



**Part-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)** Marks a cross(X) on the number corresponding to your choice in the answer sheet provided.

(1 x 40 = 40 Marks)

1) The following diagram describe to convert data into information. Which is describe the labels A, B, C in order.

A→B→C

- 1. input, storage, output
- 2. input, process, storage,
- 3. input, process, output
- 4. input, output, storage

2) Which is consider as information?

- 1. Name
- 2. NIC No.
- 3. 3+4=7
- 4. Vehicle No.

3) Which is describe the function of web camera and scanner?

- 1. Output, input
- 2. Input, input
- 3. input, output
- 4. output, output

4) What is the equivalent value hexadecimal  $F_{16}$ ?

- 1. 11110001
- 2. 1001000
- 3. 00011111
- 4. 11111

5) Consider the follow statements about data communication media.

- A. Lightning technology used in fiber optic.
- B. Coaxial cable is high speed data transfer ratio.
- C. Low frequency infrared used to infrared data communication.

Which is | are true in above statement(s)

- 1. A only
- 2. B only
- 3. A and B
- 4. A and C

6) Which is guided media in the given answer?

1. Fiber optic
2. Microwave

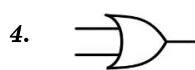
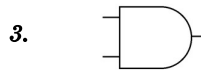
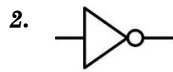
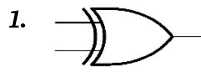
3. Radio Frequency
4. Infrared

7) Malala wish to take Tea(T) with Vadai(V) or Biscuit(B). Which Boolean expression correctly express above statement.

1. T.V.B
2. T+V.B

3. T.V.B
4. T.(V+B)

8) Which logic gate correctly denote the truth table?



Input 1	Input 2	Output
0	0	0
0	1	1
1	0	1
1	1	1

9) Which key field is suitable for primary key to store the students information in to a table in a database from grade 1 to 13.

1. NIC No
2. Student name

3. Student Admission number
4. Telephone number

10) Which is/ are main task(s) of operating system?

- A. Manage Computer memory
- B. Manage network
- C. Provide safety for hardware devices

1. A and B only
2. A and C only

3. B and C only
4. C only

11) Which is equivalent of  $2 \times 2^{20}$  MB

1.  $2 \times 2^{20} \times 1024$  Byte
2.  $2 \times 2^{20} \times 1024 \times 1024$  KB

3.  $2 \times 2^{20} \times 2^{10} \times 2^{10}$  bit
4.  $2 \times 2^{20} \times 2^{10} \times 2^{10} \times 2^3$  bit

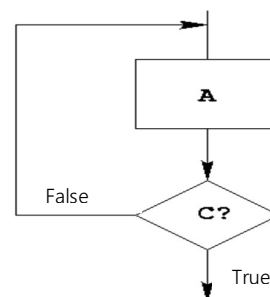
12) Which is example for Scripting Language?

1. Pascal
2. Assembly language

3. PHP
4. Python

13) Which is suitable conditional control structure of given flowchart?

1. For do
2. While do
3. Repeat until
4. If Then



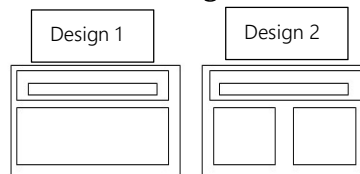
- 14) Which is suitable to use as variable in pascal language?
1. Num 1
  2. 1Num
  3. Num-1
  4. Num\_1
- 15) What is the out of the following expression in pascal NOT(3=6) OR (1>1)?
1. True
  2. False
  3. True, False
  4. False, True
- 16) How many time iteration will be done in the given pseudo code?
1. 8 times
  2. 7 times
  3. 6 times
  4. 5
- ```

n=-1
m=4
while m>n do
    n=n+1
loop

