CS & IT ENGINEERING

Programming in C

Functions and Storage Classes

DPP-01 Discussion Notes

By- Pankaj Sharma sir

01 Question

02 Discussion

Q.1 Consider the following program: **[NAT]**

```
#include<stdio.h>
        int f2(int a){
            int b=0;
            b=b+5;
            return a*b;
        }
        int f1(int a){
            int b;
            b=f2(a);
            return a*b;
        }
        int main(){
            int i, a=5, b=4;
            for(i=0;i<2;i++){
                b-=f1(a)-f2(a);
                printf("%d\t", b);
            }
            return 0;
        }
```

The sum of the printed values is _____

a: 5

b: ~~4~~ -96

5

b = 5

25

5

f2(5)

25

125

f_1 a: 5

f_1 b: 25

i = 0

b -= f1(a) - f2(a);

125 - 25

b -= = 100

b = b - 100

⇒ b = 4 - 100 = -96

-96 + (-196)

⇒ -292

i = 1

b -= f1(a) - f2(a)

f1(5)

125 - 25

b -= 100

b = b - 100;

= -96 - 100

b = -196

-196

Q.2

[MCQ]

Consider the following program:

```
#include<stdio.h>
void print(int n){
    for(n++;n++;n++)
    printf("GATE Wallah");
}
int main(){
    void print();
    void print();
    print(-9);
    return 0;
}
```

Which of the following is correct?

A. Compilation error

B. "GATE Wallah" will be printed infinite number of times.

C. "GATE Wallah" will be printed 5 times.

D. "GATE Wallah" will be printed 4 times.

Q.3

[MCQ]

Consider the following program.

```
#include<stdio.h>
void f(int n){
    switch(n<<1+n){
      default: printf("Sresth");
      case 4: printf("Parakram");
      case 3: printf("2024");
      break;
      case 2: printf("2025");
    }
}
int main(){
    f(1);
    return 0;
}
```

The output is-

n 1

+
<<

n<<1+n

1+1

n<<2

⇒ n×2²

⇒ 1×2²

⇒ 4

A

A. Parakram2024

B. SresthParakram2024

C. Parakram

D. Sresth2025

Q.4

[MCQ]

Consider the following program:

```
#include<stdio.h>
void f(){
int x;
x=10<5?printf("%d",
printf("GATE")):printf("")?printf("2024"):printf("%d",printf("Wallah
    Parakram"));
}
int main(){
    f();
    return 0;
}
```

