HMD

HALF YEARLY EXAMINATION - 2022

11 - Std

COMPUTER SCIENCE

Time : 3.00 hrs. Marks : 70

PART – A

Choose the Best Answers. **15 * 1 = 15**

1. When a system restarts which type of booting is used
   a. Cold booting b. Soft booting c. Hard booting d. Touch booting
2. How many characters can be handled in ASCII system?
   a. 64 b. 255 c. 256 d. 128
3. A Blu-Ray Disc can store up to ------ of data.
   a. 47GB b. 55GB c. 50GB d. 78GB
4. File management manages
   a. Files b. Folders c. Directory systems d. All the above
5. The shortcut key ------ is used to rename a file in Windows.
   a. F2 b. F4 c. F5 d. F6
6. Which of the following activity is not algorithmic in nature?
   a. Multiply two numbers b. Draw a Kolam
   c. Walk in the park d. swaping of two numbers
7. How many times the loop is iterated?
   int i=0;
   while (i !=5)
   i = i+1; a. 4 b. 5 c. 6 d. 0
8. A loop invariant need not be true ----
   a. at the start of the loop b. at the start of each iteration
   c. at the end of each iteration d. at the start of the algorithm
9. Assume a=5, b=6; What will be the result of a & b?
   a. 4 b. 5 c. 1 d. 0
10. The multiway branch statement is ----
    a. if b. if ... else c. switch d. for
11. Which is the return type of the function prototype of add(int,int);?
    a. float b. int c. chat d. double
12. Structure definition is terminated by
    a. : b. } c. ; d. ::
13. The most important advantage of inheritance is ----------
    a. Data hiding b. Code reusability
    c. Code modification d. Accessibility
14. A member function defined within the class behave like ----- function
    a. inline b. non inline c. outline d. data
15. Which of the following refers to a function having more than one distinct Meaning?
    a. Function overloading b. Member overloading
    c. Operator overloading d. Operations overloading

PART – B

Answer 6 questions only. Q.No.24 is compulsory. **6 * 2 = 12**

16. What are the components of a CPU?
17. Which source is used to erase the content of a EPROM?
18. Differentiate save and save as option.
19. Specify a function to find the minimum of two numbers.
20. What is meant by a Token?
21. Assume n=10; What will be the result of n++; and –n;?
22. What are the importances of void datatype?
23. Write down the importance of destructor?
24. List the operators that cannot be overloaded.

PART - C

Answer 6 questions only. Q.No.33 is compulsory. **6 * 3 = 18**

25. Differentiate Input and Output Devices.

26. Write the De Morgan's law.
27. List out the key features of Operating System.
28. What is abstraction?
29. What is the use of a header file?
30. Write a C++ program to print multiplication table of a given number.
31. What is called anonymous structure? Give an example.
32. What is Paradigm? Mention the different types of Paradigm.
33. Debug the following program.

```
% include (iostream)
class A( )
{
public;
int a1, a2 : a3;
}
void Main[ ]
{
A A1;
};
```

PART – D

Answer all the Questions. **5 * 5 = 25**

34. a. Discuss the various generations of Computers. ***(OR)***
    b. Explain the Derived gates with expression and truth table.
35. a. Explain the concept of a Distributed Operating System along with its advantages. ***(OR)***
    b. Write the procedure to create shortcut in Windows OS.
36. a. Exchange the contents: Given two glasses marked A and B. Glass A is full of apple drink and glass B is full of grape drink. For exchanging the contents of glasses A and B, represent the state by suitable variables, and write the specification of the algorithm. ***(OR)*** b. What are the types of Errors?
37. a. Write a C ++ program to find sum of the series. $S = 1 + x + x^2 + \ldots + x^n$ ***(OR)***
    b. Write the output of the following.

```
#include<iostream>
using namespace std;
class student
{
 int rno, marks;
 public:
 student(int r,int m)
 {    cout<<"Constructor "<<endl;
      rno=r;
      marks=m;
 }
 void printdet( )
 {
 marks=marks+30;
 cout<<"Name: Bharathi"<<endl;
 cout<<"Roll no : "<<rno<<"\n";
 cout<<"Marks : "<<marks<<endl;
 }
 };
 int main( )
 {
 student s(14,70);
 s.printdet( );
 cout<< "Back to Main";
 return 0;
 }
```

38. a. Write a C++ program to accept any integer number and reverse it. ***(OR)***
    b. Explain the different types of inheritance.