

Year End Examination 2015
Information & Communication Technology I
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Grade 11

Time: 1 hour

Name/ Index No.

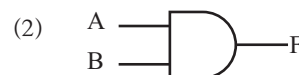
- Answer all the questions.
- 01 Which of the following is considered as raw data?
 - (1) Marks obtained by a students in a class
 - (2) Sorted list of marks obtained by students in a class
 - (3) Average marks obtained by students in a class
 - (4) Minimum marks obtained by students in a class
- 02 Among the followings what is the correct procedure are shown the evaluation of computer processing technology?
 - (1) Transistors , Integrated circuits ,Vacum tubes
 - (2) Transistors ,Vacum tubes ,Integrated circuits
 - (3) Vacum tubes ,Integrated circuits ,Transistors
 - (4) Vacum tubes ,Transistors ,Integrated circuits ,
- 03 Consider the following statements,
 - A-Annelytic Engine was invented by charls Babage
 - B-Special feature of an Annelytic Engine is ability of storing
 - C-Annelytic Engine is the first computer used transistors.Which of the above is are true ?
 - (1) A only
 - (2) A and B only
 - (3) B and C only
 - (4) A, B, C and D all
- 04 Disadvantage of using computer network is,
 - (1) Data Security
 - (2) Can spread malicious programmes
 - (3) Network can be centrally controled
 - (4) Ability to share resources
- 05 Consider the followingt statements
 - A - Keyboard is an input device
 - B - Monitor is an Output device
 - C -Compact disk is a storage deviceWhich of the above is /are true?
 - (1) Only A
 - (2) Only B
 - (3) Only A and C
 - (4) All of A,B,C
- 06 Operating system which have a command line interface
 - (1) Ubuntu
 - (2) Dos
 - (3) Windows 7
 - (4) Windows XP
- 07 The clock rate of a cup of a modern personal computer (Pe) is usually expressed in
 - (1) GHz (Gigahertz)
 - (2) Mbp s (Megabits per second)
 - (3) GB (gigabytes
 - (4) IPS (Instruction per second)
- 08 The binary equivalent of decimal 15 is
 - (1) 1001
 - (2) 1100
 - (3) 1111
 - (4) 10101
- 09 The decimal equivalent of 1101_2 is
 - (1) 12
 - (2) 15
 - (3) 13
 - (4) 09
- 10 X is base of the number 11_x . Among the followings what is the number system/ number systems of this number belongs to?
 - (1) Binary Only
 - (2) Hexa decimal only
 - (3) Octal only
 - (4) Binary ,octal or hexa decimal

- 11 Octal equivalent of hexa decimal $D2_{16}$ is,
 (1) 15 (2) 322 (3) 233 (4) 13
- 12 Value of $11011_2 + 10001_2$
 (1) 111100_2 (2) 101100_2 (3) 21012 (4) 10111_2

● Answer question number 13 and 14 by using below truth table.

A	B	F (output)
0	0	1
0	1	0
1	0	0
1	1	0

- 13 What is the logic circuit suitable for the above truth table



- 14 The boolean expression suitable for the output x is

- (1) $A + B$ (2) $A \cdot B$ (3) $\overline{A \cdot B}$ (4) $\overline{A + B}$

- 15 What is the value of $A \cdot A$ according to the boolean algebra?

- (1) A (2) A^2 (3) 0 (4) 1

- 16 Consider the following tasks.

- A Protecting data against viruses
- B Keeping track of files and directories (folders) in storage device
- C Controlling peripheral device such as disk drives and printers
- D Providing facilities for graphic design.

Which of the above are tasks of an operating system?

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

- 17 Which of the following statements is correct regarding tables used in word processing software?

- (1) Two or more cells can be merged
- (2) It is not possible to delete a column or a row
- (3) column width can be adjusted while row height cannot be adjusted
- (4) A cell cannot be split

- 18 Cannot be done using word processing software.

- (1) To send a letter to several people germane for the recipient.
- (2) Check spelling mistakes of a document.
- (3) Add a border to a page
- (4) To send a letter to a friend by using email.

- 19 Consider the following statements about word processing software.

A- It can replace all occurrence of the single word "Ceylon" with the two words "Sri Lanka" in an existing document.

B- It can justify text along the right margin of a document.

C- It can insert page numbers only at the bottom of a document.

Which of the above is/are correct?

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

- Answer question 20 to 23 by using below spreadsheet.

20 The formula written in c6 cell to get sum is,

- (1) =1:C5 (2) =tot(C1:C5)
(3) sum(C1:C5) (4) =Sum(C1:C5)

21 The formula written in C7 cell to get Average is

- (1) Ave(C1:C5) (2) =Tot+(C1:C5)/5
(3) =sum(C1:C5)/5 (4) =Average(C1:C5)

22 The formula written in C8 cell to get maximum value is,

- (1) Max(C1 : C5) (2) >(C1:C5) (3) =Maximum(C1:C5) (4) Max(C2 -C5)

23 The formula written in C9 cell to get minimum value is,

- (1) Min(C1: C5) (2) =Min (C1:C5) (3) < (C1:C5) (4) =Min(C1 -C5)

24 The particular field of a table that uniquely identifies a record is the

- (1) Key field (2) Main field (3) Alternate field (4) primary field

25 A database that connect tables using common fields is,

- (1) Flat - file database (2) Centralized database
(3) distributed database (4) Relational database

26 A database,

A - Use 'tables' to stored data

B - Use 'quary' to setup information as required.

