

KATHMANDU UNIVERSITY  
End Semester Examination [C]  
December, 2018

Marks scored:

Level : B.E./B.Sc./B.Tech.

Course : COMP 116

Year : I

Semester : II

Exam. Roll No. :

Time : 30 mins.

F.M. : 10

Registration No.:

Date DEC 31 2018

SECTION "A"

[20 Q. × 0.5 = 10 marks]

Tick (✓) the correct answer(s) or fill in the blanks with most appropriate word/phrase.

- In C++, setw manipulator is declared in..... header file.  
[a] <iostream>      [b] <fstream>      [c] <cstdio>      [d] <iomanip>
- .....feature of object oriented programming hides the internal details of how any object does its work  
[a] Encapsulation      [b] Abstraction      [c] Polymorphism      [d] Inheritance
- Which of the following is an example of Object Oriented Programming?  
[a] Smalltalk      [b] COBOL      [c] Pascal      [d] FORTRAN
- Linking of a function call to the code to be executed in response to the function invocation is called .....  
[a] Static Binding      [b] Message Passing  
[c] Dynamic Binding      [d] Polymorphism
- What is the output of the following program  

```
int main()
{
    if(0)
    {
        cout<<"Hi";
    }
    else
    {
        cout<<"Bye";
    }
    return 0;
}
```

  
[a] Bye      [b] Hi      [c] HiBye      [d] Compilation Error
- Which of the following is a correct single line comment?  
[a] /\* Comments \*/      [b] /\* Comment/ \*      [c] // Comment      [d] {Comment}
- Which of the following operator cannot be overloaded  
[a] /      [b] <      [c] %      [d] .\*

8. What is the output of the following program

```
#include<iostream.h>
void Execute(int &x, int y = 200)
{
    int TEMP = x + y;
    x+= TEMP;
    if(y!=200)
    cout<<TEMP<<x<<y;"--";
}
```

```
int main()
{
    int A=50, B=20;
    cout<<A<<B<<"--";
    Execute(A,B);
    cout<<A<<B<<"--";
    return 0;
}
```

[a] 5020--5020--

[b] 5020—70120200—5020

[c] 5020--701202012020--

[d] 5020--7050200--5020--

9. In the following,

```
class X{
int fun1 ();      };
class Y{
    friend int X :: fun1 ();    };
```

[a] Function fun1() is member of class Y and friend of class X.

[b] Function fun1() is member of class X and friend of class Y.

[c] Function fun1() is member of class X and friend of class X.

[d] Function fun1() is member of class Y and friend of class Y.

10. An expression A.B in C++ means .....

[a] A is member of object B

[b] B is member of Object A

[c] Product of A and B

[d] None

11. Which of the following concept of OOP allows compiler to insert arguments in a function call if it is not specified?

[a] Call by value

[b] Call by reference

[c] Default argument

[d] Call by pointer

12. Which of the following statement is correct?

[a] Base class constructor gets invoked in the order they are declared and then of derived class.

[b] Constructors for virtual base classes are invoked before any non-virtual base classes.

[c] Both a and b

[d] None

13. Which of the following is FALSE about references in C++
- [a] References cannot be NULL
  - [b] A reference must be initialized when declared
  - [c] Once a reference is created, it cannot be later made to reference another object; it cannot be reset.
  - [d] References cannot refer to constant value

14. What is the output of following C++ program

```
#include <iostream>
using namespace std;
int i;
class A
{
public:
    ~A()
    {
        i=10;
    }
};

int foo()
{
    i=3;
    A ob;
    return i;
}

int main()
{
    cout << foo() << endl;
    return 0;
}
```

- [a] 3                      [b] 0                      [c] 10                      [d] 13

15. When a base class is publicly inherited by the derived class, then .....
- [a] Private members of base class become private member of derived class.
  - [b] Public members of base class become public member of derived class.
  - [c] Protected members of base class become protected member of derived class.
  - [d] Public, protected members of base class become public, protected members of derived class

16. What will happen in this code?
- ```
int a = 100, b = 200;
int *p = &a, *q = &b;
p = q;
```

- [a] b is assigned to a                      [b] p now points to b  
 [c] a is assigned to b                      [d] q now points to a

17. How can we make a class abstract?  
[a] By making all member functions constant.  
[b] By declaring it abstract using the virtual keyword.  
[c] By declaring it abstract using the static keyword.  
[d] By making at least one member function as pure virtual function.
18. Template in C++,  
[a] Is way of achieving procedural programming  
[b] Is way of achieving generic programming  
[c] Is way of achieving object oriented programming  
[d] Uses the type of the data that is operated upon need not be specified as a parameter
19. Which keyword is used to handle an exception?  
[a] try                      [b] throw                      [c] catch                      [d] None
20. An Exception is a.....  
[a] Runtime Error                      [b] Compile-time Error  
[c] Logical Error                      [d] None