

V & C PATEL ENGLISH SCHOOL~ V. V. NAGAR  
Half Yearly Exam-2017-18  
Class- XI  
Subject- Computer Science

Time Allowed: - 3 Hrs.

MM: - 70

Note: - 1. All Questions are compulsory to attempt.

Q-2

- 1) What is an Operating system? What are its functions? 1
- 2) Explain briefly the concept of time-sharing. 2
- 3) What is meant by the term multiprogramming and multitasking? 2
- 4) Explain the virtual storage technique describing both the approaches. 4
- 5) The \_\_\_\_\_ provides access to all active application by maintaining a row of open application title boxes. 1
  - a) Title
  - b) Task bar
  - c) Start menu
  - d) None of the above
- 6) The Paint application is present on which subgroup 1
  - a) MS-Office
  - b) Entertainment
  - c) Accessories
  - d) None of the above
- 7) Which of the following is true: Window 95 1
  - a) Supports filenames of up to 255 characters, including space
  - b) Is easy to learn, use, manage and setup
  - c) Is single user, multitasking GUI operating system
  - d) All of the above
- 8) The appropriate application has to be selected from \_\_\_\_\_ in the start menu to launch the application. 1
  - a) Programs
  - b) Help
  - c) Documents
  - d) None of the above.
- 9) A \_\_\_\_\_ is a collection of buttons which represent various operations that can be carried out within an application 1
  - a) Buttons
  - b) Menu
  - c) Toolbar
  - d) None of the above.
- 10) The topmost bar in any application window is the \_\_\_\_\_ is displays the name of the document or application 1
  - 1) Menubar
  - b) Toolbar
  - c) Status bar
  - d) Title bar

Q-2

- a) i)  $(B2F)_{16} = (?)_8$  ii)  $(423)_{10} = (?)_{16}$   
iii)  $(3674)_8 = (?)_2$  iv)  $(22.25)_{10} = (?)_2$  4
- b) i)  $(24.6)_8 = (?)_{10}$  ii)  $(1101.000101)_2 = (?)_{10}$   
iii)  $(10110.0101)_2 = (?)_8$  iv)  $(56.08)_{16} = (?)_{10}$  4
- c) Express (-4) in 2's complement form. 1
- d) Write full form of ASCII and ISCII. 1

- Q-3 1) Point out the errors in the following program 2
- ```

Void main
{
    int sum; value; inct;
    int i;
    for (i ==0,i<=10,i++)
    cin<<value;
    sum+=value;
    int c1++
    cout>>"The average is">>sum/inct>>endl;

```
- 2) Give the output for the following program segment given below: 4
- i) for (int =10;i<6;i=i-2) cout<<i<<endl;
  - ii) for (i=-5;i<-8;i--) cout<<i+1 <<endl;
  - iii) for (int i=-3; sum=0; i<11; i++) sum ++  
cout<<sum;
  - iv) int i=100, j=9; cout<<i/j<<endl;
- 3) Write definition for a class employee that can hold information like employee no, name, desig, dept, basic salary and have associated operations for printing payslips, modifying as employee's details, printing an employee's work report. 2
- 4) Construct logical expressions to represent the following conditions 2
- a) Weight is greater than or equal to 115 but less than 125
  - b) x is even
  - c) donation is in the range 4000-5000 or guest is 1
  - d) ch is an uppercase letter.
- 5) What output will the following code fragment produce? 1.5
- ```

Int val, res, n=1000;
Cin >> val;
res = n + val > 1750 ? 400 : 200 ;
Cout << res;

```
- i) if the input is 2000
  - ii) if the input is 1000
  - iii) if the input is 500
- 6) Given the following for loop 2
- ```

Const int sz =25;
For (int i=0; sum=0, i<sz; i++)
    sum +=i;    cout<<sum;

```
- write equivalent while loop for the above code**
- 7) What is the different between 'a' and "a" in C++? 1

Q-4

- 1) What is standard library? 1  
 2) Why is C++ standard library needed? 1  
 3) What will be the output of the following statements: 2  
     i) `x = sqrt (9)` ii) `y = strlen ("INDIA")`  
     iii) `cout << strrev("COMPUTER")` vi) `ch = tolower ('A')`

- 4) What are the functions of these header files? 2  
     `lomanip.h`, `string.h`, `ctype.h`, `math.h`

- 5) Which of the following functions appends a string to another string? 1  
     `Strcpy ( )`, `strcmp ( )`, `strcat ( )`, `toupper ( )`

- 5) Read the following C++ code carefully and find out, which out of the given options (i) to (iv) are the expected correct output(s) of it. Also, write the maximum and minimum value that can be assigned to the variable Taker used in the code: 2

```
void main()
{
    int GuessMe[4]={100, 50, 200, 20};
    int Taker=random(2)+2;
    for(int Chance=0;Chance<Taker;Chance++)
        cout<<GuessMe[Chance]<<"#";
}
```

- (i) 100#**  
**(ii) 50#200#**  
**(iii) 100#50#200#**  
**(iv) 100#50#**

- 6) What will be the output of the following code fragment. 2

```
{
    clrscr();
    char *name="CompuTer";
    for(int i=0;i<strlen(name);i++)
    {
        if(islower(name[i]))
        {
            name[i]=toupper(name[i]);
        }
        else
            name[i]=name[i-1];
    }
    cout<<"\n\n\t\t"<<name;
    getch();
}
```

Q-5

- 1) Write a C++ program to generate divisors of an integer. 5  
 2) What will be the output of the following code fragment 1.5

```
Int year ;
Cin>> year;
If (year %100 == 0)
    If (year % 400 == 0)
```

```
Cout<<"LEAP";
```

```
Else
```

```
Cout<<"Not century year";
```

**If the input given is (i) 2000 (ii) 1900 (iii) 1971 ?**

- 3) Determine the hierarchy of operations and evaluate the following expression 2  
 $K = 3 / 2 * 4 + 3 / 8 + 3$
- 4) Write a C++ program that prints 1 2 4 8 16 32 64 128. 4
- 5) Correct the following code so that it is functional: 4  
Value =4;  
do ;  
{     total += value;  
  Cout << total;  
  While value <=8;
- 6) What are literal in C++ ? How many types of literals are allowed in C++? 3

Best of Luck