## Grade 11

## 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 aclass
(4) Minimum marks obtained bystudents 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) Aonly
(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 divice
C-Compact disk is a storage device
Which 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) Mbps (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 $11_{\mathrm{x}}$. 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 D $2_{16}$ 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
(1)

(2)

(3)

(4)


15 What is the value of A.A according to the boolean algebra?
(1) A
(2) $\mathrm{A}^{2}$
(3) O
(4) I

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
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 can not be adjusted
(4) A cell cannot be split

18 Can not be done using word processing software.
(1) To send a letter to several people germane for the recipient.
(2) Cheak spelling mistakes of a document.
(3) Add a boarder 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 doucument.
B- It can justify text along the right margin of a doucment.
C- It can insert page numbers only at the bottom of a doucment. 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 spred sheet.

20 The formula written in c6 cell to get sum is,
(1) $=1: \mathrm{C} 5$
(2) $=\operatorname{tot}(\mathrm{C} 1: \mathrm{C} 5)$
(3) $\operatorname{sum}(\mathrm{C} 1: \mathrm{C} 5)$
(4) $=\operatorname{Sum}(\mathrm{C} 1: \mathrm{C} 5)$

21 The formula written in C7 cell to get Average is
(1) Ave(C1:C5)
(2) $=\operatorname{Tot}+(\mathrm{C} 1: \mathrm{C} 5) / 5$
(3) $=\operatorname{sum}(\mathrm{C} 1: \mathrm{C} 5) / 5$
(4) =Average(C1:C5)

|  | A | B | C | D |
| :---: | :--- | :--- | ---: | ---: |
| $\mathbf{1}$ |  |  | 123 |  |
| $\mathbf{2}$ |  |  | 324 |  |
| $\mathbf{3}$ |  |  | 542 |  |
| $\mathbf{4}$ |  |  | 12 |  |
| $\mathbf{5}$ |  |  | 321 |  |
| $\mathbf{6}$ |  | Total |  |  |
| $\mathbf{7}$ |  | AVG |  |  |
| $\mathbf{8}$ |  | Maximum |  |  |
| $\mathbf{9}$ |  | Minimam |  |  |

22 The formula written in C8 cell to get maximum value is,
(1) $\operatorname{Max}(\mathrm{C} 1: \mathrm{C} 5)$
(2) $>(\mathrm{Cl}: \mathrm{C} 5)$
(3) $=$ Maximum $(\mathrm{C} 1: \mathrm{C} 5)$
(4) $\operatorname{Max}(\mathrm{C} 2-\mathrm{C} 5)$

23 The formula written in C 9 cell to get minimum value is,
(1) $\operatorname{Min}(\mathrm{C} 1: \mathrm{C} 5)$
(2) $=\operatorname{Min}(\mathrm{Cl}: \mathrm{C} 5)$
(3) $<(\mathrm{C} 1: \mathrm{C} 5)$
(4) $=\operatorname{Min}(\mathrm{C} 1-\mathrm{C} 5)$

24 The particular field of a table that uniquely identifies a record is the
(4) primary field
(1) Key field
(2) Main field
(3) Alternate field

25 A database that connect tables using common fields is,
(1) Flat-file database
(2) Centr alized database
(3) distributed database
(4) Relation al database

26 Adatabase,
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) $\mathrm{A}, \mathrm{B}, \mathrm{C}$
(2) $\mathrm{B}, \mathrm{C}, \mathrm{A}$
(3) $\mathrm{C}, \mathrm{B}, \mathrm{A}$
(4) $\mathrm{C}, \mathrm{A}, \mathrm{B}$

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 out put 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 s 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 out side
(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 papular 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, Donly
(4) A, B, C, D

35 Which one of the following allows you to insert a comment in an HTML document?
(1) < @
(2)
(3) $<\mathrm{e}$
(4) $<$ !
$36 \mathrm{http}: / /$ www.donets.lk is an example of,
(1) Aserver
(2) a URL
(3) An access code of a network
(4) An e-mail address of an organization

37 Comsider the following:
A - A person using a commercial software without licence
B - A person using another person's $\log$ in details
C - A business reveals information about customers to others without the consent form the customers.
D - A person creating viruses and spreading to others, computers.
Which of the above cab be considered as unethical?
(1) A and B only
(2) A, B, and Donly
(3) B, C and D only (4) All A, B, C and D

38 Most suitable for creating a animation.
(1) Front Page
(2) M S Word
(3) Micromedia Flash Mx
(4) Power Point

39 Digital divide separates,
(1) Hardware in two categories analog and digital
(2) Software in to two categories system and application.
(3) Firmware in to two categories, Rom and Cemos Rom
(4) People in to 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 computerduring lightning
(2) Whenever you use the computer for a longer duration you need to have a regular breaks
(3) Avoid poor wiring and electrical connections in the computer room
(4) Your face should be about 45 cm away from the computer screen.