```
- 17) Which is correct IP address in given below
1. 256.18.85.23
  2. 88.285.75.223
  3. 225.243.78.18
  4. 193.213.78.154
- 18) Which software is used to browse webpage?
1. Web Browser
  2. Web Server
  3. webpage
  4. IP Address
- 19) Which is used to convert URL into IP address?
1. MODEM
  2. DNS
  3. ISP
  4. Search Engines
- 20) Which section has sent mails information in email service provide web sites?
1. Send box
  2. Sent box
  3. Draft box
  4. Compose
- 21) Which is not a service of cloud computing concept?
1. Hardware management service
  2. Infrastructure as a service
  3. Platform as a Service
  4. Software as a Service
- 22) Which is/are function(s) of electronic presentation?
- A. Object animation      B. Slide transition      C. Find and replace
1. A, B only
  2. A, C only
  3. B, C only
  4. A, B C only
- 23) Muzampil wish to play a electronic presentation in full screen mode. whic viewis suitable for this purpose?
1. Normal
  2. Slide master
  3. Slide show
  4. Slide sorter

24) Which option is used to change the slide design 1 to slide design 2 in electronic presentation?

1. Slide Animation
2. Slide layout
3. Slide show
4. Slide sorter



25) In the following URL Label A, B, C are denote as ?

|                                                                                                 |   |   |
|-------------------------------------------------------------------------------------------------|---|---|
| <a href="http://www.education.com/english/ict.pdf">http://www.education.com/english/ict.pdf</a> |   |   |
| A                                                                                               | B | C |

1. Domain name, Protocol, resource file
2. Resource file, domain name, Protocol
3. Protocol, Domain name, Resource file
4. Domain name, resource file, Protocol

26) Which is wrong cell address in electronic spreadsheet?

1. \$JV132
2. A100
3. A\$B100
4. \$K\$10

27) Which is not usable equation in electronic spreadsheet?

1. =average(a1:a5)
2. =add(a1:a5)
3. =sum(a1:a5,b10,20)
4. =max(a5:a1)

28) Which is not system development model?

1. System Development model
2. Waterfall model
3. Prototyping model
4. Spiral model

29) Which is correct statement about phase implementation in system implement phase?

1. Implement in small geographical area
2. Implement the selected parts individually.
3. Remove the old system completely and implement new system.
4. Implement the new system with existing system.

30) Which database is called as tables joined by a common field?

1. Distributed database
2. Relational database
3. Centralized database
4. Flat file Database

31) In a database which has same data type in a table?

1. query
2. record
3. report
4. field

32) Which is not part of requirement identification section of SDLC?

1. System goal should be in written format.
2. Advantages should be in written format.
3. Efficiency should be in written format
4. System developer take over this work.

Answer the question no 33, 34 using the following the pseudo code.

```
N=1
M=10
While N<5 do
    N=N+1
    Write(M)
End while
```

- 33) What is the output above pseudo code?
1. 10 10 10
  2. 10 10 10 10
  3. 1 2 3 4
  4. 2 3 4 5
- 34) What is the value of M after end of the program?
1. 5
  2. 6
  3. 10
  4. 1
- 35) Which is wrong statement about computer programming translator?
1. Convert high level language into machine level language.
  2. Convert the source code into high level language.
  3. Interpreter translate the source code into machine code when execute the program.
  4. Compiler convert the source into machine code at a time before executing the program.
- 36) Which is wrong statement about computer program variable?
1. Variable has data type
  2. Variable has constant value.
  3. Variable has multiple memory address.
  4. Variable consider as identifier.
- 37) Which is describe the relation between internet and www?
1. Internet is a service of www.
  2. There is no relationship between internet and www.
  3. Internet and www are equal.
  4. www is one of the service of internet
- 38) WIMP is consider as a characteristic of GUI interface. Each letter of WIMP denote as.
1. Word, impress, media player, printer
  2. Window, icon, method, project
  3. Window, impress, menu, pointer
  4. Window, icon, menu, pointer
- 39) In maintenance phase which is/are consider to modify the existing system?
- A. New requirements of user.
  - B. Solution for identified problems when implement of system.
  - C. When implement new technology.
1. A and C
  2. A and B
  3. B and C
  4. A, B and C
- 40) Which is wrong statement about Repeat until statement?
1. Condition checked beginning of iteration
  2. Iteration will work when only the condition is wrong.
  3. Iteration will end when condition is true.
  4. It is example for iteration.

