Sivali Central College
Last Term Test 2020
Information and Communication Technology – Grade 13
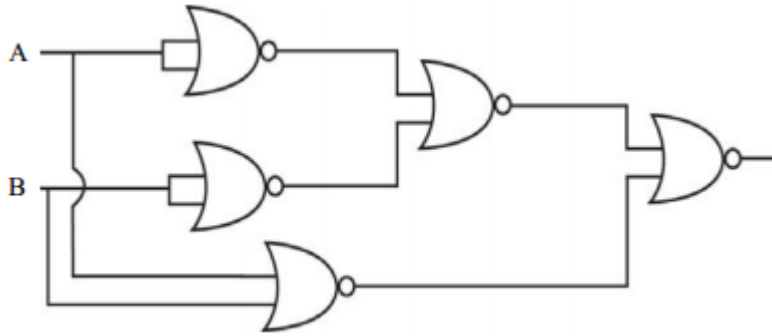
MCQ	Paper I	Duration – 02 hrs

Answer all the questions

1. Which of the following statement is incorrect about ENIAC?
I. It was the first electronic computer used for general purposes
II. It used a large number of vacuum tubes and a few transistors
III. It stands for Electronic Numerical Integrator and Calculator.
IV. It was invented by J. Presper Eckert and John Mauchly
V. It used a large number of vacuum tubes

2. Which of the followng factor make issues when using Binary Coded Decimal in data representation?
I. Space efficiency   IV. Hardware algorithms
II. Data encoding   V. Usage in digital circuits
III. Decoding

3. The stored program concept was presented by;
I. John Von Neumann   IV. Charles Babbage
II. Ada Lovelace   V. Blaise Pascal
III. John Eckert

4. Which of the following represents the bitwise OR operation of the two binary numbers 10101010 and 01010101?

I. 00000000   II. 11110000   III. 00001111   IV. 11000011   V. 11111111

5. What is the binary equivalent to the decimal 45.375_{10}?

I. 101100.101_2 II. 101101.001_2 III. 101101.111_2 IV. 101101.011_2 V. 101101.101_2

6. An advantage of managing data and information using manual methods is;
I. High resource usage
II. Having long processing methods
III. Flexsibility in customer requirements
IV. Above I and II
V. Above I and III

7. ……………………..is deciding the prices of goods and services by bidding competitively with sellers in the process of selling and buying goods and services.

I. Group purchasing   II. e-Marketplace   III. Ordinary auction
IV. Digital economy   V. Reverse auction

8. In system testing stage, the method of testing the software as a whole by an independent person or a team is,

I. Unit testing   II. Integrated testing   III. System testing
IV. Acceptance testing   V. White box testing

9. Consider the following logic circuit implemented using universal gates.

Above circuit is equivalent to,

I. XOR Gate   II. NOR Gate   III. AND Gate
IV. NOT Gate   V. NAND Gate

10. In an operating system, " .... maps virtual memory address into physical memory addresses."

I. Swapping   II. MMU   III. Process Control Block
IV. Job scheduler   V. CPU scheduler

11. ………………… is not a data validity check

I. Type check   II. Format check   III. Double entry check
IV. Range check   V. Look up check

12. Which of the following are the properties of a signal?
I.   Amplitude, Impulse, Frequency, Phase
II.   Wavelength, Clock time, Impulse, Amplitude
III.   Amplitude, Frequency, Phase, Wave length
IV.   Amplitude, Phase, Clock time, Wave length
V.   Amplitude, Impulse, Phase, Wave length

13. Economic feasibility of a system .....
I.   Involves with cost / benefit analysis
II.   Determines the technical resources required for the project.
III.   Evaluates hardware and software.
IV.   Estimates the time required for the completion of the project.
V.   Determines whether the organization's needs can be met by implementing the proposed system.

