

ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව  
 இலங்கைப் பரீட்சைத் திணைக்களம் இலங்கைப் பரීட்சைத் திணைக்களம் இலங்கைப் பரීட்சைத் திணைக்களம் இலங்கைப் பரීட்சைத் திணைக்களம் இலங்கைப் பரීட்சைத் திணைக்களம்  
 Department of Examinations, Sri Lanka Department of Examinations, Sri Lanka Department of Examinations, Sri Lanka Department of Examinations, Sri Lanka Department of Examinations, Sri Lanka  
 இலங்கைப் பரීட்சைத் திணைக்களம் இலங்கைப் பரීட்சைத் திணைக்களம் இலங்கைப் பரීட்சைத் திணைக்களம் இலங்கைப் பரීட்சைத் திணைக்களம் இலங்கைப் பரීட்சைத் திணைக்களம்  
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අධ්‍යයන පොදු සහතික පත්‍ර (සාමාන්‍ය පෙළ) විභාගය, 2012 දෙසැම්බර්  
 கல்விப் பொதுத் தராதரப் பத்திர (சாதாரண தர)ப் பரீட்சை, 2012 டிசெம்பர்  
 General Certificate of Education (Ord. Level) Examination, December 2012

තොරතුරු හා සන්නිවේදන තාක්ෂණය I,II  
 தகவல் தொடர்பாடல் தொழினுட்பவியல் 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 from 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.

- Which of the following represents the correct order of evolution in computer processor technology?  
 (1) Transistors, Integrated Circuits, Vacuum tubes (2) Transistors, Vacuum tubes, Integrated Circuits  
 (3) Vacuum tubes, Integrated Circuits, Transistors (4) Vacuum tubes, Transistors, Integrated Circuits
- In a library information system, when a user enters the title of a book, its availability is indicated after searching the database. Which of the following indicates the correct order for input, process and output of the system?  
 (1) book title, availability of the book, searching the database  
 (2) book title, searching the database, availability of the book  
 (3) searching the database, book title, availability of the book  
 (4) searching the database, availability of the book, book title
- Which of the following shows the storage devices arranged according to their access speeds from slowest to the fastest?  
 (1) Floppy Disk, Hard Disk, Main Memory (2) Hard Disk, Floppy Disk, Main Memory  
 (3) Hard Disk, Main Memory, Floppy Disk (4) Main Memory, Hard Disk, Floppy Disk
- A student prepares a report using word-processing software. What is the most suitable device that can be used to insert a picture from a printed book into the soft copy of the report?  
 (1) Keyboard (2) Mouse (3) Printer (4) Scanner
- The binary equivalent of the number  $3A_{16}$  is .....  
 (1) 111000 (2) 111001 (3) 111010 (4) 111011
- The decimal equivalent of the number  $1010101_2$  is .....  
 (1) 21 (2) 58 (3) 81 (4) 85
- Consider the number '11<sub>x</sub>' where 'x' is the base of the number system. Which of the following number system(s) can the number '11<sub>x</sub>' belong to?  
 (1) Binary only (2) Hexadecimal only  
 (3) Octal only (4) Either Binary, Hexadecimal or Octal
- Binary Coded Decimal (BCD) uses four bits to represent each digit in the decimal number system. What is the bit pattern used to encode the decimal number 28 in the BCD code?  
 (1) 00011100 (2) 00101000 (3) 10000010 (4) 11100000
- If '1000111<sub>2</sub>' represents 'G' in ASCII, what character does ASCII '1000010<sub>2</sub>' represent?  
 (1) A (2) B (3) C (4) D
- A question paper consists of three questions x, y and z. Candidates are required to answer two questions. Question x is compulsory and the candidate has to select one from questions y and z. Which of the following represents the selection of questions by a candidate?  
 (1) x OR (y OR z) (2) x AND (y AND z) (3) x AND (y OR z) (4) x OR (y AND z)

11. Consider the following:

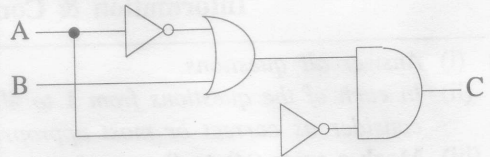
- A - Marks obtained by a student for mathematics.
- B - The average marks for mathematics of all students.

