

```
01. int main( )
{
    printf ("%d", printf("Hi!") *printf ("Bye"));
    return (0);
}
```

What is the output for the above program?

- (a) Bye Hi! 6
- (b) Hi! Bye 9
- (c) Hi! Bye
- (d) None of these

(b) (1)

```
int main()  
{
```

```
    printf("%d", printf("Hi") * printf("Bye"));
```

```
    return(0);
```

```
? =
```

```
return(3)
```

```
return(3)
```

Sol:

```
printf("%d", 3 * 3) = 9
```

Ans \rightarrow (b) Hi! Bye 9

02. int main()

```
{  
    int m = 10, n = 20;  
    printf("%d %d %d", m /*m-value*/,  
           /* n-value */n, m /* compute m*n */n);  
    return (0);  
}
```

What is the result?

- (a) Runtime Error (b) 10 20 20
- (c) Compile-Time Error (d) 10 20 200

(c) (2)

int main()

{

int m = 10, n = 20;

printf("%d %d %d", m, /* m-value */
/* n-value */ n, m /* compute m*n */

n);

return (0);

SJn

~~m = 10, n = 20, mn = 10 * 20 = 200~~

~~1020 (Error)~~

Ans - (d) 10 20 200

(e) Compile-time Error

Teacher's Signature

03. int main()

{

 char str[] = “Test”;
 if ((printf (“%oS”, str)) == 4)
 printf (“success”);

 else

 printf(“Failure”);

 return (0);

}

(a) Failure

(b) Success

(c) Compile-Time Error

(d) Test

b) ③

int main()

```
char str[7] = "Test";
if ((printf("%s", str)) == 7)
    printf("Success");
else
    printf("Failure");
return(0);
```

Str" -

Char "Test" == 7

So, Condition = True

Ans 3 (b) Success

04. int main ()

```
{  
    int val = 5;  
    printf ("%*d", val, val);  
    return(0);
```

}

- (a) bbbbb5 (Where b means blank space)
- (b) 5
- (c) Compile Time Error
- (d) None of these

(a) (4)

int main()

{ int val = 5;

printf("%.*d", val, val);

return (0)

"%.*d" \Rightarrow "%5d"

print 5 space

Ans \Rightarrow (a) ~~ddddd~~ bbbbb5

 (b \rightarrow blank)

Teacher's Signature

05. A language with string manipulation facilities uses the following operation head (S) : first character of a string, tail (S): all but the first character of a string, Concat (S_1, S_2): S_1S_2 For the string acbc what will be the output of Concat (head (S), head(tail(tail(S))))

(a) ac	(b) bc
(c) ab	(d) cc

Q5

String manipulation facilities.

head(s) : first char of string

tail(s) : All ~~but~~ first char of string
except

Concat(s₁, s₂) : s₁s₂ for the string ~~for~~ acbc

Concat(head(s), head(tail(tail(s)))) : ?

Sol:

head(s) : a

head(tail(tail(s))) : b

$s = acbc$

head(abcd) = a

tail(abcd) = bcd

Concat(ab) = ab

Ans : G → ab

06 Structures in ‘C’ support

I. Call by Value

II. Call by address

(a) Only I

(c) Both I and II

(b) Only II

(d) None

(C) ⑥

C - Support -

I - Call by Value

II Call by address

~~Solⁿ~~

Any \Rightarrow C \rightarrow Both I & II

07 What would be the output of the following programs.

I. main ()

{

printf(“\n%d%d%d”,sizeof(‘3’),sizeof(“3”),
 sizeof (3));

}

```
II. main ()  
{  
    printf("n %%%%");  
}  
(a) I. 111 II. %%% (b) I. 222 II. %%%  
(c) I. 122 II. %%% (d) I. 111 II. %%%
```

I. | main()

{ printf("%d%d%d", sizeof('3'),

sizeof("3"),

sizeof(3)); → 2

Output → 2.22

II. | main()

{ printf("%d%d%d", "%y.y.y.",

4,

Output → %y.y.(2) that is standard

Ans

I.

→ 222

II

→ 4.4.4

sizeof returns the size of the variable in bytes.

08. What do the following declaration signify?

char (*(*X[3]) ())[5];

- (a) X is a pointer to an array of 3 elements function returning an array of 5 pointers
- (b) X is a pointer to an array of 3 elements which returns an array of 5 chars
- (c) X is an array of 3 pointers to function returning pointer to an array of 5 chars
- (d) None of these

Q(8) → char (* (* X[3]) ()) [5] ;

Solⁿ ⇒

~~* X[3]~~ → Array of 3 pointers

~~(* (* X[3]) ())~~ → Array of 3 pointers to

function returning pointers

Ans Q → X is an array of 3 pointers to function
returning pointers to an array of 5 chars.

Teacher's Signature

09. Match the following

P. int main ()
{
 printf();
 return(0);
}

1. Run-time Error

Q. int main ()
{
 printf(NULL);
 return (0);
}

2. Compile-Time Error

R. int main ()
{
 printf("%d",
 printf(" ") +
 printf(" "));
 return (0);
}

3. No output

4. 0

5. None of these

(a) P-1, Q-2, R-3

(b) P-4, Q-4, R-2

(c) P-2, Q-3, R-4

(d) P-5, Q-2, R-2

(9) `int main()
{ printf();
return(0);
}`

(3) No Output

(10) `int main()
{ printf(NULL);
return(0);
}`

(4)

(R) `int main()
{ printf("%d",
printf(""));
printf("");
return(0);
}`

(5) None of these

(2) Compile-Time Error

Ans →

(C) P → 2 → → Compile Error
Q → 3 → → No Output
R → 4 → →