14. Which of the following statements describes a functional requirement of a digital camera?
I.   Should be light in weight.
II.   Shall be able to provide one year warranty for battery.
III.   Should provide a USB cable.
IV.   Shall be able to take a photo.
V.   Should have a memory card with sufficient capacity.

15. Which of the following system development models has an extremely long linear development process?

I. Prototyping model   II. Waterfall model   III. Spiral model
IV. Agile model   V. Rapid Application Development model

16. .... is used for analog signal to digital signal conversion.
Which of the following is most appropriate to fill the blank in the above statement?
I.   Amplitude Modulation (AM)
II.   Frequency Modulation (FM)
III.   Pulse Code Modulation (PCM).
IV.   Phase Modulation (PM).
V.   Time Division Modulation (TDM).

17. Which of the following is a correct MAC address?

  I. 192.248.0.0.1   II. 192.258.16.1   III. 192.248.16.1
  IV. 255.255.0.0   V. 03:A3:CC:99:C9:AB

18. There are 55 hosts connected to a particular sub network. What is the most appropriate sub net mask for this sub network?

  I. 255.255.255.240   II. 255.255.240.0   III. 255.240.0.0
  IV. 255.255.255.192   V. 255.255.255.0

19. What is the network address of the sub network where the IP address 145.65.89.45 belongs with sub net mask 255.255.240.0

  I. 145.65.80.0   II. 145.65.89.0   III. 145.65.0.0
  IV. 145.65.96.0   V. 145.65.16.0

20. What is the broadcast address of the sub network where the IP address 200.10.34.52 belongs with sub net mask 255.255.255.248

  I. 200.10.34.255   II. 200.10.34.55   III. 200.10.255.255
  IV. 200.10.34.7   V. 200.10.34.48

21. What is the first host IP address of the sub network where the IP address 198.65.80.30 belongs with sub net mask 255.255.255.192

  I. 198.65.80.1   II. 198.65.80.65   III. 198.65.80.129
  IV. 198.65.80.0   V. 198.65.0.1

22. What is the last host IP address of the sub network where the IP address 201.21.82.75 belongs with sub net mask 255.255.255.240

  I. 201.21.82.254   II. 201.21.82.255   III. 201.21.82.65
  IV. 201.21.82.78   V. 201.21.255.254

23. Two machines with the IP addresses 192.248.16.158 and 192.248.16.218 are connected to a local area network (LAN). Which of the following is a suitable subnet mask for this network?

  I. 255.255.255.192   II. 255.255.255.248   III. 255.255.255.240
  IV. 255.255.255.128   V. 255.255.255.224

24. A computer in a network is configured with the IP address 192.248.16.95 and the subnet mask 255.255.255.192. Which of the following IP addresses cannot be assigned to a computer in the same network?

  I. 192.248.16.110   II. 192.248.16.65   III. 192.248.16.129
  IV. 192.248.16.92   V. 192.248.16.120

25. What is an advantage of the virtual memory?
I.   The ability of keeping opened the programs larger than the capacity of the

main memory
II.   The Operating system has the ability to do other task while doing one task
III.   The ability of using one central processing unit for many tasks
IV.   The ability of increasing the capacity of secondary storage
V.   The prevention of fragmentation of hard disk in saving date files

26. Consider the following statements about HTML.
(A) HTML tags describe document content.
(B) HTML documents contain HTML tags and plain text.
(C) The browser displays the HTML tags.

Which of above is/are true?

I. B only	II. A and B only	III. A and C only
IV. B and C only	V. All of the above	

27. The correct HTML segment which can be used to limit the number of characters to 15 in the text box Nick Name in the Form of given picture.

