Registration No.:

Paper Code: B

COURSE CODE : CSE202

COURSE TITLE : OBJECT ORIENTED PROGRAMMING

Time Allowed: 01 hr ***Max.Marks: 40***

Read the following instructions carefully before attempting the question paper.

1. Match the Paper Code shaded on the OMR Sheet with the Paper code mentioned on the question paper and ensure that both are the same.

2. This question paper contains 40 questions of 1 mark each. 0.25 marks will be deducted for each wrong answer.

3. Do not write or mark anything on the question paper except your registration no. on the designated space.

4. Submit the question paper and the rough sheet(s) along with the OMR sheet to the invigilator before leaving the examination hall.

Q1. If a programmer defines a class and defines a default value parameterized constructor inside it. He has not defined any default constructor. And then he try to create the object without passing arguments, which among the following will be correct?

a) It will not create the object (as parameterized constructor is used)
b) It will create the object (as the default arguments are passed)
c) It will not create the object (as the default constructor is not defined)
d) It will create the object (as at least some constructor is defined)

Q2. Which among the following is true for copy constructor?

a) The argument object is passed by reference
b) It can be defined with zero arguments
c) Used when an object is passed by value to a function
d) Used when a function returns an object

Q3. Which stream class is used to both read and write on files ?

a. ofstream b. ifstream c. fstream d. iostream

Q4. Which object will be created first?

```
class student
{
   int marks;
};
student s1, s2, s3;
```

a) s1 then s2 then s3
b) s3 then s2 then s1
c) s2 then s3 then s1
d) All are created at same time

Q5. Which among the following is correct for the class defined below?

```
class student
{
        int marks;
        public: student(){}
        student(int x)
        {
                marks=x;
        }
};
main()
{
student s1(100);
student s2();
student s3=100;
return 0;
```

a) Object s3, syntax error
b) Only object s1 and s2 will be created
c) Program runs and all objects are created
d) Program will give compile time error

Q6. For constructor overloading, each constructor must differ in _____ and _____

a) Number of arguments and type of arguments
b) Number of arguments and return type
c) Return type and type of arguments
d) Return type and definition

Q7. Predict 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) 0 (b) 3 (c) 10 (d) None of the above

Q8. *Predict the output of following C++ program*

```
#include <iostream>
using namespace std;
class A
{
  int id;
  static int count;
public:
  A() {
    count++;
    id = count;
    cout << "constructor for id " << id << endl;
  }
  ~A() {
    cout << "destructor for id " << id << endl;
  }
};

int A::count = 0;

int main() {
  A a[3];
  return 0;
}
```

(a) constructor for id 1
constructor for id 2
constructor for id 3
destructor for id 3
destructor for id 2
destructor for id 1

(b) constructor for id 1
constructor for id 2
constructor for id 3
destructor for id 1
destructor for id 2
destructor for id 3

(c) Compiler Dependent.

(d) constructor for id 1
destructor for id 1

Q9. Which of the following statements are not true about destructor?
1. It is invoked when object goes out of the scope
2. Like constructor, it can also have parameters
3. It can be virtual
4. It can be declared in private section
5. It bears same name as that of the class and precedes Lambda sign.

a. Only 2, 3, 5 b. Only 2, 3, 4 c. Only 2, 4, 5 d. Only 3, 4, 5

Q10. Assume class TEST. Which of the following statements is/are responsible to invoke copy constructor?
a. TEST T2(T1) b. TEST T4 = T1 c. T2 = T1 d. both a and b

Q11. What is the index number of the last element of an array with 9 elements?
a) 9 b) 8 c) 0 d) 10

Q12. Which of the following gives the memory address of the first element in array?
Array is declared as: int array[10];
a) array[0]; b) array[1]; c) array(2); d) array;

Q13. What is the output of this program?

```
#include <iostream>
using namespace std;
int main()
{
int a = 5, c;
    void *p = &a;
    double b = 3.14;
    p = &b;
    c = a + b;
cout<< c << '\n' << p;
    return 0;
}
```

a) 8, memory address
b) 8.14
c) memory address
d) memory address, memory address

Q14. Considering the following declarations:
void *p;
float abc;

