

247

INTERNATIONAL INDIAN SCHOOL, DAMMAM
MODEL EXAMINATION 2013-2014

SUB: COMPUTER SCIENCE
CLASS: XI

MAX. MARKS:
TIME: 3 HRS

SET B

Note: All Questions are compulsory.

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- | | |
|--|---|
| 1. Name the computers based on their performance. | 1 |
| 2. Differentiate between primary memory and secondary memory. | 2 |
| 3. What is meant by time sharing operating system? | 1 |
| 4. What is the significance of recycle bin? | 1 |
| 5. Define the following: | 2 |
| i) Dynamic RAM | |
| ii) Parallel Port | |
| 6. Convert the following: | 2 |
| i) $(2C9)_{16} = (?)_{10}$ | |
| ii) $(3674)_8 = (?)_2$ | |
| 7. Expand CISC. | 1 |
| 8. What are the different types of error that occur during programming? Explain any two. | 2 |
| 9. What are the different stylistic guidelines in program development? | 2 |
| 10. What are the different methods developed for program verification? | 2 |
| 11. Define: (1) Pretty printing
(2) Object code. | 2 |
| 12. Mention the different steps you would follow while writing a program. | 2 |
| 13. What do you mean by testing and debugging? | 2 |
| 14. What are the rules to be followed while naming an identifier? | 2 |
| 15. What are the advantages and disadvantages of floating point numbers over integers? | 2 |
| 16. Write the names of the header files to which the following functions belong:
(i) write() (ii) strrev() | 1 |
| 17. Write C++ expression for :
Result = $2 \cdot y^2 + 4^y$ | 1 |
| 18. How many times will the following loop execute?
<pre>int sum=0, i=0; while(i<=5) { sum+=i; i++; }</pre> | 1 |

19. Convert the following conditional statement to if-else.
 int val, res, n=1000;
 cin>>val;
 res=(n+val)>1750?400:200;
 cout<<res;
20. What is the difference between islower() and tolower() functions? Explain with example. 2
21. Rewrite the following program after removing all the syntax error(s), if any. Underline each correction. 2
- ```
#include <iostream.h>
void main()
{
 int X[3] = { 60,50,30,40}, Y, Count = 4;
 cin >> Y ;
 for (I = Count - 1 ; I >= 0; I - -)
 switch(I)
 {case 0 :
 case 2 ; cout<<Y * X [I] << endl; break;
 case 1 :
 case 3 : cout >> Y + X [I] ; } }
```
22. Find the output of the following:

i) #include<iostream.h> 2

```
void main()
{
 int i, j, a=10 b=8;
 for(i=0;i<=a;i++);
 cout<<i<<" ";
 for(j=0;j<=b;j++);
 cout<<j<<endl;
 b=a;
 --a;
 b--;
 cout<<a<<" "<<++b;
}
```

ii) #include<iostream.h> 2

```
main()
{
 int a[5]= {15,20,25,30,35};
 int i, j,k=1,m;
 i = a[1] ++;
 j= ++a[2];
 m= a[k+1];
 cout<<i<<j<<k<<m; }
```

23. Differentiate between local variable and global variable with example.

24. Find the output of the following:

```
i) #include<iostream.h>
 int max(int &x, int &y, int z)
 {
 if(x>y && y>z)
 { y++;
 z++;
 return x;
 }
 else
 {
 if(y>x)
 return y;
 else
 return z;
 }
 }
 void main()
 {
 int a=20, b=15,c=10;
 a= max(a,b,c);
 cout<<a<<b<<c;
 b= max(a,b,c);
 cout<<+a<<+b<<+c<<endl;
 }
```

3

```
ii) #include<iostream.h>
 #include<string.h>
 #include<ctype.h>
 void main()
 {
 char NAME[]="a pRoFiLE";
 for(int x=0;x<strlen(NAME);x++)
 {
 if(islower(NAME[x]))
 NAME[x]=toupper(NAME[x]);
 else
 if(isupper(NAME[x]))
 if(x%2!=0)
 NAME[x]=tolower(NAME[x-1]);
 else
 NAME[x]--;
 }
 cout<<NAME<<endl;
 }
```

25. Rewrite the following program after removing the syntax error(s) if any. Underline each correction.

```
#include<iostream.h>
void main()
{
 One=10,Two=20;
 void Callme(int A=10, int B);
 Callme(One;Two);
 Callme(Two);
}
void Callme(int Arg1, Arg2)
{
 Arg1=Arg1+Arg2;
 cout<<Arg1<<Arg2;
}
```

26. Write a C++ program to find the sum of the series 3  
 $1+1!+2!+3!+\dots$
27. Write a C++ program to print every integer between 1 and n divisible by m. Also report 4  
 whether the number that is divisible by m is even or odd.
28. Write a C++ program to divide all those elements of a one dimensional array by 3, which 4  
 are divisible by 3 and multiply other elements by 7.  
 Eg. If the array elements are
- |    |    |    |    |    |
|----|----|----|----|----|
| 21 | 11 | 33 | 10 | 18 |
|----|----|----|----|----|
- The output should be
- |   |    |    |    |   |
|---|----|----|----|---|
| 7 | 77 | 11 | 42 | 6 |
|---|----|----|----|---|
29. Write a C++ program to find the sum of both diagonal elements of a square matrix. 4
30. Write a C++ program to count the number of occurrences of a given character in a string. 3
31. Write a function to swap two numbers to swap two numbers using call by value. Write the 4  
 main to invoke this function.

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