LYCEUM INTERNATIONAL SCHOOL
Second Semester Examination – July 2019

80	E	I

Subject : Information Communication Technology - I

Class : 10 (National) ....

Duration : 1 hour

Date : ....

Candidate's name:...

Admission no : ....

Note :

Answer all the questions.

In each of the questions 1 to 40, pick one of the alternative (i), (ii), (iii) and (iv) which you consider as correct or most appropriate.

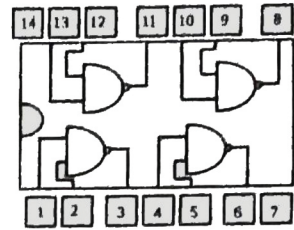Mark a cross (x) on the number corresponding to your choice in the answer sheet provided.

1. Which of the following can be considered as information?

    i. Name of school.

    ii. Marks obtained by a student for ICT subject.

    iii. Average marks obtained for ICT subject by all the students of a class.

    iv. Marks obtained by two students for ICT subject.

2. Analytical Engine was invented by

    i. John Von Neumann.

    ii. Charles Babbage.

    iii. John V.Atanasoff.

    iv. Ada Lovelace.

3. What is wrongly listed about the generation of computers, according to its major hardware technology and the medium of storage?

    i. 1st Gen – Vacuum Tubes- Punch cards

    ii. 2nd Gen- Automatic Sequence Control Calculator

    iii. 3rd Gen- Integrated Circuits –High Capacity Disks

    iv. 4th Gen – LSIC,VLSIC-Very High Capacity Hard Disks and Optical Disks

4. What type of signal is depicted by the given picture?

    i. Analog Signals

    ii. Digital Signals

    iii. Digitized Signals

    iv. Hybrid Signals

11. What values should be there for pins 1 and 2 respectively, If the output (pin 3) is 0 of the given circuit?

    i.   0 and 0   ii. 0 and 1

    iii. 1 and 1   iv. 1 and 0

12. What is the software that helps to prepare a disk to use as a new disk to store files and folders?

    i.   Disk formatting   ii. Anti-virus software

    iii. Disk defragmentation   iv. Database management software

13. Consider the following statements about operating system.

    A) Handling files and folders

    B) Interfacing between user and hardware

    C) Helping to run application software

    Which of the above is/are correct?

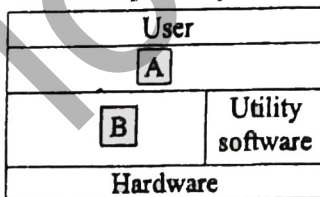   i.   A only   ii. B only

    iii. A,C only   iv. A,B,C all

14. Based on the functionality, the operating system can be classified into four types.The operating system which allows to run multiple process at the same time is called

    i.   multi-user operating system.   ii. multi-tasking operating system.

    iii. multiplexing operating system.   iv. multi-threading operating system.

15. The following picture shows the relationship of the user with the computer system. The letter A and B respectively refers to

User
A

B	Utility software

    | Hardware |

    1. Operating system, Application software
    2. Utilities, Packages
    3. Packsges, Utilities
    4. Application software, Operating system

16. Identify the correct pairs.

    a) Slide Transition-Apply special effects to be played when the slide is displayed.

    b) Slide Sorter- Contains and display all the slide thumbnails.

    c) Slide master- A slide format that is used to design all other slides.
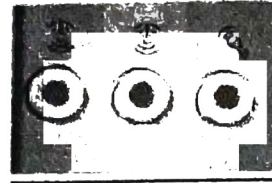
    (i) A Only   (ii) B Only   (iii) C Only   (iv) All of the above

5. The order of audio ports shown in this picture is

    i.   Line out, Line In, headphone.

    ii.   headphone, Line Out, Line In.

    iii.   Line In, Line out, microphone.

    iv.   Line In, Microphone, Line Out.