I.   <input   type="text"   name="nickname" maximumlength="15">

II.   <input type="text" name=" nickname " maxlength="15">

III.   <input type="text" name=" nickname " length="15">

IV.   <input type="text" name=" nickname " width="15">

V.   <input type="text" name=" nickname " maxcharacter="15">

Member Information

First name: _____

Last name: _____

Nick Name _____

Gender: ● Male ○ Female
Date of Birth : mm / dd / yyyy

[Submit] [Cancel]

28. Which of the following statement is correct about multi – core processors?

I.   There are two or more independent processing units (cores) in a computer.
II.   A processor that executes parts of various programs at the same time.
III.   Multiple instructions run in a single processor
IV.   Only a single instruction can be run in a multi-core processor
V.   The performance of a computer gets low by using a multi-core processor

29. Consider the following statements regarding the Open System Interconnection model.
A. Transmitting data over a transmission medium is done in the transport layer.
B. The network layer identifies the IP addresses of the devices connected to the transmission.
C. Data transformation and coding takes place in the presentation layer.
Which of the above statement/statements is/are correct?

I. A only	II. A and B only	III. A and C only
IV. B and C only	V. All A, B and C	

30. Which of the following tasks uses multi software Agents?

I.	Part picking robot	IV.	Image analysis

II.   Refinery Controller   V.   Medical diagnosis
III.   Interactive English tutor

31. Which of the following statement is incorrect?
    I.   Pure brick organizations are called as Brick and Mortar firms.
    II.   In a reverse auction, buyers compete to obtain a good or service by offering increasingly higher prices.
    III.   E-marketplace consists of frontend process and backend process.
    IV.   Facial and voice recognition come under Affective technology.
    V.   The digital economy is also sometimes called the Internet Economy.

32. What is the appropriate SQL statement for selecting all the data in the record with data starting with the letter "C" in the "$FirstName$" field in the student table?
    I.   SELECT * FROM Student WHERE FirstName LIKE '%c'
    II.   SELECT * FROM Student WHERE FirstName = 'c'
    III.   SELECT * FROM Student WHERE FirstName = '%c%'
    IV.   SELECT * FROM Student WHERE FirstName LIKE '%c%'
    V.   SELECT * FROM Student WHERE FirstName LIKE 'c%'

33. Meaning of software piracy is ......

    I.   Stealing of software at home.
    II.   Coping software.
    III.   Stealing of software from manufacturing company.
    IV.   Coping from purchased software.
    V.   Making of illegal copies of software on which the user has no copy right.

34. Consider the following statements.
    A. Frequent refreshing take place in DRAM while SRAM has no such frequent refreshing.
    B. Cache Memory belongs to the category of SRAM
    C. Present day most of computers have SRAMs.
    Which of the above statement/s is/are true?
    I. A only   II. B only   III. C only
    IV. A and B only   V. B and C only

35. Autonomous, Problem Solving computational entities capable of effective operation in dynamic and open environments are defined as……………….
    I. Evolutionary computing   II. Agent Technology   III. Ubiquitous computing
    IV. Von-Neumann concept   V. Quantum computing