Which of the following is correct in relation to the above?

- (1) Both A and B represent data.
- (2) Both A and B represent information.
- (3) While A represents data, B represents information.
- (4) While A represents information, B represents data.

12. Consider the given logic circuit with A and B as inputs and C as the output. Which of the following is correct regarding the inputs when the output C = 1 ?

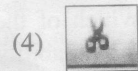
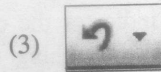
- (1) A should always be 0.
- (2) A should always be 1.
- (3) B should always be 0.
- (4) B should always be 1.



13. Which of the following statements is correct regarding folders in a computer?

- (1) Folder names cannot be altered (renamed).
- (2) Folders are used to store files in an organized manner.
- (3) Maximum number of folders that can be created within a folder is 10.
- (4) One folder can store only the files of the same type.

14. What is the icon that can be used to undo the steps applied to a document in a word processing software?



15. What is the function key for obtaining help in a word processing software?

- (1) F1
- (2) F2
- (3) F5
- (4) F7

16. Assume that the cell pointer of the following spreadsheet segment is currently in cell A1. By pressing the key combination **Ctrl+→** the cell pointer can be directly moved to cell D1.

What is the key or key combination for directly moving the cell pointer from cell D1 to cell D6?

- (1) Ctrl+↓
- (2) Ctrl+End
- (3) End+↓
- (4) PgDn

	A	B	C	D	E
1	Ambepussa			Dehiovita	
2					
3					
4					
5					
6	Ampara			Dikwella	
7					

17. Select the most suitable statement which describes the formula =B2\*C2 in a spreadsheet.

- (1) The contents of cell B2 is added to the contents of cell C2.
- (2) The contents of cell B2 is divided by the contents of cell C2.
- (3) The contents of cell B2 is multiplied by the contents of cell C2.
- (4) The contents of cell C2 is subtracted from the contents of cell B2.

18. Which of the following formula should be entered in cell A8 in the given spreadsheet segment to provide the total number of cells containing numeric values in the range A1 to A7?

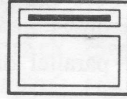
- (1) =count(A1:A7)
- (2) =max(A1:A7)
- (3) =min(A1:A7)
- (4) =sum(A1:A7)

	A
1	10
2	apple
3	23
4	34
5	45
6	76
7	anil
8	

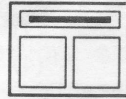
19. Nazeer wants to do an electronic presentation in the full-screen mode with his computer. What is the most suitable view for this purpose?

- (1) Normal
- (2) Slide master
- (3) Slide show
- (4) Slide sorter

20. Which feature of an electronic presentation software can be used to change the style of a slide from *Style 1* to *Style 2* as given below?



Style 1



Style 2

- (1) Slide animation      (2) Slide layout      (3) Slide show      (4) Slide sorter

● Answer the questions 21 - 23 using the following table segment that stores details of some students of a school.

21. How many records are stored in the given table segment?

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

Student_number	Name	Date_of_Birth
S2010-01	Shantha	21/10/2003
S2010-02	Fathima	26/11/2003
S2010-03	Uma	25/02/2003
S2010-04	Dilani	12/01/2004

22. How many fields are used to store data in the given table segment?

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

23. What is the most suitable data type for 'Student\_number'?

- (1) Currency                      (2) Date/Time                      (3) Number                      (4) Text

24. Which of the following is correct regarding the 'primary key' of a database table?

- (1) Primary key can be empty.                      (2) Primary key must be of numeric data type.  
(3) Primary key must be of text data type.                      (4) Primary key must be unique.

25. A collection of web pages accessible on the internet is known as a/an .....

- (1) Intranet                      (2) IP address                      (3) Web server                      (4) Web site

26. Which of the following shows the domain name part of the URL

<http://www.doenets.lk/exam/docs/examcal/cal-oct-2012.pdf> ?

