

(English Version)

Subject : ICT (Creative)

Time : 2 Hours 35 Minutes

Full Marks — 50

[Answer any five questions]

1. The electronics devices are being modern in the field of ICT as day pass. The devices are becoming developed and small in size and are changing rapidly in technology, at the same time the cost is being low.
 - a. What is E-Governance? 1
 - b. Damaged tissue can be destroy in low temperature— Explain it. 2
 - c. Which technology is mentioned in above stem? Explain it. 3
 - d. “The technology has bring radical change” Analyze it according to stem. 4

2. Shafiq’s teacher was teaching him about the communication medium of ICT book. The teacher told that by the medium movable image can be sent besides data. For expanding communication in distant places it is necessary to set up tower between 10 km to 100 km. The frequency of which is from 300 MHz to 300 GHz. After that a newly developed technology is combined with it. That is adding a continent with another continent in the bottom of the sea.
 - a. What is cloud computing? 1
 - b. Router works like a postman— Explain it. 2
 - c. Explain the first medium of the above stem. 3
 - d. Analyze your opinion that second medium is more convenient. 4

3.

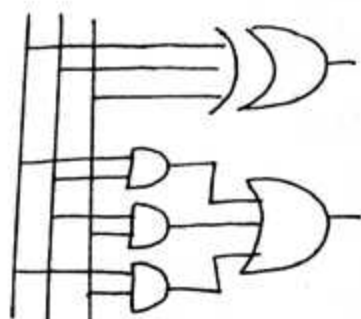


fig-1

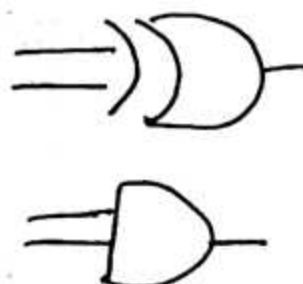
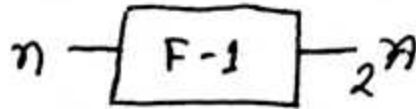


fig-2

- a. What is counter? 1
- b. BCD and binary code are not same— Explain it. 2
- c. Which type of circuit can be created by using gates of fig-1? Explain with truth table and equation. 3
- d. Explain with equation and diagram whether it is possible to implement the circuit of fig-1 by using the circuit that is developed by using gates of fig-2. 4

4.



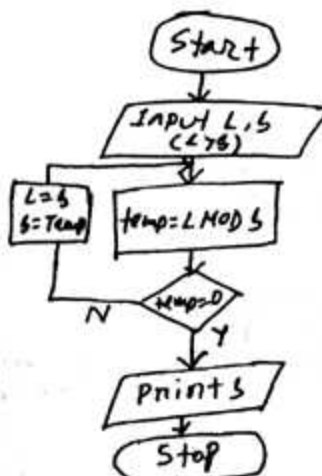
- a. What is Boolean postulates? 1
- b. Prove that $\overline{A + B} = \bar{A} \cdot \bar{B}$. 2
- c. Draw the 3 input variables truth table and circuit of F-1. 3
- d. Which type of change will be brought if you write output instead of input and input instead of output in the mentioned block diagram. Explain it and draw the changable circuit. 4

5.

Roll	Name	Result
1001	Apon	A+
1002	Ador	A+
1003	Siam	A
1004	Toma	A-

- a. What is attribute? 1
- b. www.bafsd.edu.bd —Explain it. 2
- c. Write a html code of above mentioned table. 3
- d. What type of change will be brought into the code to add a column named B-Date for entering Date of Birth between Name and Result. 4

6.



- a. What is structured programming? 1
- b. There is a difference between i++ and ++i. Explain it. 2
- c. Write the significance and function of the symbols mentioned in the flowchart. 3
- d. Write a c program of above mentioned flowchart. 4
7. Void main ()
- ```
{
int n, c, s = 0;
scanf("%d", n);
for (c=1); c<n; c++);
S = s + c * c
printf("%d", & s);
```
- a. What is Token? 1
- b. Variable and constant are not same— Explain it. 2
- c. Write a flowchart of above program. 3
- d. Identify which types of errors are there in the stem and write the correct program. 4
8. There are some data of a college where the name of the table is stu(stu\_id, stu\_name, Location, Phn\_no, section) of Database named student\_info. Complete the necessary queries of the institute using the stutable of this database.
- a. What is cryptography? 1
- b. Primary key and foreign key are not same. Explain it. 2
- c. Explain data types according to the stem. 3
- d. Do the following queries with the help of SQL using the table in the stem. 4
- i. Show all data of stutable by using query.
- ii. Show stu\_id and location by using query.
- iii. Show the names and Phn\_no of students of Equity section.