36. Study the following statements about the given data base table.

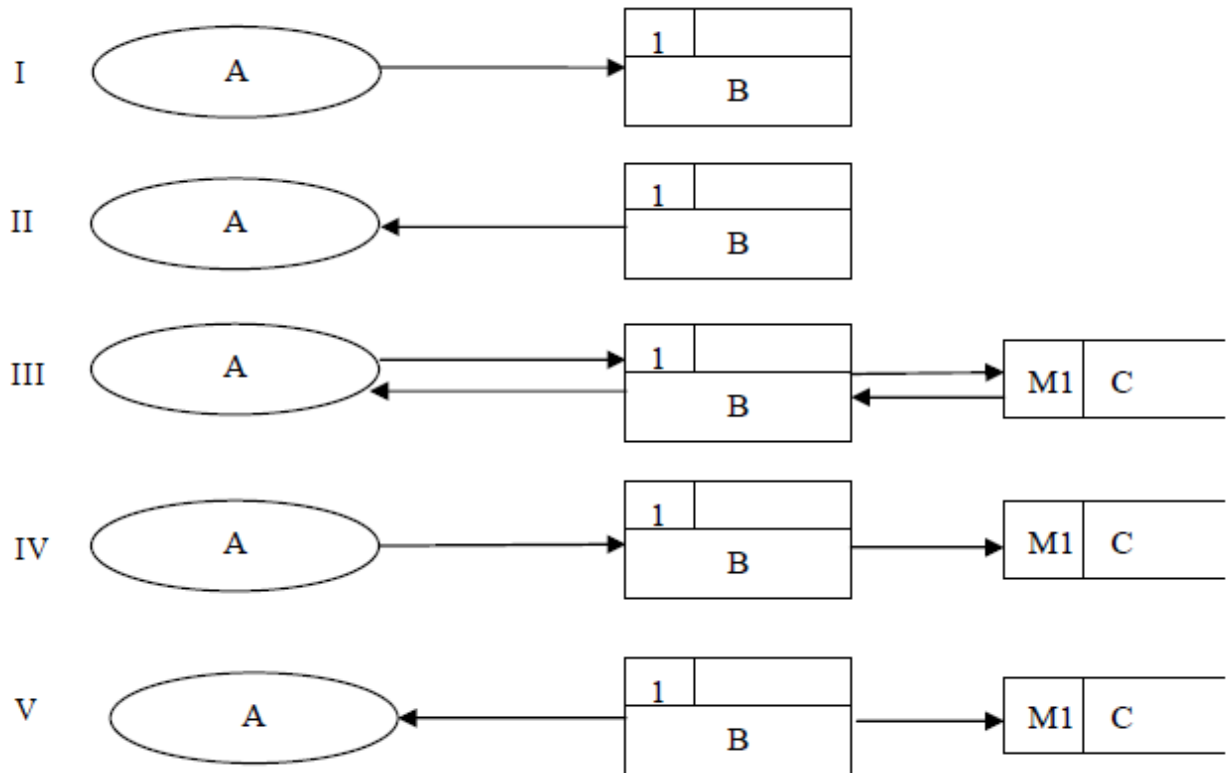 | STUDENT |
    | --- |
    | INDEX_NO |
    | NAME |
    | DOB |
    | SEX |

    A. Student is an entity.
    B. Index NO field can be used as primary key.
    C. NAME, DOB are two attributes of table.
    D. Collection of data in all attributes of a certain student is named as a record.

    Which of the above statement/s is/are true?
    I. A and B only   II. B and C only   III. C and D only
    IV. A, B and C only   V. All of the above

37. Which of the following data flow diagrams is correct with respect to the rules of data flow modeling?

38. Which of the following SQL commands is not available in the data definition language (DDL)?

I. CREATE II. DROP III. ALTER
IV. UPDATE V. TRUNCATE
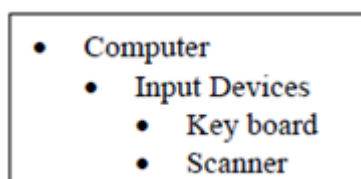
39. Consider the following HTML code.
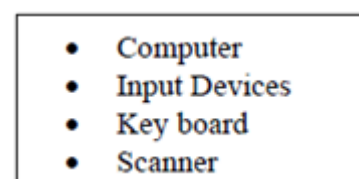
```
<ul>
<li> Computer</li>
<ul>
<li> Input Devices </li>
 <ul>
 <li> key board </li>
 <li> Scanner </li>
</ul>
 </ul>
</ul>
```

Which of the following is the output generated by the above code?