6. What is the Most Significant Bit and the Least Significant Bit of the given number?
   01010.1010_2

    i.   1 and 0   ii.   1 and 1

    iii.   0 and 0   iv.   0 and 1

7. 1101111_2 is **not** equal to

    i. 109_{10} ii. 157_8

    iii. $6F_{16}$ iv. 111_{10}

8. Equivalent BCD code for 68 is

    i.   0101 1001 BCD   ii.   0101 1000 BCD

    iii.   0110 1000 BCD   iv.   1001 1001 BCD

9. There is a shop which gives discounts for their products. To get discounts, a customer needs to buy a product from type A or type B as the first product. He has to select a product from C as the second product and another product must be bought from type D. According to the above situation, select the expression which describes the combination of products using Boolean expression.

    i.   (A and B) and (C and D)   ii.   (A or B) and (C and D)

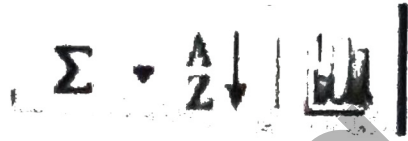   iii.   (A or B) and (C or D)   iv.   (A and B) or (C and D)

10. What are the Boolean gates which are relevant to following truth tables?

A		
A	B	x
0	0	1
0	1	0
1	0	0
1	1	0

B		
A	B	x
0	0	1
0	1	1
1	0	1
1	1	0

    i.   NOR and OR   ii.   AND and NOR

    iii.   AND and NOR   iv.   NOR and NAND

17. What is the shortcut key for open existing document ?

    i.   Ctrl + O

    ii. Ctrl + P

    iii. Ctrl + F

    iv. Ctrl + N

18. Identify the following icons in order

    i.   Sort Ascending, Auto Sum, Chart Wizard

    ii. Auto Sum, Sort Ascending, Chart Wizard

    iii. Sort Ascending, Chart Wizard, Auto Sum

    iv. Auto Sum, Sort Descending, Chart Wizard

19. Consider the following worksheet.

	A	B	C	D
1		5	10	50
2			15	50
3			20	50
4				

    Which of the following formula should be entered into the cell D1 to obtain the result in cell range D1:D3?

    (i) B1 * C1   (ii) B1 * C1   (iii) B1 * C1   (iv) B1 * C1

20. Which of the following is an absolute cell reference in a spreadsheet software?

    (i) !A!2   (ii) A2   (iii) #A#2   (iv) A2

21. Which one of the following function is available to find total numbers in a selected cell range in a spreadsheet software ?

    i.   Total()

    ii. Sum()

    iii. Add()

    iv. Count()

22. What is the output of =2^ 3/(5-1^3) * 6 in a spreadsheet software?

    i.   12

    ii. 3

    iii. 10

    iv. 13

23. Security of a database is very important and most of the time, those are converted into unreadable format and it is converted back when they are retrieved. This security mechanism is called

    i.   Data coding.
    ii. Data encryption.
    iii. Decoding.
    iv. Use of password.

Use the following database to give answers for question number 24 and 25.

Account Table

Account Type	Name	Rate	Term
A	Private	10.00 %	30
B	Coorporate	7.00 %	60
C	Preffered	5.00 %	90

Loan Table

Loan _ ID	Distribution _Date	Customer _ ID	Loan Amount
L001	03/10/00	C1111	$ 5,000.00
L002	04/04/00	C1112	$ 10,000.00
L003	03/05/00	C1113	$ 500.00
L004	01/05/00	C1114	$ 10,000.00

Customer Table

Customer _ ID	First Name	Last Name	Account type	Date Aquired
C1111	Sunimal	Silva	A	05/05/01
C1112	Nimal	Perera	B	04/04/01
C1113	Kamal	Mendis	B	03/05/01
C1114	Amal	De Silva	C	01/05/01

24. What can be the relationship among Account table and Customer table?

    i.   Many to Many
    ii. Many to One
    iii. One to Many
    iv. One to One

25. What are the suitable data types for Account type of Account table, date Aquired of Customer table and Loan Amount of Loan table respectively?

    i.   Date, Text, Currency
    ii. Text, Currency, Date
    iii. Currency, Text, Date
    iv. Text, Date, Currency

26. Select the function related to the numbered parts of the table given below.

1 Time line	A - Found at the begining and end of motion
2 Property Panel	B - Needs two key frames
3 Key frame	C - Set time period for animation
4 Tween	D - Can be used to alter an object's properties

i. 1- A, 2- B, 3- C, 4 -D
ii. 1- C, 2- D, 3- A, 4 -B
iii. 1- B, 2- C, 3- D, 4 -A
iv. 1- D, 2- C, 3- A, 4 -D

27. Select the correct function and tool from the table given below.

1		A – Moves layers and selection
2		B – Draw free form selections
3		C- Files an area with a colour or pattern
4		D - Align or arrange layers and / or other objects

i. 1-A ,2 -B, 3 – C, 4- D
ii. 1-C ,2 -A, 3 – B, 4- D
iii. 1-B ,2 -C, 3 – D, 4- A
iv. 1-D ,2 -C, 3 – A, 4- B

28. What is the protocol of which the main function is to inform and control messages when there are errors ?

i TCP /IP   ii FTP   iii SMTP   iv ICMP

29. A – 5>=5 AND NOT(8<10)

B – NOT(15 mod 4>4)

For the above logical expression, the correct answer is ?

i. FLASE ,FLASE
ii. FLASE.TRUE
iii. TRUE,FLASE
iv. TRUE,TRUE

30 Consider the following about HTML.

A - <img> the src attribute should not be available in the text.

