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^n.

printf("%d", 3 × 3) = 9

Ans → (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

(d) (2)

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

Soln

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

Ans - (d) 10 20 200

Teacher's Signature .....

03. int main( )

```
{
    char str[ ] = "Test";
    if ((printf ("%s", 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[] = "Test";
    if((printf("%s", str)) == 4)
        printf("Success");
    else
        printf("Failure");
    return(0);
}
```

Soln —

Char "Test" == 4

So, Condition = True

Ans → (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" ⇒ "%5d"

print 5 spa

Ans ⇒ (a) ~~ddddd~~ bbbbb5

(b → 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

(C)(5) String manipulation facilities :-

head (s) : first char of string
tail (s) : All but first char of string

Concal (S_1, S_2) : S_1S_2 for the string acbc

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

Soln

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

S = acbc
head (abcd) = a
tail (abcd) = bcd

Concat (ab) = ab

Ans

Ans : C. → ab

06 Structures in 'C' support

I. Call by Value

II. Call by address

(a) Only I

(b) Only II

(c) Both I and II

(d) None

(C) (6)

C - Support -

I - Call by Value

~~II~~ Call by address

Sol^n

Any ⟹ C → 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. %%%%%

Q ④

I.
```
main()
{ printf("\n%d%d%d", sizeof('3'), sizeof("3."), sizeof(3));
}
```
→ 1, → 2, → 2

Output → 122

II.
```
main()
{ printf("\n%%%%%%");
}
```

Output → %%%

Ans (I.) → 222 , (II) → %%%

Sizeof returns the sizeof 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

(8) → char (* (*X[3])()) [5];

Soln ⇒

*X[3] → Array of 3 pointers

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

Ans of (c) → 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);
}
```

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

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

1. Run-time Error
2. Compile- Time Error
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

C (9) (P)

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

(3) No Output

(4) 0

(Q)

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

(1) Run-Time Error

(5) None of these

(R)

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

(2) Compile-Time Error

Ans ⇒

(C) P → 2 → Compile Error
Q → 3 → No Output
R → 4 → 0