40. Consider the following HTML code for creating a table.
    ```
    <table border = "1">
     <tr><th colspan = "2"> Students </th></tr>
    <tr><td rowspan= "2"> Name </td>
     <td>Vithu</td></tr>
    <tr><td>Tharani</td></tr>
    </table>
    ```
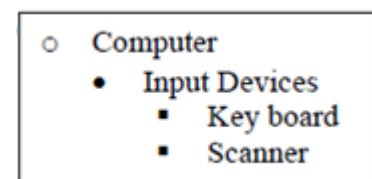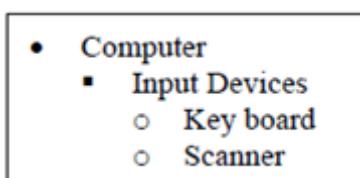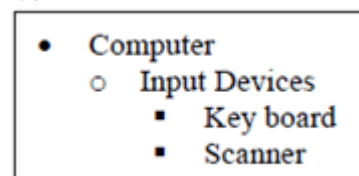
I
Students	Name
	Vithu
	Tharani

II
Students	
Name	Vithu
	Tharani

III
Students	
Name	
Vithu	Tharani

IV
Students	Name
Vithu	Tharani

V
Students	Name	
	Vithu	Tharani

41. Which of the following symbol is used to write comments in a PHP program?

    I. --   II. <!- - comment -->   III. //
    IV. *   V. %

42. Which of the following will be used to define an external CSS?
    I.   <link src = "abc.css" rel = "stylesheet" type = "text/css">
    II.   <link href = "abc" rel = "stylesheet" type = "text/css>
    III.   <link href = "abc.css" type = "text/ css">
    IV.   <link href = "abc.css" rel = "stylesheet" type = "text/css">
    V.   <href link = "abc.css" rel = "stylesheet" type = "text/css">

43. Which of the following is a valid example for CSS Id selector?
    I.   .myid{color:red;text-align:center;}
    II.   #myid{color:red;text-align:center;}
    III.   myid{color:red;text-align:center;}
    IV.   myid:{color:red;text-align:center;}
    V.   myid;{color:red;test-align:center;}

44. What is the output of the following python program?
    ```
    s ="Hello World!"
    print (s[-5: -2])
    ```

    I. Wor   II. orl   III. Wo   IV. llo   V. ell

45. Consider the following python codes.
    ```
    def fun(a):
            i, c=1, a[0]
            while i<len(a):
                    if(a[i])>c:
                            c=a[i]
                    i=i+1
            return i
    print{fun([9,3,11,15,-1])}
    ```

    Which of the following is the output of it?

I. -1   II. 3   III. 5   IV.8   V. 15

46. Consider the following incomplete python code segment that is used to arrange data items of "marks" data structure in descending order.

```
marks=[28,75,52,89,68]
datacount=len(marks)
for i in range(datacount-1):
        for k in range(i+1,datacount):
                if …………………….
                        marks[i],marks[k]=marks[k],marks[i]
```

   Which of the following is the suitable statement to fill in the blank?

   I. marks[i]<marks[k];   II. marks[i]>maks[k];   III. marks[i]=marks[k]:
   IV. marks[i]<marks[k]:   V. marks[i]>marks[k]:

47. Consider the following python statement.

   A=32.7
   B={'Age':21,'Name':'Perera'}
   C=(28,95,'Kamal')
   D={5,10,15,'sarath'}
   Which of the following contains relevant data types for A, B, C, and D respectively.

   I. float, tuple, list, dictionary   IV. float, tuple, dictionary, set
   II. integer, dictionary, list, dictionary   V. float, dictionary, tuple, set
   III. float, dictionary, tuple, dictionary

48. What is the correct value of the following Python statement?

   (12 >> 2) % 4 & 7

I. 7   II. 6   III. 3   IV.2   V. 0

49. The process of directing the data relevant to a task to the memory and directing them to the relevant devices with the compatible speed of the device is known as,

I. Compaction   II. Paging   III. Spooling   IV.   V.   Memory
                                                         Defragmentation   allocation

50. What is the output when you execute the following Python code?

   ```
   x=[34,7,12,17,21,4,51]
   t=0
   for i in range(0,len(x)):
           b=x[i]%2
           if b==0:
                   t=t+x[i]
   print(t)
   ```

   I. 96   II. 146   III. invalid syntax
   IV. 50   V. list index out of range