B - <table> defines a table

C - <caption> defines a table caption

Which of the above is/are correct?

(i)   A only   (ii)   B only   (iii)   Band C only   (iv)   A,B,C all

31. Which of the following can be used to insert an image into a web page?

i.   <img src="bird.jpg" alt="parrot" width="104" height="142" >

ii.   <img href="bird.jpg" alt="parrot" width="104" height="142" >

iii.   < image="bird.jpg" alt="parrot" width="104" height="142" >

iv.   <img link="bird.jpg" alt="parrot" width="104" height="142" >

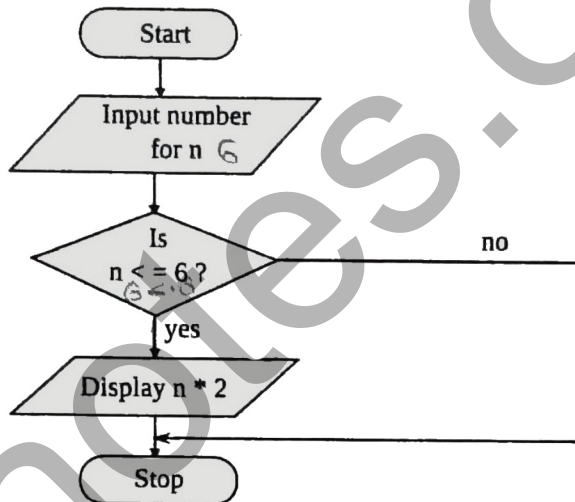32. Consider the following HTML code segment.

```
<ul type ="Disc">
        <li> Coffe</li>
        <li> Tea</li>
                <ul type ="Circle">
                        <li> Black Tea</li>
                        <li> GreenTea</li>
                        </ul>
                </li>
        <li> Milk</li>
        </ul>
```

The output of the above HTML code segment would be

(i)
- Coffee
- Tea
    - Black tea
    - green tea
- Milk

(ii)
- Coffee
- Tea
    o   Black tea
    o   green tea
- Milk

(iii)
- Coffee
- Tea
    ▪   Black tea
    ▪   green tea
- Milk

(iv)
- Coffee
- Tea
    i.   Coffee
    ii.   Tea
- Milk

33. Consider the URL "http://www.sampathbank.lk/ accounts/applicationfm.pdf". The "/acounts/" is called

    i.   Domain name.   ii.   resource.

    iii. protocol.   iv.   Path.

34. ---------------------------- is a system that prevents unauthorized use and access of computer through the Internet.

    i.   Anti-virus   ii.   Firewall

    iii. Data backup   iv.   Virus

35. What will be the result according to the following flow chart, when the input number(n) =6

    i.   1,2,3,4,5,6   ii.   2,4,6,8,10,12

    iii. 12   iv.   No output

36. Consider the following pseudo code.

    ```
    j = 1
    Do While j < 4
    Print (j)
    j = j*j+1
    End While
    ```

    Which of the following is the output of this pseudo code?

    (i) 1 2 3 4   (ii) 1   (iii) 3 4   (iv) 1 2

37. A)   var count :Integer;
    B)   Var a,b;String;
    C)   Var Name,School:String;
    D)   Var Gender,Age:Boolean;

    The correct variable declaration of the above pascal programming are

    i.   A and B   ii.   B and C
    iii.   A and C   iv.   C and D

38. Mnemonic, a memory trick is used in which of the following language ?

    i.   High Level language   ii.   Assembly Language
    iii.   Machine Language   iv.   None of above

39. Which of the following is an invalid comparison operator in pascal?

    i.   : =   ii.   =<
    iii.   <>   iv.   =

40. From the following statements, choose the correct constant declaration that defines a constant called MAX with a value 100.

    i.   type MAX=100;   ii.   Const MAX :100;
    iii.   Const MAX=100;   iv.   Var MAX=100;

[Total = 40 marks]

END

Ref : TH