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# Information and communication technology

## Part-II

- Answer five(05) questions only, selecting the first question and four others.
- First question carries 20 marks and each of the other questions carries 10 marks.

01)

1. Write the difference between data and information(2 marks)
2. Write any two quality of information?(2 marks)
3. Write the two characteristic of 5<sup>th</sup> generation computers? (2 marks)
4. Write any two examples for nonimpact printer type? (2 marks)
5. Write any two basic components of computer system?(2 marks)
6. What are the conditional control structures in computer programming language?(marks)
7. Write two drawback in manual data processing? (2 marks)
8. Write the purpose of FTP protocol(1 marks)
9. Write any 4 services of internet?(2 marks)?
10. What are the main services of Cloud computing (2 marks)

02) SLW is a small business organization. The following figure describe the employees' payment details.

|   | A                         | B                    | C               | D                     |
|---|---------------------------|----------------------|-----------------|-----------------------|
| 1 | <b>SLW- Organizartion</b> |                      |                 |                       |
| 2 | <b>Payments:</b>          | <b>Jul-17</b>        |                 |                       |
| 3 | <b>OT Rate</b>            | <b>LKR 300.00</b>    |                 |                       |
| 4 | <b>Basic Payemnts</b>     | <b>LKR 15,900.00</b> |                 |                       |
| 5 | <b>Emp.ID</b>             | <b>Name</b>          | <b>OT Hours</b> | <b>Total Payments</b> |
| 6 | E100                      | Mithushan.S          | 12              | LKR 19,500.00         |
| 7 | E101                      | Salman.A             | 3               | LKR 16,800.00         |
| 8 | E102                      | Peter.J              | 4               | LKR 17,100.00         |
| 9 | E103                      | Perara.E             | 7               | LKR 18,000.00         |

To find the "Total payments" is otrate\* othours + basic payments

1. Write the function should be in cell D9.(2 marks)
2. When modify the data in cell B3 what are the cells will be update?(2 marks)
3. How to fill the formula from cell d6 to d7,d8,d9?(3 marks)
4. Write the steps to show the title as SLW-Organization (3 marks)

03)

1. Writer 4 differences between manual database and computerized database? (4 marks)
2. What are the characteristics of Primary key(2 marks)
3. What is the meaning of composite primary key? Explain with suitable example? (4 marks)

04)

1. The following pseudo code is used to display the result as positive or negative of given integer number. This program will be run until the given number is zero. Write the label name of ① and ② (2 marks)

```
Begin
  Input n as integer
  While ① do
    If ② then
      Write('negative')
    Else
      Write('positive')
    End if
  Input n as integer
End while
End
```

2. Write the flow chart of above pseudo code? (4 marks)
3. Write a pascal program to store 10 students name in an array type variable given by user? (4 marks)

05)

1. Write all six stages of System development life cycle? (3 Marks)
2. Write any two advantages and any two disadvantages of Water fall model?(2 Marks)
3. Write any two software testing methods name?(2 marks)
4. Write any three system implementation methods name? (3 Marks)?

06) The given details are describe about working principal of a machine (W).

Manually (M) machine can be switched on or off otherwise automatic switch (A) should be on and sensor(S) should be realize the lightning the machine will be work.

- Machine working condition is 1 and not working condition is 0.
- Manual (M) switch on status is 1 and off status is 0.
- Automatic (A) switch on status is 1 and off status is 0.
- Sensor observer the light is 0 and observer the dark is 1.

Answer the following question according to the above statements.

(if question no 1 is wrong, marks will not give to question 2 and 3.)

1. Write the Boolean expression of above situation.( 2 marks)
2. Draw a logical circuit for your answer in question no 1 (3 marks)
3. Write the truth table for your answer in question 1? (5 marks)

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