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PAPER CODE	U112-202A (BE)
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**DEC 2022(INSEM+ ENDSEM) EXAM**  
**F.Y. B. TECH. (SEMESTER - II)**  
**COURSE NAME: FUNDAMENTALS OF PROGRAMMING**  
**COURSE CODE: CS10202A**  
**(PATTERN 2020)**

Time: [2Hr]

[Max.Marks: 60]

**(\*) Instructions to caates:**

- 1) **Figures to the right indicate full marks.**
- 2) **Use of scientific calculator is allowed**
- 3) **Use suitable data where ever required**

Q.1

Solve the following

i) The difference between memory and storage is that the memory is ..... and storage is ..... [2]

- a) permanent, permanent    b) temporary, temporary  
 c) Slow, fast    d) temporary, permanent

ii) Which of the translator program converts assembly language program into equivalent machine language program? And which of the programming language is said to be machine independent language? [2]

- A) Compiler, High Level Language,  
 B) Compiler, Machine Language  
 C) Assembler, High Level Language,  
 D) Assembler, Machine Language

iii) What are mandatory parts in function declaration? [2]

- A) return type,function name  
 B) return type,function name,parameters  
 C) both a and b  
 D) void

iv) Which operator is used to access static members of class and named as \_\_\_\_\_ [2]

- A) relational operator  
 B) scope resolution operator  
 C) conditional operator  
 D) static access operator

v) What should be the output of below program? [2]

```
int main()
{
    int a = 1;
    switch(a)
    {
        case 1: cout<<"First ";
        case 2: cout<<"Second ";
        case 3: cout<<"Third ";
        default: cout<<"Default";
    }
}
```

```

    return 0;
}
A) First
B) Second
C) First Second Third
D) Default

```

vi) What should be output of given program?

[2]

```

int main()
{
    int x = 5;
    if(x++ == 5)
        cout<<"Five"<<endl;
    else
        if(++x == 6)
            cout<<"Six"<<endl;
    return 0;
}

```

- A) Five
- B) FiveSix
- C) 7
- D) 8

vii) What should be output of given program?

[2]

```

#include<iostream>
#include<string.h>
using namespace std;
int main()
{
    char one[]="one";
    char two[]="two";

    if(one==two){
        cout<<"Equal";
    }
    if(strcmp(one, two)==0){
        cout<<"Equal";
    }
    else
    {
        cout<<"NotEqual";
    }
    return 0;
}

```

- A) Equal
- B) NotEqual
- C) EqualEqual
- D) EqualNotequal

viii) What should be output of given program?

[2]

```

int main()
{
    int n;
    for(n=5;n>0;n--)
    {
        cout<<n;
        if(n==3)
            break;
    }
}

```

```
return 0;
}
```

- A) 543
- B) 54
- C) 321
- D) 5

ix) What is the output of this program?

[2]

```
#include <iostream>
using namespace std;
int g = 100;
int main()
{ int a;
  { int b;
    b = 20;
    a = 35;
    g = 65;
    cout << b << a << g;
  }
  a = 50;
  cout << a << g;
  return 0; }
```

- A) 2035655065
- B) 2035655035
- C) 2035635065
- D) none of the mentioned

x) What is the output of this program?

[2]

```
#include <iostream>
using namespace std;
void addprint()
{ static int s = 1;
  s++;
  cout << s;
}
int main()
{
  addprint();
  addprint();
  addprint();
  return 0;
}
```

- A) 111
- B) 123
- C) 235
- D) 234

xi) What are mandatory parts in function declaration?and which of the following is used to terminate the function declaration?

[2]

- A) return type,function name,parameters , :
- B) return type,function name, ::
- C) both a and b, :
- D) return type,function name, ;

xii) What is the output of this program?

[2]

```
#include <iostream>
using namespace std;
void fun(int x, int y)
{ x = 20;
  y = 10; }
```

```
int main()
{ int x = 10;
  fun(x, x);
  cout << x;
  return 0;
}
```

- A) 10,20
- B) 10
- C) 20
- D) 20,20

xiii) The if else statement can be replaced by \_\_\_\_\_ operator having \_\_\_\_\_ symbol. [2]

- A) Bitwise operator, \$
- B) Conditional operator, ?:
- C) Addition operator, &
- D) Conditional operator, &&

xiv) What is dynamic initialization of variables in C++? [2]

- A) In C ++ you have to declare variable anywhere
- B) C++ allows initialization of the variable at runtime.
- C) C++ allows initialization of the variable at compile time
- D) None of above

xv) Consider the following statements [2]

```
char *ptr;
ptr = "hello";
cout << *ptr;
```

What will be printed?

- A) h
- B) o
- C) hello
- D) he

2

**Solve any three out of four**

- A) Write difference between Procedure oriented programming Vs Object oriented programming. [5]
- B) Describe use of constructor in OOP. State its types and explain any one with suitable example. [5]
- C) Describe significance of various access specifiers in CPP with suitable example. [5]
- D) Write a C++ program to create a class for student. Use getdata member function to input student details such as roll number, name and marks and display function to print details of a student [5]

Q.3

**Solve any three out of four**

- A) Explain function overloading with suitable example. [5]
- B) Explain multiple inheritance with suitable example. [5]
- C) With suitable program explain use of scope resolution operator. [5]
- D) What is need of virtual function? and when to use pure virtual function. [5]