

QUESTION BANK

SUB: COMPUTER SCIENCE(083)

CHAPTER 6 Pointers

2 MARKS QUESTION

1. Rewrite the following codes after removing errors, if any, in the following snippet.

Explain each error.

```
#include<iostream.h> void
main( )
{ int x[5], *y, z[5] for
(i = 0; i < 5; i ++)
{x[i] = i;
z[i] = i + 3;
y = z; x =
y;}
```

2. Rewrite the following program after removing the syntactical errors (if any). Underline each correction.

```
#include<iostream.h> void main()
{char arr[] = {12, 23, 34, 45};
int ptr = arr; int val = *ptr; cout <<
*val << endl; val = *ptr++; cout <<
val << endl; val = *ptr : cout << val
>> endl;
val = *++ptr; cout << val << endl;}
```

3. Identify the errors if any. Also give the reason for errors.

```
#include<iostream.h> void main()
{ const int i =20;
const int * ptr=&i;
(*ptr)++; int j=15;
ptr =&j;}
```

4. Identify the errors if any. Also give the reason for errors.

```
#include<iostream.h> void main()
{ const int i =20; const
int * const ptr=&i;
(*ptr)++;
int j=15; ptr
=&j;}
```

5. Identify errors on the following code segment

```
float c[ ] ={ 1.2,2.2,3.2,56.2};
float *k,*g; k=c; g=k+4;
k=k*2; g=g/2;
cout<<"*k="<<*k<<"*g="<<
*g;
```

6. Identify the errors if any. Also give the reason for errors.

```
#include<iostream.h> void main()
{ const int i =20;
const int * ptr=&i;
(*ptr)++; int j=15;
ptr =&j;}
```

7. Identify the errors if any. Also give the reason for errors.

```
#include<iostream.h> void main()
{ const int i =20; const
int * const ptr=&i;
(*ptr)++; int j=15; ptr
=&j;}
```

8. Identify errors on the following code segment

```
float c[ ] ={ 1.2,2.2,3.2,56.2};
float *k,*g; k=c; g=k+4;
k=k*2; g=g/2;
cout<<"*k="<<*k<<"*g="<<*g;
```

3 Marks Questions

1. # Predict the output of the following code:

```
# include<iostream.h>
#include<conio.h>
void main()
{int arr[] = {12, 23, 34, 45}; int
*ptr = arr; int val = *ptr; cout <<
val << endl; val = *ptr++; cout <<
val << endl; val = *ptr; cout <<
val << endl;
val = *++ptr; cout << val << endl;
}
```

2. Find the output of the following code.

```
#include<iostream.h>
#include<conio.h> void
main()
{int arr[] = {12, 23, 34, 45}; int
*ptr = arr; int val = *ptr; cout <<
val << endl; val = *ptr++; cout <<
val << endl; val = *ptr; cout <<
val << endl; val = *++ptr; cout <<
val << endl; val = ++*ptr; cout <<
val << endl;
}
```

```

3 . #include<iostream.h>
#include<conio.h> void
main()
{int arr[] = {12, 23, 34, 45}; int
*ptr = arr; int val = *ptr; cout <<
val << endl; val = (*ptr)++; cout <<
val << endl; val = *ptr; cout << val
<< endl;
val = *++ptr; cout << val << endl;
}

```

```

4. #include<iostream.h>
#include<conio.h> void main()
{int arr[] = {2, 33, 44, 55}; int *ptr
= arr; int val = *ptr; cout << val
<< endl; val = *++ptr ; cout << val
<< endl; val = *ptr; cout << val <<
endl; val = * ptr++; cout << val <<
endl;
}

```

5. Write the output of the following program:

```

#include<iostream.h> #include<conio.h>
void main( )
{ clrscr( ); int
a =32; int
*ptr = &a;
char ch = 'A'; char *cho=&ch; cho+=a; // it
is simply adding the addresses.
*ptr + = ch; cout<< a << ""
<<ch<<endl;
}