- (1) .pdf                      (2) cal-oct-2012.pdf                      (3) doenets.lk                      (4) http://

27. Which of the following is defined by the tags `<hr>...</hr>` in HTML?

- (1) Anchor                      (2) Break                      (3) Header Line                      (4) Horizontal Rule

28. Which of the following defines a comment in HTML?

- (1) `<!--...-->`                      (2) `<a>...</a>`                      (3) `<br>...</br>`                      (4) `<p>...</p>`

29. What is the result after evaluation of the following expression considering the operator precedence of programming languages?

$$5*3+1*5-1$$

- (1) 19                      (2) 35                      (3) 79                      (4) 99

30. Consider the following logical expressions:

A - (23>14) AND (11>8)

B - (23<14) OR (11>8)

C - NOT (23>14)

Which of the following represents the correct outcome of the expressions A, B and C respectively?

- (1) True, False, False      (2) True, False, True      (3) True, True, False      (4) True, True, True

31. What is the expected output of the following pseudo-code segment?

```
n=1;
Do while n<5
    Print n
    n=n+1
```

Loop

- (1) 1234                      (2) 2345                      (3) 12345                      (4) 23456

32. Which of the following shows the correct order of the given phases in the System Development Life Cycle (SDLC)?

- (1) design, coding, testing                      (2) design, feasibility study, maintenance  
(3) design, testing, feasibility study                      (4) testing, maintenance, feasibility study

33. A new automated library information system is to be implemented in a school. The principal does not feel safe to directly start the new system by completely stopping the current manual system. Which of the following are appropriate methods of system conversions which will address the principal's concern?
- (1) either direct or phased (2) either direct or prototype  
 (3) either parallel or phased (4) either parallel or prototype

34. Consider the following HTML segment:

```
<html>
<body>
<dl>
<dt <b> Cricket </b> </dt>
<dt> Volleyball </dt>
<dt <b> Football </b> </dt>
<dt> Netball </dt>
</dl>
</body>
</html>
```

Which of the following is the output of the above?

- (1) 

Cricket
Volleyball
Football
Netball

 (2) 

Cricket
Volleyball
Football
Netball

 (3) 

<b>Cricket</b>
Volleyball
<b>Football</b>
Netball

 (4) 

Cricket
<b>Volleyball</b>
Football
<b>Netball</b>

35. Amal sent an email to Meena and copied the same mail to Nazeer using Cc. Amal also sent a copy to Russel using Bcc. Which of the following is correct with regard to this scenario?
- (1) Email received by Nazeer does not display Amal as the sender of the email.  
 (2) Email received by Nazeer does not display Russel as another recipient of the email.  
 (3) Email received by Meena does not display Amal as the sender of the email.  
 (4) Email received by Meena does not display Nazeer as another recipient of the email.
36. Which of the following is/are correct regarding the 'layers' available in image editing software?
- A - Layers used in image editing software allow the objects on the layer to be edited without affecting other layers.  
 B - Layers can be inserted into an image and renamed.  
 C - Two layers **cannot** be blended (be combined).
- (1) A only (2) A and B only (3) B and C only (4) All A, B and C
37. A/An ..... in graphic animations defines the starting and ending points of any smooth transition. Which of the following is most suitable to fill the above blank?
- (1) Image Property Inspector (2) Key Frame  
 (3) Panel (4) Timeline
38. .... security of ICT applications can be improved through the use of user names and passwords. Which of the following is most suitable to fill the above blank?
- (1) Environmental (2) Hardware (3) Logical (4) Physical
39. Which of the following help(s) to bridge the Digital Divide?
- A - Donating computers to schools with less facilities.  
 B - Improving computer literacy of communities with less computer literacy.  
 C - Providing internet connectivity to the communities without internet access.
- (1) A only (2) C only (3) A and B only (4) All A, B and C
40. Which of the following help(s) to reduce Repetitive Stress Injury (RSI) when using computers?
- A - Keeping the wrist straight and level with the lower arms when typing.  
 B - Taking precautionary measures such as blinking to avoid eye strain.  
 C - Keeping the computer in a suitable place to avoid indirect glare (bright light).
- (1) A only (2) B only (3) A and B only (4) All A, B and C

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