

Time: 2½ Hrs.

~~CSA~~

BLOCK NO-10  
Room NO - C-105  
SYBLOM-

Time: 2½ Hrs.

X Y G A B C

Maximum Marks: 75

COMP

- Note: 1) All questions are compulsory.  
2) All questions carry equal marks.

Q.1 A. State whether the following statements are True or False : (8)  
(Attempt any Eight).

1. The third Generation of computers used large scale integrated circuits.
2. USB flash drives have no moving parts.
3. Operating systems were developed in the second generation of computers.
4. A running program is called a Process.
5. A flow chart is graphical representation of an algorithm.
6. MIS stands for Management Information System.
7. printf () is an formatted output function.
8. exit statement is used to take the control of the program out of the loop.
9. Every switch statement can be written using nested if() statements.
10. -- i is called a post increment of the value of i.

Q.1 B. Select the appropriate option from the following : (7)  
(Attempt any Seven).

1. Fifth generation computers are based on ....  
a) Artificial Intelligence      b) Transistors  
c) Vacuum Tubes                  d) Integrated circuits
2. A ..... computer looks more like a handheld slate.  
a) Tablet      b) Laptop      c) workstation      d) mini
3. In Digital Computers the data is processed in a .....form.  
a) Continuous                      b) Discrete  
c) Nano                                d) Pico
4. The rectangle shape in the flowchart signifies .....  
a) Processing                        b) Decision making  
c) Input                                d) Output
5. A keyword must be written in .....  
a) upper case                        b) lower case  
c) toggle case                        d) mini case
6. The modulus operator (%) gives the ..... of the division.  
a) Quotient                            b) Numerator  
c) Denominator                        d) Remainder
7. To read any type of data typed from keyboard the function ... is used.  
a) puts()      b) printf()      c) scanf()      d) getch()
8. The function getch() is defined in the header file .....  
a) stdio.h      b) conio.h      c) math.h      d) None of these

[P.T.O.]

X Y G A B C

9. If we declare a variable as float  $y = 9$  then  $y$  will contain the value .....
- a) 9                      b) 10                      c) 9.0                      d) 9.000000
10. In the while() loop the condition is written at the ..... of the loop.
- a) end                      b) middle                      c) lower end                      d) beginning

**Q.2 Answer the following questions :**

- a. What are the different types of computers? Explain features of each of them. (8)
- b. What are binary numbers? What are the rules for binary addition? (7)

**OR**

- Q.2** c. Write a short note on 1) PDA's 2) CPU (8)
- d. Convert the following binary numbers to decimal numbers: (7)
- a)  $(110011)_2$                       b)  $(10101.101)_2$

**Q.3 Answer the following questions :**

- a. What is the relationship between software and hardware? (8)
- b. Write a short note on: 1) Interpreter 2) Compiler 3) Assembler (7)

**OR**

- Q.3** c. Write algorithm and draw flowchart that reads two numbers and display larger number. (8)
- d. What is e-Commerce? Discuss the applications of computer to Inventory Control? (7)

**Q.4 Answer the following questions :**

- a. What are the different types of constants? Explain each with example in C language. (8)
- b. Write a C-program to accept a number and check whether it is even or odd number. (7)

**OR**

- Q.4** c. Give the output of the following C-program: (8)

```
#include<stdio.h>
void main()
{
    int x=10, y=15, z=300, t;
    z%=-y;
    t=4*x--;
    printf("%d %d %d %d \n", x, y, z, t);
}
```

- d. Give the output of the following C-program: (7)

```
#include<stdio.h>
void main()
{
    int i;
    for(i=2;i<=20;i+2)
    {
        printf("%d \n", i*i);
    }
}
```

[P.T.O.]

X Y G A B C

**Q.5** Answer the following questions :

- a. Write a C-program to calculate and display the sum of following series : (8)  
5+10+ .....+105
- b. Write a C-program to input the Telephone number and number of calls made. (7)  
Calculate and display the bill amount which includes a fixed rent of 500, the first 100 calls are free and excess calls are charged @90 paise each.

**OR**

**Q.5** c. Write short notes on any three of the following giving suitable examples : (15)

1. break statement
2. do .. while()
3. for() loop
4. nested if()
5. switch() case statement

-----X-----X-----