

CS & IT ENGINEERING

C-Programming

String and Structure

DPP 01 Discussion Notes



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#Q. Consider the following codes P and Q as:

P: `char* p = "GATEWallah";`

`p[5] = 'A';`

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

Read only memory

Q: `char* p = "GATEWallah";`

`char* q = p;`

`q[5] = 'A';`

`printf("%s", q);`

The number of INCORRECT codes is/are 2.

[MCQ]



#Q. P : char s1 [] = "GATE";
char s2 [] = "GATE";
if(s1 == s2) printf("YES");
else
printf("NO");

NO

Q : char s1 [] = "GATE";
char s2 [] = "GateWallah";
if(*s1 == *s2) printf("YES");
else
printf("NO");

No yes

The outputs are-

A

P = YES Q = YES

B

P = YES Q = NO

C

P = NO Q = YES

D

P = NO Q = NO

[MCQ]



#Q. P : char s[20];
printf("Enter your GATE stream with year: \n");
scanf("%s",s); *CS 2023 CS*
printf("%s",s);

Q : char s[20];
printf("Enter your GATE stream with year: \n");
gets(s); *all the characters till you get New Line*
printf("%s",s);

If the input string is "CS 2023", the outputs are-

A

P=CS 2023 Q = CS 2023

B

P=CS Q = CS

C

P=CS 2023 Q = CS

D

P = CS Q = CS 2023

[MCQ]



#Q. `#include<stdio.h>`
`#include<string.h>`
`int main()`
`{`
`char s[20]="GATEWallah";`
`printf("%s",s+4);`
`s[4]=0;`
`printf("%s",s);`
`return 0;`
`}`

The output is-

G A T E ⁰~~W~~ a l l a h
0 1 2 3 4

w a l l a h

G A T E

A

WallahGATE ✓

B

EWallahGAT

C

WallahGATE0allah

D

EWallahGAT0allah

[MCQ]



```
#Q. #include<stdio.h>
#include<string.h>
int main()
{
    char s[20]="GATEWallah2023";
    s[10]='0';
    printf("%s",s+s[3]-s[1]);
    return 0;
}
```

The output printed is-

$$0 + 69 - 65 = 4$$

A

Wallah0

B

Wallah2023

C

Wallah0023 ✓

D

Wallah

65 A
66 B
67 C
68 D
69 E

character

[MCQ]



```
#Q. #include<stdio.h>
#include<string.h>
void f(char *p)
{
    static int q=2;
    q=q+3;
    p[q]+=2;
}
int main()
{
    char s[20]="GATEWallhbesthai";
    int i=0;
    for(i=0;i<3;i++){
        f(s);
    }
```

Handwritten notes and calculations:

Diagram showing memory indices and values:

9	2	5
		8

Calculations:

$$i=0 \quad * (0+8) = *(0+8) + 2$$
$$i=1 \quad * (0+11) = *(0+11) + 2$$
$$* (0+5) = *(0+5) + 2$$