```

6. Write the output of the following program:

```

#include<iostream.h>
#include<conio.h> void
main( )
{clrscr( ); int
a =32; int
*ptr = &a;
char ch = 'A';
char
*cho=&ch;
*cho+=a; // it is adding the values. cout<<
a << "" <<ch<<endl;
}

```

7. Write the output of the following program:

```
#include<iostream.h>
#include<conio.h> void
main( )
{clrscr( ); int a =32; int *ptr
= &a; char ch = 'A'; char
*cho=&ch; *cho+=a; *ptr
+= ch; cout<< a << ""
<<ch<<endl;}
```

8. Write the output of the following program:

```
#include<iostream.h>
#include<conio.h> int
a =3;
void demo(int &x, int y, int *z)
{a+= x;
y*=a; *z
= a+y;
cout<< a << "" << x << "" << y << "" << z <<endl; } void
main( )
{clrscr( ); int a = 2, b =5; demo(::a,a,
&b); cout<< ::a<< "" <<a<< "" <<
b<<endl; }
```

9. Find the output of the following :

```
#include<iostream.h>
#include<conio.h>
#include<stdio.h>
#include<string.h>
#include<ctype.h> void main( )
{char *Name= "InTRAnET";
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]);
else
Name[x]=Name[x-1]; }
puts(Name);
}
```

10. Give the output of the following program: void main()

```
{int x [] = { 10, 20, 30, 40, 50};
int *p, **q, *t; p = x; t = x +
1; q = &t;
cout << *p << "\t" << **q << "\t" << *t++;
```

11. What will be the output of the program(Assume all necessary header files are included) :

```
#include<iostream.h> void print (char * p ) {p = "pass";
cout<<"value is "<<p<<endl;
}
void main( )
{char * x = "Best of luck";
print(x);
cout<<"new value is "<<x<<endl; }
```

12. What will be the output of the following program

```
#include<iostream.h>
#include<ctype.h>
#include<conio.h> #include<string.h>
void changestring(char text[], int &counter)
{
char *ptr = text; int length=strlen(text);
for(;counter<length-2;counter+=2, ptr++)
{*(ptr+counter) = tolower(*(ptr+counter)); }
}
void main()
{clrscr();
int position = 0;
char message[] = "POINTERS FUN"; changestring(message,
position);
cout<<message<< "@" <<position; }
```

13. Find the output of the following program :

```
#include<iostream.h> void main()
{int Numbers[] = {2,4,8,10};
int *ptr = Numbers; for (int
C = 0; C<3; C++) {cout<<
*ptr << "@";
ptr++;} cout<<endl;
for(C = 0; C<4; C++)
{(*ptr)*=2; --ptr;} for(C = 0;
C<4; C++) cout<< Numbers
[C]<< "#";
cout<<endl; }
```

14. What is the output of the following program if all the necessary header files have been included: 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;}

```

15. Find the output of the following program:

```

#include<iostream.h> void main()
{
int A[]={10,20,30,40,50};
int *p=A; while(*p<30)
{
if(*p%3!=0)
*p = *p+2;
else *p=*p+1;
*p++;
}
for(int J=0;J<=4;J++)
{
cout<<A[J]<< "@"; if(J%3
== 0)
cout<<endl;
}
cout<<A[4]*3<<endl;
}

```

16. Find the output of the following code.

```

#include<iostream.h> #include<conio.h>
void main( )
{ clrscr( );
int a =32;
int *ptr =
&a; char
ch = 'D';
char
*cho=&c
h;
*cho+=a;
*ptr += ch; *ptr *= 3; ch=ch-
30; cout<< a << "" <<--
ch<<endl;
}

```

17. Give the output of the following program.

```

#include<iostream.h>
void main( )
{
char *p="Difficult"; char c;
c=*p++;

```

```
cout<<c<<c++<<+<+<c<<"\n";  
char d =c+1;  
cout<<d++<<"\n";  
cout<<d<<"\n";  
cout<<*p;  
}
```

18. What is THIS pointer? Explain with example.

19. What is a self-referential structure? Give example.