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- 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 and audio clip of the same duration
(4) Why is not advisable to place speaker very close to a CRT monitor?
(5) Convert the binary number 1101110 in to the hexadecimal equivalent?
(6) Build up the logic circuit suitable for below truth table.

| Input (x) | Input $(\mathrm{y})$ | Output $(\mathrm{z})$ |
| :---: | :---: | :---: |
| 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) $(\overline{\mathrm{AB}}) \quad \overline{\mathrm{A}}+\overline{\mathrm{B}}$
(b) $(\overline{\mathrm{A}+\mathrm{B}})=\overline{\mathrm{A}} \cdot \overline{\mathrm{B}}$
(8) Write File extensions of following files

MS Word 2010 file
M S Excel 2010 file
M S Power Point 2010 file
MS Access 2010 file
(9) Copy table A and table B given below in to your answer paper and draw arrows between maching items of table A and table B.

| Table A | Table B |
| :--- | :--- |
| Email address | www.google.com |
| U R L | Internet Explorer |
| I P address | Google |
| Search Engines | 172.16 .12 .1 |
| Web broweser | exams @ donets.lk |

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

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

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

(1) Write the formula to get total value of T shirts in D3 cell?
(2) What is the formula written in C 8 cell to get sum of the quantities?
(3) The steps of coping C 8 cell formula to D 8 cell is given below. Fill the blanks using correct words.

- Take the Cell pointer to $\qquad$ (1) cell.
- Take the Mouse pointer in bottom .........2......... corner till shown '+' symbol.
- Click Left mouse button and take the Pointerto $\qquad$ cell.
(4) Write two formula to get maximum price and minimum prize among total prices.

03 (1) What is data?
(2) List three difficulties of handling large volumes of data.
(3) What is database? Briefly explain now you would overcome the difficulties mentioned in (ii) above by using a data base.
(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, UL Type = SQUARE,TD)
<01>
<HEAD. btml ques $01<$ TiTLE
</HEAD>
$<02>$ storage devices</04>
< $03>$
$<04>$ primary storage $</ 04>$
$<04>$ secondary storage $</ 04>$
</03>
<05>
$<$ LI $>$ Primary Storage $</<$ I $>$ <06>
$<$ LI $>$ RAM C/<CI
$<\mathrm{LI}>\mathrm{ROMC} /<\mathrm{CI}$
$<\mathrm{LI}>$ CACHE MEMORY $\mathrm{C} /<\mathrm{CI}$
</UL>
$<\mathrm{LI}>$ secondary Storage $\mathrm{C} /<1>$

$$
<07>
$$

<LI>HARDDISK C/LI>
<LI>PLOPPY DISK C/LI>
<LI>TASS DISK C/LI>
<LI>ZIP DISK C/LI>
</UL>
< UL>
$<\mathrm{H} 2></ \mathrm{h} 2>$
$<$ TABLE BOARDER $=1>$
<08><09> OPTICAL < 09 > MAGNETIC < 09> FCTRONIC</08>
$<08><10>\mathrm{CD}</ 10>10>\mathrm{HDD}</ 10><10>$ FLASH DRIVE $</ 10></ 08>$
$<\mathrm{TR}><\mathrm{TD}>\mathrm{DVD}</ \mathrm{TD}><\mathrm{TD}>$ FLOPPY </TD ><TD> MENU
CHIP</TD></TR>
$<$ TR $><$ TD $></ \mathrm{TD}><$ TD $>$ ZIP $\ll / \mathrm{TD}><$ TD $></ \mathrm{TD}><$ TR $>$
$<$ TABLE>
</ (1) >
out put

Storage devices

1. Primary Storage
2. Secondary Storage

O Primary Storage

- RAM
- ROM
- CACHE MEMORY

O Secondary Storage

- HARDDISK

ㅁ 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 barries Sri Lankan genaral public may face in reaping the benefits of the internet.
(4) Use the ICT to develop the helth sector of Sri Lanka. $\quad(2.5 \times 4=10)$

