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|  | INDIAN SCHOOL AL WADI AL KABIR |

Assessment - II (2017-18)

Class: XI Sub: Computer Science M.M: 70

Date: 14/12/17 Set - II Time: 3 Hrs.

 *General Instructions: -*

*1.All Questions are compulsory. Please write the question number of the question you attempt.*

*2.Attend all sub-questions together.*

**QI**

Answer the following:

a)Write the full form of ASCII. (1)

b) What are the functions of operating System? (2)

c) Convert the following numbers (2)

 (i) (8BAF)16 to decimal

 (ii)(101010111010)2 to hexadecimal

**QII**

 a)What is a character constant in C++? (1)

 b)What is meant by token? Name the tokens available in C++. (2)

 c) Arrange the following data types from smallest to largest: float, char, double, long double, long, short, (1)

 d) Find out the errors, if any, & rewrite the following C++ statements: (2)

 (i) cout<<"a=" a; (iii) break=x\*y;

 (ii) m=5, n=12; 0=15 (vi) cout>>\n"abc";

e) What will be the value of following statement produce, if j = 5 initially? (2)

 (i) (5\* ++j)%6

 (ii) (5\* j++)%6?

f) Write a C++ program to input a number X.If the number is even, print its square otherwise print X itself. (2)

**QIII**

1. Correct the following code fragment (1)

if (x=1)

 k=100;

 else

 k=10;

 b) Guess the output, assume all header files are included (1)

 int x=65;

 cout<< ++x;

 cout<<(char)(x-1);

 c) Write a menu driven program to perform the following tasks as per user’s choice: (4)

 Choice Task

 A To check entered no N is Armstrong or not

 B To check the entered number N is palindrome or not.

 C Exit

d) Write a menu driven program to perform the following tasks as per user’s choice: (4)

 Choice Task

 A To check whether entered no N is prime or not

 B Display the format

 1

0 1

1 0 1

0 1 0 1

1 0 1 0 1

 C Exit

**QIV**

a) What are actual and formal parameters of a function? (2)

b) Differentiate between call by value and call by reference method of calling function

with the help of an example (2)

c) Write the names of the header files, for the following functions

 i)setw ii)gets iii)random iv)strupr (2)

d) Write a program to replace every space in a string STR with (@) sign.Dispaly the string after the changes.(2)

e )Identify the errors in the function prototypes given below: (2)

 (i) float average (a,b);

 (ii) float mult(int x, y);

 (iii) void calc(int a[], s=10);

 (iv) void arithop (int a[], int b[], int s=10, int j);

f) Guess the output assume all the header file are included (2)

i)

 void main()

 {

 clrscr();

 char text[]="GOOD DAY";

 int i=20,j=14;

 cout<<text[i%j]<<'\t'<<text[i%j-3];

 getch();

 }

ii)

 void guess(int &x,int &y) (2)

 {

 x+=12;

 y\*=2;

 cout<<"x="<<x<<"y="<<y<<endl;

 }

 void main()

 {

 clrscr();

 int a,b;

 a=5;

 b=7;

 guess(a,b);

 cout<<"a="<<a<<"b="<<b;

 getch();

 }

iii) (3)

 int main()

 {

 randomize();

 int Marks[ ] = { 99, 92, 94, 96, 93, 95 }, MyMarks;

 MyMarks = Marks[1 + random(2)];

 cout << MyMarks << endl;

 }

Select the correct option and write highest as well as lowest value

 (i) 99 (ii) 94

 (iii) 96 (iv) None of the above

iv) (3)

 int p=5;

 void guess(int &x,int s)

 {

 s+=5;

 x\*=2;

 if(s>=20)

 cout<<(s+p)<<":"<<x<<"\n";

 cout<<p<<(s+2)<<x<<endl;

 }

 void main( )

 {

 clrscr( );

 int p=10,q=25;

 guess(::p,q);

 cout<<::p<<":"<<p<<":"<<q<<"\n";

 guess(p,q);

 cout<<::p<<":"<<p<<q<<"\n";

 getch();

 }

v)

 #include<iostream.h> (3)

 int &max(int &x, int &y)

 {

 if(x>y)

 return(x);

 else

 return(y);

 }

 void main( )

 { int A=10,B=13;

 max(A,B)=-3;

 cout<<"A="<<A<<"B="<<B<<endl;

 max(B,A)=7;

 cout<<"A="<<A++<<"B="<<B--<<endl;

 max(A,B)=3;

 cout<<"A="<<A<<"B="<<B<<endl;

 }

g)Write user defined function called swap( ) for swapping of two values X and Y passed as parameters . (2)

**QV**

a) What is an array? How is it different from normal variables?? (2)

b)Write a statement that defines a one-dimensional array called amount of type double that holds two elements (1)

c) Declare following arrays: (2)

 (i) figures of 30 char

 (ii) check of 100 short

 (iii) balance of 26 float

 (iv) budget of 58 double

 d) Guess the output assume all header files are included (3)

 char text[]=”pOwERALone”;

 for(int k=0;text[k]!='\0';k++)

{

 if(text[k]>='F'&&text[k]<='P')

 text[k]+=32;

 else if(text[k]=='E'||text[k]=='e')

 text[k]='%';

 else if(k%2==0)

 text[k]=text[k]+1;

 else

 text[k]=text[k-1];

}

 cout<<"New Text:"<<text<<endl;

e) Write a menu driven program to perform the following task as per user’s choice: (4)

 Choice Task

1. Read N number of elements in aa array AR[ ] to search specific element X in a 1-D

 array. Display appropriate message if found.

1. Read N number of elements in an array A[ ] and sort them in descending order.Display
2. the sorted list
3. Exit

f) Write a program to transpose and print a matrix M of size P rows and Q columns. (4)

g) Write a program to find the sum of both first and last row elements separately of a matrix MAT of M rows

 and N columns (4)