 (2). Many to Many (4). One to One

28. All the details about sales can be stored in bill table instead of storing in three separate tables. Select the answer which has issues that you may face when you store them in a single table?

- (1). Less insertion anomaly, data duplication, memory wastage
 (2). Data duplication, data redundancy, easy updating of data
 (3). Data duplication, data redundancy, data anomalies
 (4). High redundancy, data duplication, high efficiency of processing

29. Consider the following pseudocode.

```

Input marks
sum=0
x=0
while(mark>=74) do
    sum=sum+marks
    x=x+1
    output marks
    input marks
endwhile
print
    
```

For the above pseudocode, inputs are as follows.

89, 76, 74, 75, 98, 30 If the following values are entered for this pseudocode, what can be the output of this pseudocode?

- (1). 89 76 74 (3). 89 76 74 75
 (2). 89 76 74 75 98 (4). 89 76

30. Select the pseudocode which can be used to store following values in an array.

10	11	12	23
----	----	----	----

- | | | | |
|---|--|---|---|
| Start
For x=0 to 3 do
num[x]=x + 10
num[3]=num[2]+num[1]
next x
stop
(1). | Start
For x=0 to 3 do
num[x]=x + 10
next x
num[2]+num[1]= num[3]
stop
(2). | Start
For x=0 to 4 do
num[x]=x + 10
next x
num[3]=num[2]+num[1]
stop
(3). | Start
For x=0 to 3 do
num[x]=x + 10
next x
num[3]=num[2]+num[1]
stop
(4). |
|---|--|---|---|

31. The following table consists of terms related to internet and their descriptions. Select the answer which shows the correct combinations.

a		b	
A	IP address	1	assistance to share all sorts of information which consists of multimedia such as text, images audio and video.
B	SMTP	2	Used to uniquely identify all the devices in the network.
C	Streaming of media	3	Protocol which is used in simple mail exchanging.

- (1). A – 1 , B – 2, C - 3
 (2). A – 2 , B – 3, C - 1
 (3). A – 2 , B – 1, C - 3
 (4). A – 3 , B – 1, C - 2

32. Select the answer which contains a URL with non profitable organization domain and a correct email address.

- (1). www.educationsl.org AND sanurasl@gmail@com
 (2). www.educationsl.org AND sanurasl@gmail.com
 (3). www.educationsl.gov.lk AND sanurasl@gmail.com
 (4). www.educationsl.ngo AND sanura sl@gmail.co

33. Followings are about two projects. Each project is having its own requirements.

A – Need to develop one small component at a time and gradually they need to add other components.

B – Well known requirements are there and it is not required to involve while developing the system.

Select the most suitable system development model for each project.

- (1). Iterative incremental model and Waterfall model
 (2). Waterfall model for both
 (3). Iterative incremental model for both projects
 (4). Prototyping model and Waterfall model

34. Followings are some features of a graphic.

- A – Quality will not be lost when the size changes
- B - Computer Speed will be reduced when a graphic is in creation
- C - Graphic consists of pixel array of different colours.
- D - It needs high computer memory.

Which of the above feature/features is/are belong to vector graphic?

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

35. Which one of the following is not available with audio editing software?

- (1). changing file format of the audio file.
- (2). Changing speed of the recording
- (3). Create smooth motion between two frames.
- (4). Recording music being played in the computer

36. How many colours can be represented by a pixel of this graphic?

- (1). 24 colours
- (2). 2^{24} colours
- (3). 72 colours
- (4). 2^{72} colours

24bpp



72dpi

37. Followings are features which should be considered before developing a web site. Select the inappropriate statement for selecting content for a web site.

- (1). Ability to attract customers quickly
- (2). More access controls for website
- (3). Minimum issues for updating the web site.
- (4). Maximize opportunities for adding new features

38. What is the correct HTML code segment to get the following output?

Details of customers

Contact numbers

Name	Telephone	
Bill Gates	55577854	55577855

```

1) <body>
    <h2><center>Details of customers</h2></center>
    <table border="1px">
        <caption>Contact numbers</caption>
        <tr>
            <th>Name</th>
            <th colspan="2">Telephone</th>
        </tr>
        <tr>
            <td>Bill Gates</td>
            <td>55577854</td>
            <td>55577855</td>
        </tr>
    </table>
</body>

