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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 - III 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)Define term (i)Time Sharing (ii) Throughput (2)

b) How are compilers different from interpreters? (2)

c) Convert the following numbers (1)

 (7FACE)16 to decimal

**QII**

 a) What is an identifier? What are the identifier forming rules of C++? (2)

 b) Which escape sequences represent the newline character & null character? (1)

 c) Which character is automatically added to strings in C++? (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 result of X ,in following expression, if (2)

(i) ans = 700, val = 300?

(ii) ans = 800, val = 700?

 int X=ans – val <500 ? 150 : 50;

f) Write a C++ program to input principle amount and time. If time is more than 10 years, calculate the simple interest with rate 8%. Otherwise calculate it with rate 12% per annum. (2)

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**QIII**

a)Which elements/parts are needed to control a loop? (1)

 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 display sum of series

 Y=2+ p2/4! - p3/5! + p4/6! - …….pn/n+2!

B To check the entered number 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 find factorial of given no N

B Display the format

 12345

1234

123

12

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 functions

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 count number of words present in a string STR[ ] ,entered by the user. (2)

e) Construct function prototype for descriptions given below: (2)

(i) Rarb( ) take no argument and has no return value.

(ii) mains( ) takes a float argument and returns an int.

(iii) san( ) takes two double arguments and returns a double.

(iv) sum ( ) takes an int array and an int value and returns a long result.

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 Guess, High = 4;

 Guess = random(High) + 50;

 for (int C = Guess; C <= 55; C++)

 cout << C << "#";

}

Select the correct alternatives ,write highest & lowest values

(i) 50 # 51 # 52 # 53 # 54 # 55 #

(ii) 52 # 53 # 54 # 55 #

(iii) 53 # 54 #

(iv) 51 # 52 # 53 # 54 # 55

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 A,B. Using call by reference method(2)

**QV**

a) What is the statement specifically called that invokes a function? (1)

b) What is function prototype and when/why it is used ? (2)

c) What is the output of the following program? (2)

void main()

{clrscr();

int a[ ]={3,6,-1,0,4};

cout<<a<<"\n";

cout<<2[a]<<endl;

cout<<a[3]++<<endl;

cout<<++a[3]<<endl;

cout<<a[4]+1<<endl;

cout<<a[4];

getch( );

}

d)Guess the output of the snippet (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 to an array AR[ ] and search specific element X in a 1-D

 array

1. Read N number of elements in an A [ ] and sort them in ascending order.
2. Exit

f)Write a program to transpose a matrix M[ ][ ] of size X rows and Y columns. (4)

g)Write a program to add row wise and column wise elements separately of a two dimensional array A[10][10].

 Display the sums on screen. (4)