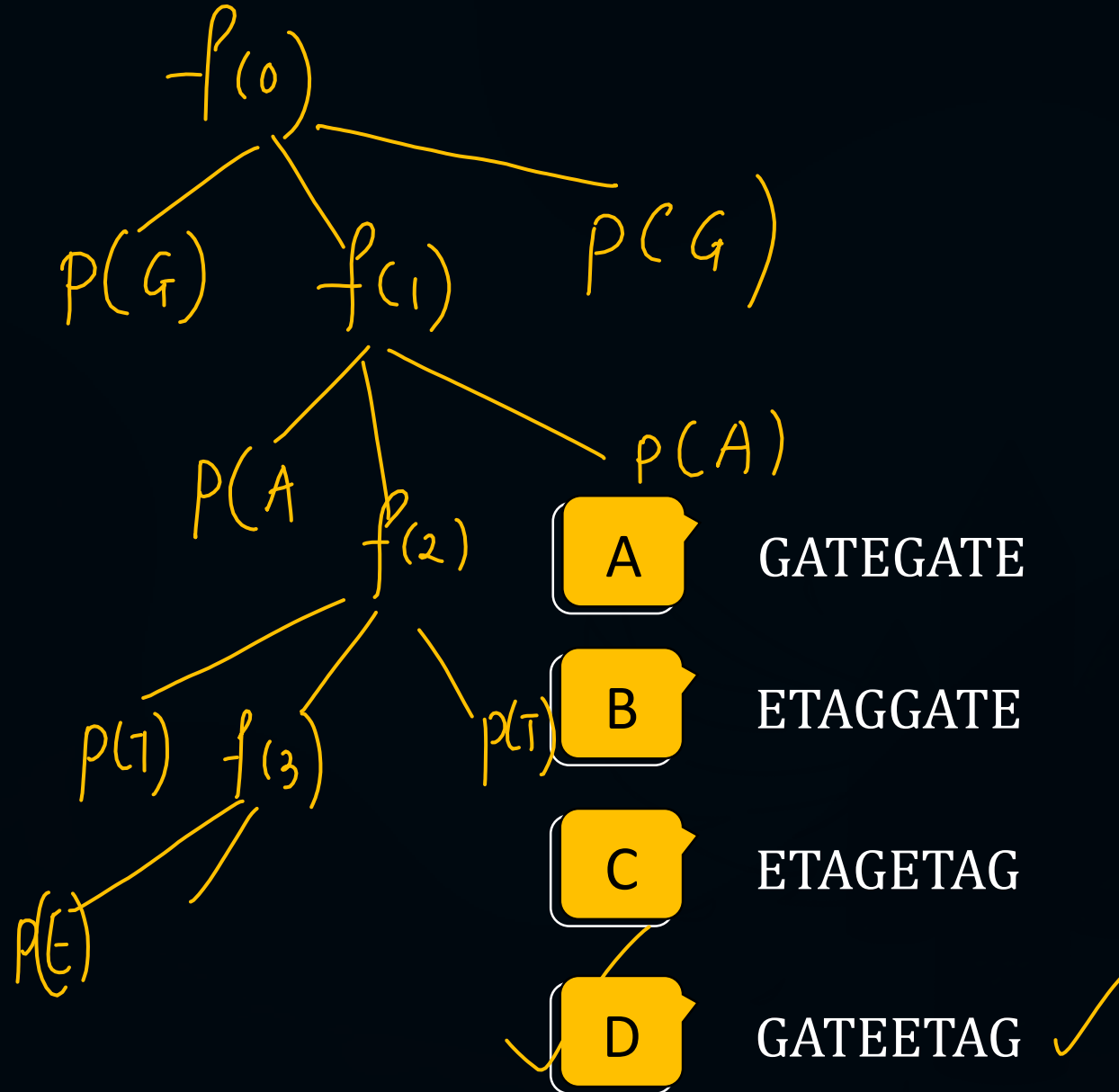
```
printf("%s",s);
return 0;
}
```

The output string printed is-

- ☒ A GATEW**cll**ch**bg**sthai ✓
- ☐ B GATEW**cll**b**hb**g**st**hai
- ☐ C GATEW**cll**ch**be**sthai
- ☐ D GATEW**cll**ch**be**sthai

#Q. `#include<stdio.h>`
`#include<string.h>`
`void f(char *p){`
 `if(*p!=0){`
 `printf("%c", *p);`
 `f(p+1);`
 `}`
 `printf("%c", *p);`
`}`
`int main()`
`{`
 `char s[5]="GATE";
 f(s);
 return 0;
}`

The output is-




```
#Q. #include<stdio.h>
#include<string.h>
int main()
{
    int a=1;
    char b[]="GATE2024";
    char c[]="GATE2024";
    int d=strcmp(b,c);
    if(d==0) ✓
    a=printf("GATEWallah");
    printf("%d",a);
    return 0;
}
```

strcmp - value return is zero
if string is same

a = 10

The value of a is 10.



THANK - YOU