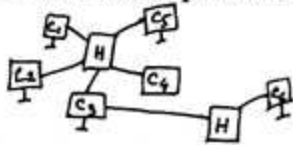
(English Version)  
Subject : ICT (MCQ)

Time : 25 Minutes

Full Marks—25

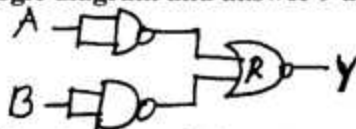
[ Darken the circle (O) with black ball point pen from the alternatives]

- What is Heuristic?
    - Type of treatment
    - Thinking ability of man or animal
    - Thinking skill of Robot
    - Activities of Robot
  - What is the full form of NNI?
    - National Nanotechnology Initiative
    - National Nanotechnology Institute
    - Network of National and International
    - National Network over Internet
  - Which technology is used for DNA mapping?
    - Biometrics
    - Bio informatics
    - Nanotechnology
    - Genetic Engineering
  - What is PKI?
    - Special type of encryption algorithm
    - Secret number of Biometrics user
    - Name of a satellite station
    - A Network protocol
  - Which generation mobile uses packet switching Data Transmission Method?
    - 1G
    - 2G
    - 3G
    - 4G
- See the stem and answer questions no. 6 and 7 :



- Which topology is mentioned in above stem?
  - Bus
  - Star
  - Ring
  - Hybrid
- Which type of change will happen in whole system if  $C_3$  is damaged?
  - Whole network will damage
  - All computer are connected without  $C_3$
  - $C_6$  will disconnected from network
  - Network of  $C_1$ – $C_5$  will be active
- Which one is work as physical layer of OSI model?
  - HUB
  - Router
  - NIC
  - Gateway

See the logic diagram and answer 9 and 10 :



- What will be the value of  $y$ ?
  - $AB$
  - $A + B$
  - $\overline{A + B}$
  - $\overline{A} + \overline{B}$
- Which logic gate need to replace, with the gate indicate by R of the diagram to get output  $y = A + B$ ?
  - NOT
  - OR
  - NAND
  - EX-OR
- Register is used—
  - to store 0, 1
  - to add 0, 1
  - to shift data

- Which one is correct?
  - i & ii
  - i & iii
  - ii & iii
  - i, ii & iii
- BCD is — bits code.
  - 2
  - 4
  - 6
  - 8
- What will be the previous number of  $(100)_{16}$ ?
  - 77
  - 99
  - AA
  - FF
- Smallest measurement of memory is—
  - bit
  - byte
  - kilobyte
  - Megabyte
- In html, "from start tag to ending tag" all are called—
  - Value
  - Tag
  - Element
  - Attribute
- URL may be—
  - File name with directory
  - Website address
  - Protocol with Domain name
 Which one is correct?
  - i & ii
  - i & iii
  - ii & iii
  - i, ii & iii
- Which website can be create interactive layout?
  - Static
  - Dynamic
  - Global
  - Normal
- What is the top level domain of `http : // www.prothom-alo.com`
  - http
  - www
  - prothom-alo
  - .com

Read the stem and answer 19 and 20 :

int a, b

a = 10;

b = 20;

printf("%f", a + b);

- Which type of error has happened?
  - Data type of variable
  - Name of variable
  - Making expression
  - Syntax
- What will be the result?
  - 3
  - 30
  - 33
  - No value will show
- Correct variable name is—
  - n@me
  - rate%
  - 3 number
  - total
- Which one is used as input statement in C.
  - input
  - read
  - load
  - getchar
- Which operator is used to connect more than one text or string?
  - Logical
  - comparison
  - Concatenation
  - Like
- Which one is doing to keep data back up and recovery of Database?
  - Database user
  - Database programmer
  - System Analyst
  - Database Administrator
- Sequence of Data hierarchy is—
  - File>Record>Field>Byte>Bit
  - Bit>Byte>File>Field>Record
  - Field>Record>File>Bit>Byte
  - Bit>Byte>Field>Record>File