Which of the following C++ statements will correctly print the value of variable abc using pointer p
a) cout<<*p b) cout<<*(float)p c) cout<<*(float*)p d) error

Q15. Which of the following cannot be passed to a function ?
(a) Array (b) Reference variable (c) Object (d) File

Q16. What is the output of this program?

```
#include <iostream>
#include <cstring>
using namespace std;
int main ()
{
   char str1[12] = "Hello";
   char str2[12] = "World";
   char str3[12];
   int  len ;
   strcpy( str3, str1);
   strcat( str1, str2);
   len = strlen(str1);
   cout << len << endl;
   return 0;
}
```

a) 5 b) 55 c) 11 d) 10

Q17. Which among the following is called first, automatically, whenever an object is created?
a) Class b) Constructor c) New d) Trigger

Q18. A constructor that accepts _____ parameters is called the default constructor.
a. one b. two c. no d. three

Q19. Which among the following is correct?
a) class student{ public: int student(){} };
b) class student{ public: void student (){} };
c) class student{ public: student{}{} };
d) class student{ public: student(){} };

Q20. In which access should a constructor be defined, so that object of the class can be created in any function?
a) Public b) Protected c) Private d) Any access specifier will work

Q21. The effect of endl is same as
a) \t b) \n c) \a d) \b

Q22. Size of the union is determined by size of the
a) First member in the union b) Last member in the union
c) Member taking largest amount of memory d) Sum of the sizes of all members

Q23. >> is called as
a) Extraction operator b) Insertion operator c) Object d) Header file

Q24. A reference is declared using the _____ symbol.
(a)&& (b) * (c) & (d) **

Q25. Find output:

```
#include<iostream>
#include<conio.h>
using namespace std;
int fun(int &anotherref);
int main()
{
  int a=20,&refval=a;
 cout<<refval++;
 cout<<fun(refval);
  getch();
}
int fun(int &anotherref)
{
   return anotherref++;
}
```

a) Prints 2021 on the screen. b) Prints 2120 on the screen.
c) Results in a compiler error. d) Prints 2020 on the screen.

Q26. Which of the following declaration statements declares maximum number of pointers?
a) int *p,q,r; b) int* p,q,r; c) int p,*q,**r; d) int ******p;

Q27. The syntax for declaring generic pointer is
(a)template *ptr1; (b)generic *ptr1; (c)void *ptr3; (d)type *ptr4;

Q28. Suppose you declare int count = 5 and int *pCount = &count; which of the following is true?
(a)*count is the address of count.
(b) &count is 5
(c) pCount is 5
(d)pCount contains the address of count.

Q29. Which of the following is illegal?
a) int *ip;
b) string s, *sp = 0;
c) int i; double *dp = &i;
d) int *pi = 0;

Q30. Which is false in case of pointers arithmetic
a) Pointers can be added
b) Pointers can be subtracted
c) Pointers can be incremented
d) Pointers can be decremented

Q31. Object is
a) instance of int b) instance of float c) instance of class d) instance of char

Q32. The standard output stream in C++ represented by
a) cout b) cin c) Header file d) Class

Q33. Out of following which is not the property of static data member of a class
a) Only one copy of static member is created for the entire class
b) Static member is shared by all the objects of class
c) Only one copy of static member is not created for the entire class and not shared by all the objects of class
d) Both a and b

Q34. << is called as
a) Extraction operator b) Insertion operator c) Object d) Header file

Q35. Friend function invoked or called like
a) Normal function b) Member function of class c) Object d) Operator

Q36. Function overloading is an example of
a) Inheritance b) Polymorphism c) Data hiding d) Encapsulation

Q37. cin object in C++ corresponds to the
a) Standard input stream b) Standard output stream c) Header file d) Object

Q38. For the following structure how much space is created? struct school { int a; char b[5]; }sch; where int take 2 bytes and char take 1 byte
a) 3 bytes b) 5 bytes c) 7 bytes d) 8 bytes

Q39. setfill is a
a) Manipulator b) Header file c) Object d) Class

Q40. For the following union how much space is created? union college { int a; char b; }col; where int take 2 bytes and char take 1 byte
a) 2 bytes b) 3 bytes c) 4 bytes d) 5 bytes

-- End of Question Paper --