C - Use 'report' to create report for printing

From above statements

- (1) true only A (2) true B only (3) true B and C only (4) All are true

27 What is the output of following pseudo code ?

Begin

Input number one

Input number Two

Result = number one/number Two

Output result

Output number Two

Output number One

End

- (1) 4,12,13 (2) 5, 2, 10 (3) 5, 10, 2 (4) 4, 8, 2

28 Consider the following tyoes of computer programing languages

A Machine language B Assembly language C High level language

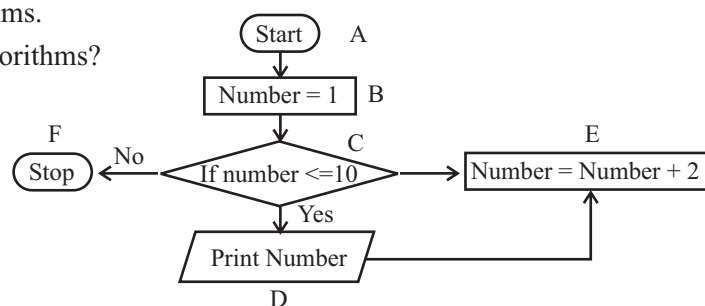
Which of the following shows the order of generations of the above programing language in ascending order?

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

29 Consider the following algorithms.

What is the output of above algorithms?

- (1) 1,2,3,4,5,6,7,8,9,10
(2) 1,2,3,4,5,6,7,8,9,
(3) 1,3,5,7,9
(4) 10



- 30 What is the change to get output as 11 ?
- (1) Remove D in the place and keep it between C and F
 - (2) Change E as number = number + 1
 - (3) Change C as if number < 11
 - (4) Change B as number = 2
- 31 Incorrect statement about system is,
- (1) Have input output - system to a system
 - (2) Have a limit to a system
 - (3) Have a Aim to a system
 - (4) A System always computerized
- 32 The statement that most agreed about Close System is,
- (1) Takes inputs from outside, does not give outputs to outside
 - (2) Does not take inputs from outside give outputs to outside
 - (3) Takes inputs from outside, give outputs to outside
 - (4) Does not take inputs from outside, does not give outputs to outside
- 33 Wikipedia is,
- (1) The world's largest selling computer game
 - (2) A free service search engine.
 - (3) A command use universal Dictionary of the internet update by viewers.
 - (4) A popular web browser
- 34 Consider the following:
- | | | | |
|---------------|--------------|---------------|-------------------|
| A Web browser | B Web Server | C I P address | D Website content |
|---------------|--------------|---------------|-------------------|
- Which of the above are essential in hosting a Website ?
- (1) A, B and C only
 - (2) B, C, D only
 - (3) A, B, D only
 - (4) A, B, C, D
- 35 Which one of the following allows you to insert a comment in an HTML document?
- (1) <@
 - (2) <*
 - (3) < €
 - (4) <!
- 36 http://www.donets.lk is an example of,
- (1) A server
 - (2) a URL
 - (3) An access code of a network
 - (4) An e-mail address of an organization
- 37 Consider the following:
- A - A person using a commercial software without licence
- B - A person using another person's login details
- C - A business reveals information about customers to others without the consent from the customers.
- D - A person creating viruses and spreading to others, computers.
- Which of the above can be considered as unethical?
- (1) A and B only
 - (2) A, B, and D only
 - (3) B, C and D only
 - (4) All A, B, C and D
- 38 Most suitable for creating an animation.
- (1) Front Page
 - (2) MS Word
 - (3) Micromedia Flash Mx
 - (4) Power Point
- 39 Digital divide separates,
- (1) Hardware in two categories analog and digital
 - (2) Software in two categories system and application.
 - (3) Firmware in two categories, ROM and CMOS ROM
 - (4) People in two categories, "computer literate and 'Computer illiterate'"
- 40 Which of the following is not recommended regarding health and safety of using a computer?
- (1) Use the computer during lightning
 - (2) Whenever you use the computer for a longer duration you need to have a regular break
 - (3) Avoid poor wiring and electrical connections in the computer room
 - (4) Your face should be about 45cm away from the computer screen.
- (40 marks)

Year End Examination 2015
Information & Communication Technology II
තොරතුරු හා සන්නිවේදන තාක්ෂණය II
Grade 11 **Time: 2 hours**
Name/ Index No.

- Answer first question and four other questions only.
- 20 marks for the first question and 10 marks each for other 4 questions.