```

```

3) <body>
    <h2><center>Details of customers</h2></center>
    <table border="1px">
        <caption>Contact numbers</caption>
        <tr>
            <th>Name</th>
            <th >Telephone</th>
        </tr>
        <tr>
            <td>Bill Gates</td>
            <td>55577854</td>
            <td>55577855</td>
        </tr>
    </table>
</body>

```

```

2) <body>
    <h2><center>Details of customers</h2></center>
    <table >
        <caption>Contact numbers</caption>
        <tr>
            <th>Name</th>
            <th colspan="2">Telephone</th>
        </tr>
        <tr>
            <td>Bill Gates</td>
            <td>55577854</td>
            <td>55577855</td>
        </tr>
    </table>
</body>

```

```

4) <body>
    <h2><center>Details of customers</h2></center>
    <caption>Contact numbers</caption>
    <table border="1px">
        <tr>
            <th>Name</th>
            <th colspan="2">Telephone</th>
        </tr>
        <tr>
            <td>Bill Gates</td>
            <td>55577854</td>
            <td>55577855</td>
        </tr>
    </table>
</body>

```

39. Select the correct statement regarding issues associated with ICT.

- (1). It is possible to get a patent right for protection of an intellectual property.
- (2). Listing of web addresses of resources from which the information was collected can be considered as Citing.
- (3). Unauthorized access can be blocked completely by having Anti-virus software.
- (4). Spam presents itself as harmless and it enters the system without the knowledge of the user.

40. Select the most suitable solution which can be used for logical security of a computer system.

- | | |
|-------------------------|--------------|
| (1). Hardware firewalls | (3). Backups |
| (2). Surge protectors | (4). CCTV |

Ministry of Education
e-learning and Nenas Educational Program Unit
G.C.E. Ordinary Level – Support Seminar – 2019

80 Information & Communication Technology - II

Grade 11

English Medium

Time–2 Hours

- Answer *all* the questions.
- Each question carries **1 mark**.

01.

(1). Information is very important for decision making process in an organization and it is specially important for a business which is expected to expand their business activities island wide.

- i) Mention two special features which should be included in a good information in the above process.
- ii) Write two parties who are interested on internal information of this organization in above mentioned situation.

(2).

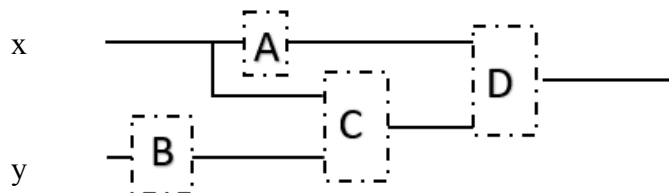
- i. Write the equivalent binary number for $1000\ 0101\ 0011_{bcd}$ and
- ii. Convert your answer to the hex decimal.
(Show your calculations)

(3). A traffic light system uses logic gates as a part of the control system. The system is operated when the output C has the value 1.

This happens when: either (a) signal X is red
or (b) signals X is green and Y red

(NOTE: You may assume for this problem that red = 0 and green = 1).

Complete the logic circuit given below.



(4). Followings are solutions for some of the issues of using ICT in a working area of an organization.

A	Firewall
B	Username and password
C	UPS
D	Anti-virus software
E	Encryption
F	Proper arrangements of furniture required for computer users

Write down particular numbers to represent solutions/s for each issue given below.

(Note – There can be more than one possible solution for a problem)

Issue	Solutions
1 - Unauthorized access into computerized system to steal/edit data
2 - High voltage supply for computers
3 - Copying or impersonating personal documents
4 - Musculoskeletal problems

(5). Ms. Kaushalya uses a smart system to deposit money. She has to give her account number with NIC number before deposit money. She gives her phone number with above mentioned details. Then the money is entered into the machine and it will check the validity of money before displaying the total amount to the user. After verifying all these details, the system will get the final approval (“OK”) from the user. Then user can view details and she will get the receipt.

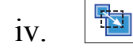
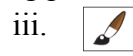
According to the above situation, Write 2 inputs, 2 processes and 2 outputs.

(6). What is the output of the following pseudocode?

```

x=1
while x<=2 do
    for y=1 to 10 step 3 do
        print (x * 2)
    end while
    x=x+1
end while
    
```

(7). Mention the use of following images in graphic editing processes.



