

GULF SAHODAYA (SAUDI CHAPTER) EXAMINATION-2013

COMPUTER SCIENCE

CLASS: XI
 Max.Marks:70
 Time: 3 Hours
 Total Pages:4

INSTRUCTIONS:

1. All questions are compulsory.
2. Marks are indicated against each question.
3. Programming must be done in C++.

QUESTIONS

- | | |
|--|---|
| 1. Expand EPIC. | 1 |
| 2. Name two commonly used mobile operating systems. | 1 |
| 3. Explain Booting. | 2 |
| 4. Define: i)ISCII
ii)Time sharing Operating system | 2 |
| 5. Convert: i)(FACE) ₁₆ =(?) ₈ =(?) ₂ | 2 |
| 6. Write short notes on Blue-ray disk. | 2 |
| 7. Explain the terms: i) Logical errors
ii) Infinite looping | 2 |
| 8. What do you mean by program maintenance? Explain any one type of maintenance. | 2 |
| 9) What are the stages of program development? | 2 |
| 10) Briefly explain on comments in C++. | 2 |
| 11) Mention the characteristics of a good program. | 2 |
| 12)Find the output of the following program:
a)#include<iostream.h>
struct point
{
int x,y,z;};
void stepin(point &p, int step=1)
{
p.x+=step;
p.y-=step;
p.z+=step;
} | 3 |

(1)

```

void stepout(point &p,int step=1)
{
    p.x-=step;
    p.y+=step;
    p.z-=step;
}
void main()
{
    point p1={15,25,5},p2={10,30,20};
    stepin(p1);
    stepout(p2,4);
    cout<<p1.x<<" "<<p1.y<<" "<<p1.z<<endl;
    cout<<p2.x<<" "<<p2.y<<" "<<p2.z<<endl;
    stepin(p2,12);
    cout<<p2.x<<" "<<p2.y<<" "<<p2.z<<endl;
}

```

```

b)#include<iostream.h>
#include<ctype.h>
void changeit(char text[],char c)

```

2

```

{
    for(int k=0;text[k]!='\0';k++)
    {
        if(text[k]>='F' && text[k]<='L')
            text[k]=tolower(text[k]);
        else
            if(text[k]=='E' || text[k]=='e')
                text[k]=c;
            else
                if(k%2==0)
                    text[k]=toupper(text[k]);
            else
                text[k]=text[k-1];
    }
}

```

```

void main()
{
    char Oldtext[]="pOwERALone";
    changeit(Oldtext,'%');
    cout<<"New Text:"<<Oldtext<<endl;
}

```

c)The following code is from a game, which generates a set of random numbers. Yallav is playing this game, help him to identify the correct option(s) out of the four choices given below as the possible set of such numbers generated from the program code so that he wins the game. Justify your answer. 2

```

#include<iostream.h>
#include<stdlib.h>

```

2

```

const int low=15;
void main()
{
    randomize();
    int point=5,number;
    for(int i=1;i<=4;i++)
    {
        number=low+random(point);
        cout<<number<<" ";
        point--;
    }
}

```

i)19:16:15:18:
 ii)14:18:15:16:
 iii)19:16:14:18:
 iv)19:16:15:16:

```

d)#include<iostream.h>
void main()
{
    int x=100,y=200;
    for(int i=1;i<=2;i++)
    {
        cout<<x++<<" "<<y-5<<endl;
        cout<<--y<<" "<<x+5<<endl;
    }
}

```

2

13) What is the difference between automatic type conversion and type casting? Also give suitable C++ code to illustrate both.

2

14) What is the difference between arrays and structures?

2

15) What do you mean by cascading of operators?

2

16) What are nested loops? Explain with example.

2

17) What do you mean by call by reference? Explain with example.

2

18) Explain any two type modifiers with example.

2

19) What is the purpose of keywords:

i)const ii)typedef

4

20) Predict the output:

2

```

int ch=2;
cout<<"ch==8 is"<<ch==8<<"\n";
cout<<"ch=8 is"<<ch=8<<"\n";

```

(3)

21) Identify and correct the error in the following code:

```
struct first
{
int a;
}s1;
struct second{
int a;
}s2;
s1=s2;
```

22) Name the header files for the following functions:

2

i) isdigit() ii) itoa() iii) strcpy() iv) pow

23) Write a program to generate the Fibonacci series upto n terms.

3

Fibonacci series-0,1,1,2,3.....n

24) Write a program to print the largest even and largest odd number from a list of numbers entered through keyboard. The list terminates as soon as user enters zero.

4

25) Write a user defined function to find the factorial of a number, entered as user input.

4

26) Write a program that reads two strings and copies smaller string into larger string.

4

27) Write a program to reverse all strings stored in a two dimensional array.

4

4