



Pointers MCQ

Q-1 What will be the output of the following code? #include<stdio.h>

```
void main(){
```

```
char *p;
```

```
char sample_string[]="codingjunction";
```

```
p=sample_string;
```

```
p +=6;
```

```
printf("%s",p); }
```

- A) coding
- B) codingj
- C) junction
- D) codingjunction

Q-2 which of the following statement(s) best refer to pointers?

- A) Pointer arithmetic is permitted on pointers of any type.
- B) A c pointer of type void can be used to directly examine or modify any object of any type
- C) A c pointer knows the types of pointers and indirectly referenced data items at runtime

D) All of above

Q-3 How can dynamic array of pointers(to integers) of size 100 can be created using new in C++?

- A) `int *arr = new int *[100];`
- B) `int **arr = new int *[100];`
- C) `int *arr = new int [100];`
- D) `int arr = new int [100];`

Q-4 What is the problem with the following code `#include<stdio.h>`
`int main()`
`{`

```
int *ptr = (int *)malloc(sizeof(int));  
ptr = NULL;  
free(ptr);
```

`}`

- A) Dangling Pointer
- B) Memory leak
- C) The program may crash as `free()` is called for NULL pointer.
- D) Compiler Error

Q-5 Why reference is not same as a pointer?

- A) A reference can never be null.
- B) A reference once established cannot be changed.
- C) Reference doesn't need an explicit dereferencing mechanism.
- D) All of the above.

Q-6 What will be the output of the following program? `#include <iostream>`
`using namespace std;`

```
int main() {  
int arr[]={0,1,2,3,4};
```

```
int i, *ptr;  
for(ptr= arr, i=0; ptr+i <= arr+4; ptr++, i++) cout<<*(ptr+i);  
return 0;
```

```
}
```

A) 01234

B) 024

C) 234

D) 12340

Q-7 In the piece of code, arr[][] is a 2-D array and assume that the contents of the 2-D array are already filled up. What is stored in the variable sum at the end of the code segment?

```
int arr[3][3];
```

```
int i, sum=0; i = 0; while(i<3) {  
sum += * ( * (arr+i)+(i++)); }  
printf("sum:%d", sum);
```

A) Sum of all elements in the matrix

B) Sum of alternate elements in the matrix

C) Sum of the elements along the principal diagonal

D) None

Q-8 Would the following program compile?

```
#include <iostream>
```

```
using namespace std;
```

```
int main() {
```

```
int a=10, *j; void *k; j=k=&a; j++;
```

```
k++; cout<<j<<k; return 0;
```

```
}
```

Would the following program compile?

A) Yes

B) No