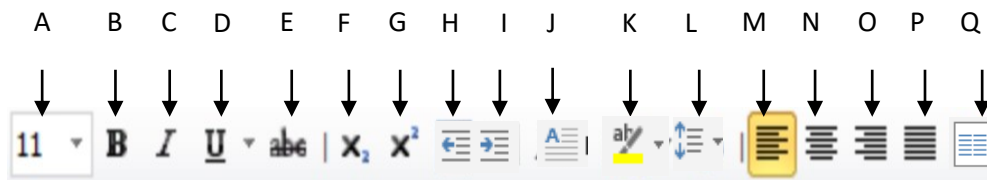
(8). Following table Shows a formatted text in word processing software. Use the given set of tools and write the relevant letter of the tool for each formatting.

27th September 2019 ← 1

Sri Lanka

3 → **S**ri Lanka, officially the Democratic Socialist Republic of Sri Lanka, is ← 2
 an island country in South Asia, located in the Indian Ocean to the
 southwest of the Bay of Bengal and to the southeast of the Arabian Sea.

The current constitution stipulates the political system as a republic and a unitary state governed by a semi-presidential system. It has had a long history of international engagement, as a founding member of the South Asian Association for Regional Cooperation (SAARC), and a member of the United Nations, the Commonwealth of Nations, the G77, and the Non-Aligned Movement. ← 4



(9). Nowadays most of the users select solid state storage devices over hard disc drives for their storage requirements.

- i. Do you agree with the above statement?
- ii. Give reasons for your answer.

(10). State whether the following statements are correct or incorrect.

- i. Removing or reducing unnecessary sound will help to increase the size of an audio clip and quality of the clip. ()
- ii. Well-designed website will facilitate users to navigate the website easily()
- iii. Quality of images with smaller number of pixels will be reduced, when it is enlarged. ()
- iv. Those who receive Bcc copy of an email can see all the other recipients of the same email and those who receive Cc copy of an email, can't see receivers of Bcc copies. ()

02. Following is a spreadsheet which is used to store course details with marks of students in an organization. Use the given spreadsheet and write answers for given questions.

	A	B	C	D	E	F	G	H	I	J	K
1	Students' Records - Group A										
2	st no	st name	Semester 1			Sem 1 Average score	Semester 2			Sem 2 Average score	Highest average
3			Sub 1	Sub 2	Sub 3		Sub 1	Sub 2	Sub 3		
4	st00134	S. senaya	45	56	46	61.00	56	48	57	53.67	61.00
5	st00135	R. Thisak	56	54	69	71.67	67	58	63	62.67	71.67
6	st00136	S. Amika	67	67	65	78.33	68	70	65	67.67	78.33
7	st00137	T. Lehansa	65	71	56	76.00	68	54	67	63.00	76.00
8	st00138	U. Chenuli	34	68	58	65.33	50	58	45	51.00	65.33
9											
10	Students' Practical Mark for group A										
11		Semester 1	12								
12		Semester 2	16								
13											
14											
15											

Student	Sem 1 Average score	Sem 2 Average score
S. senaya	61.00	53.67
R. Thisak	71.67	62.67
S. Amika	78.33	67.67
T. Lehansa	76.00	63.00
U. Chenuli	65.33	51.00

- (1). Average of semester 1 will be calculated by adding the average marks of three subjects and practical marks for semester 1 (C11). Write the formula for cell F4 to get the average mark for semester 1 of the student (S. Senaya). Assume that this formula will be copied to other cells to calculate the average marks for other students.
- (2). What is the formula that you can see in F5 after copying the above-mentioned formula?
- (3). Write the function which should be entered in K4 to get the highest average of both semesters of S Senaya. This value should be able to copied for all other students. The function =function(cell1,cell2,cell3) can be typed at K4 to calculate the highest average of st00134. Write down the values for function, cell1, cell2, cell3
- (4). In this spreadsheet, they have used a chart type for student's performance.
 - i. What is the chart type that they have used?
 - ii. Why do they used this chart type instead of using pie chart for above sheet?
- (5). Write two special features of spreadsheet software for above calculations.

03. Following is a part of database of a bank. All the details of accounts, users and their balances will be stored in this database.