- 01 (1) Write two examples of guided data communication media.
- (2) Write two examples of full duplex communication.
- (3) Why do you need more computer memory to store a video clip than an audio clip of the same duration?
- (4) Why is it not advisable to place a speaker very close to a CRT monitor?
- (5) Convert the binary number 1101110 into the hexadecimal equivalent?
- (6) Build up the logic circuit suitable for the below truth table.

Input (x)	Input (y)	Output (z)
0	0	1
0	1	0
1	0	1
1	1	1

- (7) Prove the following De Morgan's laws using a truth table.
- (a) $(\overline{A} \cdot \overline{B}) = \overline{A + B}$
- (b) $(\overline{A + B}) = \overline{A} \cdot \overline{B}$
- (8) Write file extensions of the following files
- MS Word 2010 file
- MS Excel 2010 file
- MS Power Point 2010 file
- MS Access 2010 file
- (9) Copy table A and table B given below into your answer paper and draw arrows between matching items of table A and table B.

Table A	Table B
Email address	www.google.com
URL	Internet Explorer
I P address	Google
Search Engines	172.16.12.1
Web browser	exams @ donets .lk

- (10) State the requirements gathering techniques used in system development Life cycle?

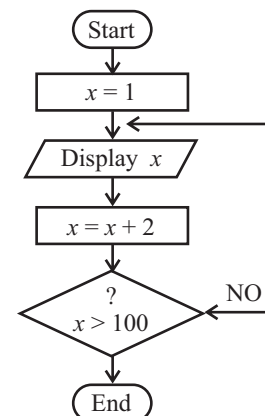
02 Below shown a spreadsheet about a bill that purchases in textile shop by Amali.

	A	B	C	D
1				
2	Item	Unit Price	Quantity	Total
3	T-shirt	Rs. 800.00	20	Rs. 16000.00
4	Skirts	Rs. 575.00	12	Rs. 6900.00
5	Frocks	Rs. 980.00	10	Rs. 9800.00
6	Trousers	Rs. 2300.00	15	Rs. 34500.00
7	Shirts	Rs. 1800.00	15	Rs. 27000.00
8			72	Rs. 94200.00

- (1) Write the formula to get total value of T shirts in D3 cell? (m- 02)
- (2) What is the formula written in C8 cell to get sum of the quantities?
- (3) The steps of coping C8 cell formula to D8 cell is given below. Fill the blanks using correct words.
 - Take the Cell pointer to ① cell.
 - Take the Mouse pointer in bottom ② corner till shown '+' symbol.
 - Click Left mouse button and take the Pointer to ③ cell.
- (4) Write two formula to get maximum price and minimum price among total prices.

- 03
- (1) What is data?
 - (2) List three difficulties of handling large volumes of data.
 - (3) What is database? Briefly explain how you would overcome the difficulties mentioned in (ii) above by using a database.
 - (4) What is the general name used to describe a set up Software which creates, maintains and utilize database? List two popular examples of such software packages.
 - (5) Assume that you are asked to create a simple database containing the data of teachers of your school. List five fields that can be used to construct a table in the database. Give two sample records that you would enter the table.

- 04
- (1) Below shows a flowchart that displays odd numbers in a certain range. Write the first three and last two numbers displayed by it. (m- 02)
 - (2) Write the Pseudo-code that corresponds to the logic given in the flowchart. (m-04)
 - (3) State how to modify the given flowchart to display all even numbers from 1 to 100 inclusive. (m- 04)



- 05 Consider the below shown HTML code and output of it fill the blanks by using correct tags given in the list write the table number and correct tag only in your answer paper.

(List : LI, HTML, MI, BR, TH, UL, Type = CIRCLE, TR, OL, ULTYPE = Disc, U, ULType = SQUARE,TD)

```
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</03>
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            <LI>ZIP DISK C/LI>
        </UL>
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    <08><10> CD</10>10>HDD</10><10> FLASHDRIVE </10></08>
    <TR> <TD>DVD</TD ><TD > FLOPPY </TD ><TD> MENU
CHIP</TD></TR>
    <TR><TD></TD><TD> ZIP<</TD><TD></TD></TR>
    <TABLE>
    </①>
```

out put

Storage devices

1. Primary Storage
2. Secondary Storage
 - Primary Storage
 - RAM
 - ROM
 - CACHE MEMORY
 - Secondary Storage
 - HARD DISK
 - FLOPPY DISK
 - JAZZ DISK
 - ZIP DISK

OPTICAL	MAGNETIC	ELECTRONIC
CD	HDD	FLASH DRIVE
DVD	FLOPPY	MEM CHIP
	ZIP	

06 Write the short notes about topics given below.

- (1) Advantages of e-learning than traditional class room learning.
- (2) Advantages of e-mail than traditional post mail.
- (3) Explain barriers Sri Lankan general public may face in reaping the benefits of the internet.
- (4) Use the ICT to develop the health sector of Sri Lanka. (2.5 x 4 = 10)