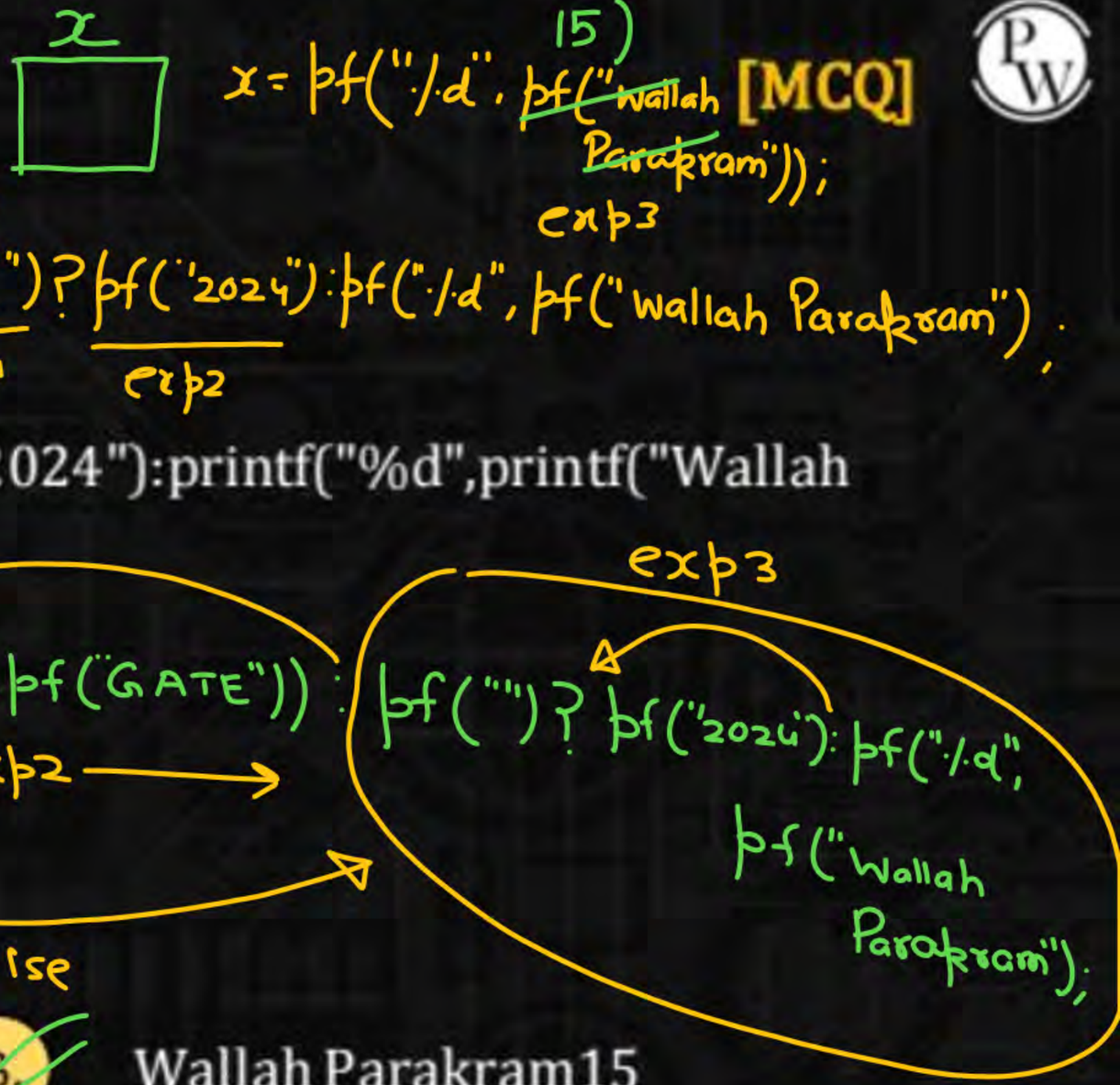
The output is-

A. GATE2024

B. Wallah Parakram15

C. GATEWallah Parakram4

D. GATE4



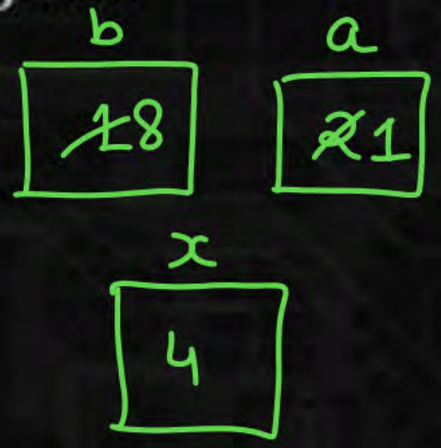
Q.5

[NAT]

Consider the following program:

```
#include<stdio.h>
int f(int b, int a){
    int x;
    x=a<<b;
    b=x*a--;
    return a+b-x;
}
int main(){
    printf("%d", f(1,2));
    return 0;
}
```

The value printed is _____.



2<<1
⇒ 2x2¹ ⇒ 4

b = x x a--

1 + 8 − 4
= 5

(i) use a
(ii) a = a-1

b = x x a
a = a - 1

b = 4x2 = 8

Q.6

[MCQ]

Consider the following program:

```
#include <stdio.h>
int r(int num){
return --num;
}
int main(){
int n=4;
for (r(n);r(n++);r(--n))
printf("%d\t",r(--n));
return 0;
}
```

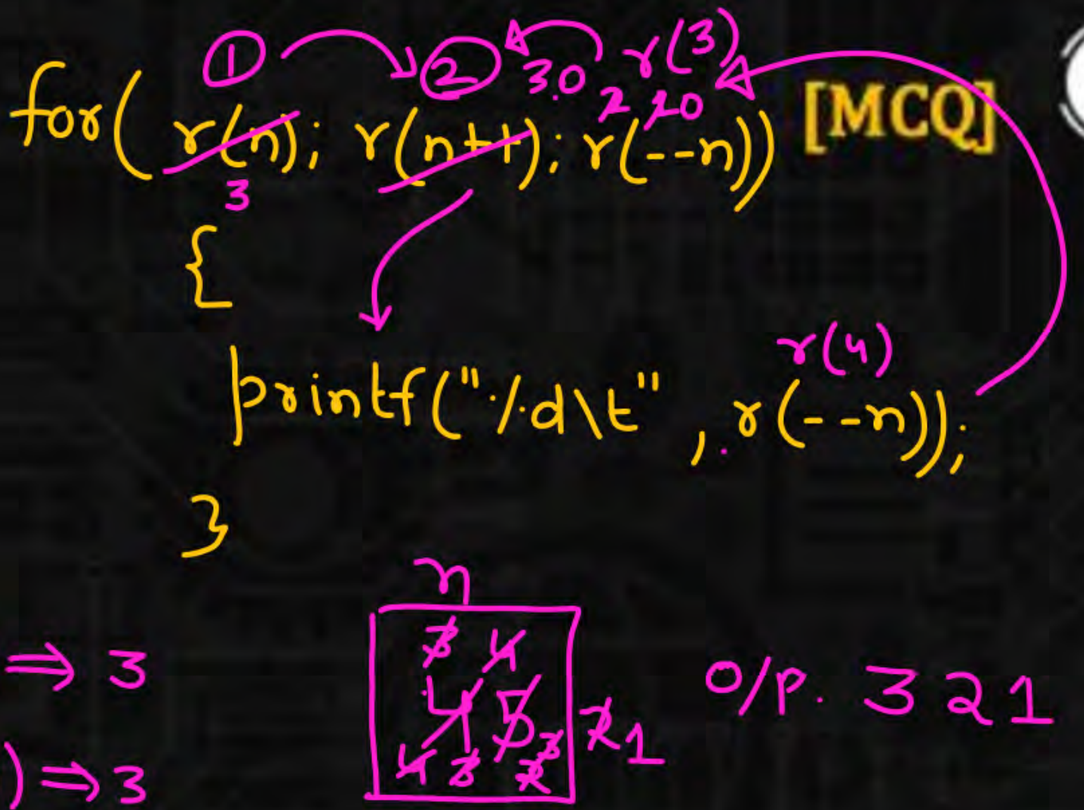
The output is-

A. 123

B. 1234

C. 321

D. 4321



THANK YOU GW
SOLDIERS !