Answer questions using the above database

Account

Account	acc_type	no_of_acc
16plus	Single	23090
Kids	Single	23909
Ladies	Single	13000
couple	Joint	2579
Adult+	Single	32402

Acc_customer

Acc_no	Cus_id	Account	Balance
1008 456 22	823883834v	16plus	45,000.00
1003 300 45	930034533v	Joint	120,000.00
1002 390 32	823883834v	Ladies	540.00
1002 456 23	838483222v	Ladies	1,000.00
1008 657 68	945655849v	16plus	13,402.00
1003 868 00	737575849v	Joint	235,643.00

Custmer

cus_id	cus_name	Address
823883834v	M. Perera	Colombo
838483222v	L.Sunethra	Kandy
930034533v	G. Ravindra	Maharagama
737575849v	R.Kavin	Matara
945655849v	R.Kavin	Matara

1) “They have stored data in separate tables relationships instead of storing all data in a single table. They hope to reduce **the data duplication issue** of this database.”

A. Mention 3 issues to be occurred with above mentioned problem if you store all in a single table.

B. What is the database type they have used in this organization?

2) What are the suitable data types for following fields in the above database?

(1) Acc_type

(3) Balance

(2) Cus_id

(4) No_of_acc

3) Mention the relationship among account and customer tables in the above database.

4) L. Sunethra(38483222v) withdraws Rs. 1,000/= from his ladies account and she closed the account.

A. Which tables are updated due to above transaction?

B. Show relevant records.

5) Manager needs to generate new list of Ladies account holders who have more than R50,000/= account balance. He needs to send the generated list to the regional office as an email attachment. He wishes to use features given in the database management software.

What are the database components where the manager will use to accomplish above requirement?

04. “Sri Lankan Farmers” is a farm which produces agricultural products nationally. Five years they started their business activities with a computerized system and they obtained many advantages through that system.

But from next year they are going to start online businesses through a new website and now they have decided they need to change their current computerized system including web activities.

i. Mention 2 reasons for changing the currently used computerized system into a new system.

ii. Write two benefits of using online businesses for following parties.

A. Customer

B. Business

- iii. Software development team has decided to develop this new system with Spiral model.
 - A. Do you agree with this statement?
 - B. Mention reason for your answer.
- iv. Management of the “Sri Lankan Farmers” decides to use ICT related technologies to improve the productivity of their cultivations.
 - A. Mention 3 technologies that they can use for the above requirement.
 - B. Mention 2 social issues that “Sri Lankan Farmers” may face, due to the use of ICT in their agricultural activities.

05.

- (1). Fill in the blanks of following statements using matching terms which are given below.
- i. Instead of writing like notepad, HTML editors such as Coffeecup, Seamonkey composer can be used to write HTML codes easily.
 - ii. If the given image in a web page is not available, will be helpful to understand what the image contains.
 - iii. in a table shows the gap between cell border and its content.
 - iv. When the web content is often changed, those web pages are called web pages.
(dynamic, Text editors , alternate text, Html editors, cellpadding , cell spacing, static)

(2). HTML code for the following web is given with blanks. Required tags/attributes are given in the box. Select the correct answers and write with relevant number which is in the HTML code.

Hurry up!!!



Special offers

Type Item		Discount
<ul style="list-style-type: none"> • Kids' wear • school uniform 	70%	
curtains	60%	

[click here to visit our web site](#)

- Title
 - border
 - center
 - H5
 - H3
 - Colspan
 - OL
 - UL
 - row span
 - caption
 - src
 - target


```

<html>
  <head>
    <(1) >Sales</ (1) >
  </head>
  <body>
    <h1><center>Hurry up!!!</h1></center>
    <hr>
    <(2) ></ (2) >
    <(9) (3) ="1px">
      <(4) ><(5) >Special offers</ (5) ></ (4) >
    <tr>
      <th>Type Item</th>
      <th (6) ="2px">Discount</th>
    </tr>
    <tr>
      <td><font size="4px">
        <(7) >
          <li>Kids' wear</li>
          <li>school uniform</li>
        </ (7) >
      </font></td>
      <td><font size="4px">70%</font></td>
      <td><img (8) ="images/discount1.jpg" ></td>
    </tr>
    <tr>
      <td><font size="4px">curtains</font></td>
      <td><font size="4px">60%</font></td>
      <td></td>
    </tr>
  </ (9) >
  <center>
    <a href="www.fashions.com" (10) ="_blank">click here to visit our web site
  </center>
</body>
</html>

```

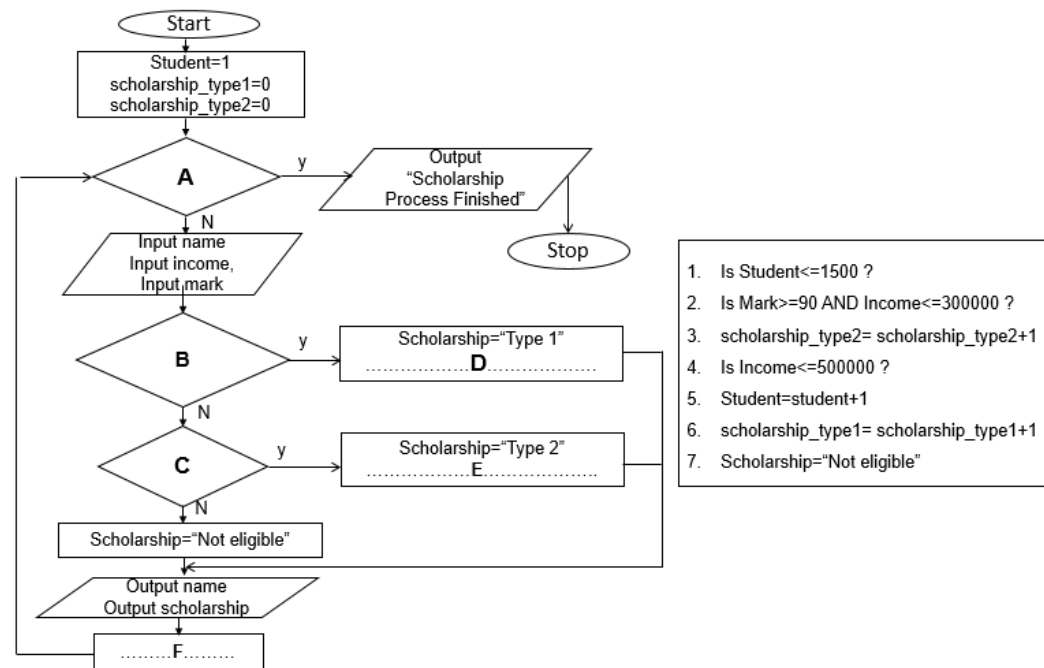
06.

(1). Following flowchart is for a university which has 1500 students to check the eligibility of students for scholarship program. Scholarships will be allocated based on student’s annual family income and their marks. If students score is higher than 90 or equal, scholarship type-1 will be allocated without considering their family income. For others, family income should be considered as follows.

If it is less than 300000 the scholarship will be type one and other students with annual income greater than 500000 will not be eligible. Other students will be type 2 scholarship.

Fill in the blanks of the flowchart using given answers in the box.

Select the correct term to fill in the blanks and write the letter with the relevant number.



(2). Following is a pseudocode for an institute to display their students’ class date according to marks of students. The pseudocode for the above situation is given below.

Write the output of the following pseudocode according to its given data.

List_name=["Shaan","Oneli","Ruwen","Romesh","Kushan"]

List_Mark =[75,45, 76, 59, 36]

```

for i = 0 to 4 step 1 do
    if (List_Mark [i]>=50)then
        date="Monday"
    else
        date="Wednesday"
    endif
    Print(List_name[i])
    Print(List_mark[i])
endfor
    
```

07.

- (1). Kasun works for “World Techno” Company which is located in Kandy. He works staying at home with his laptop and using internet. There are some other employees who work like Kasun and once a month they have progress review meeting online. They share all the working with others at this meeting.
- i. What are the most suitable terms to use for following situations?
 - A. Kasun works from home with his laptop and through internet.
 - B. They conduct a meeting once a month from their own locations.
 - ii. Mention two benefits that the employer of Kasun will get because of this working pattern.
 - iii. World Techno company is expected to expand their business activities to Matara and Colombo and they hope to have centralized management from head office through expected network among all branches.
 - A. Which type of network they need to maintain for the above requirement?
 - B. Mention two devices which they need to use for their network in the head office.
 - C. Write on usage of each device you mentioned in the above question (B).
